

## Developing appropriate strategies for boundary cities' sustainable development (The case: Boundary city Bane)

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### Abstract

Development's new patterns are based on local development orbit and benefiting from spatial-location varieties. So, nowadays, identification of capacities and abilities in line with access to this important affair is placed at the center of development planner in different levels of geographical spaces. A brief look at country's different areas especially urban sectors indicates this fact that many of development potential abilities and capabilities are actual and hidden with respect to spatial and structural varieties in the land area. One of the existing potential features in this field at the country's spatial areas is revealing capacities of border areas development of provinces. If we consider borders and border locations as a positive factor and phenomenon in development, surely we will require attitude's changes in approaches toward border areas' role. Now we aim in this process research to response to this fundamental question that on which basis the development strategies in boundary city Bane are based and what are the considerable components? So, some strategies was offered and suggested respecting local realities as the most influential and development strategy among 158 by using determining items and indexes of urban sustainable development in the form of Likert spectrum and randomly through applying questionnaire and in the strategic planning framework and by means of swot technique in the framework of overview strategy framework.

**Key Words:** Sustainable development, urban sustainable development, strategic planning, border, Kurdistan province.

### Introduction

Cities' increasing expansion and the increase in their population have created many changes in their spatial and also social and economic structures which these changes sometimes have been accompanied by inappropriate and negative consequences. In response to issues and crises due to such changes, some new concepts and approaches for future development were discussed which we can refer to environmental justice, smart development, etc. (Bartone et al -2003: 18). Posing sustainable development as the third millennium slogan will be due to the cities' effects on the scope of biosphere and different dimensions of human life so that the

discussion regarding sustainability and sustainable development through neglecting cities and urbanism will be meaningless. (HosseinZadehdalir et al – 2007:2).

Sustainable development which is nowadays the main subject, the topic of development circles and planning is the result of different development ideas itself. Similarly, there also are some various understandings about this concept such as the development concept. The common point of all of these ideas is ideas, sustainability and reaching to a process of development that can be stable and durable. It is a development which provides next generations' necessities without damage to next generations' abilities. (Jome Poor, 2006 , 62). The concept of sustainable development in two recent decades has been the central point of many development paradigms. Sustainable development idea refers to this affair that there are various paths that can be replaced with current development patterns which led to massive environmental resources" destruction and social increasing inequalities. (Hall – 2006:156).

Among this, boundary cities are ones of the cities which both global and local forces influence on their sustainability respecting their special situation and function. Because In the one hand, these cities such as many of other cities which exist in this earthy sphere are under influence of natural conditions, residents' social relationship, relationship with settlement around each other and also they also have role and function in their national economic and political systems and on the other hand, they are under influence of economic, political, social and transnational and even global processes. Thus sustainability issue in such cities is far more important and it is more challenging rather than many other cities. It is while in spite of the importance of this issue, borders and boundary situations' effect on cities' sustainability has not yet been explained and although according to result which was taken place in the recent decades, this result was obtained that border areas can have a fundamental role in advancement and progress of economic development in border areas, promoting life standards, reducing and eliminating poverty and giving speed to more cooperation between countries

and settlements around them. (Chandoevvit et al - 2004: 145)

In the framework of above statements, the settlement adjacent borders including cities may deteriorate or flourish and it depends on border line was caused disturbance for natural areas or not and some new roles were offered them regarding path the borders. Totally, cities' flourishing or deterioration and in the other words, cities sustainability or non-sustainability depend on this fact that border line create some different roles for them or vice versa, it damage their natural areas. (Perskat -2006:161).

Bane boundary city has been always influenced by this city's boundary situation as one of the country's boundary cities and cities development especially sustainable development has always been a function of boundary situation ( because of very much ups and downs in relations and transactions between Iran and Iraq). This is while some limited researches have been conducted respecting these cities' sustainability and the effects which border and boundary situation can have on their sustainability and it can be said regarding Kurdistan province that no research has been taken place in this field. Thus it can be said that in spite of the remarkable effects that boundary situation have had remarkable developments and changes of this province's cities, however respecting limited researches in this field , boundary situation's effect on urban sustainability of the cities of Kurdistan province have yet been unknown, Thus and according to sum of above sayings , this research aims to response this fundamental question: what is the appropriate strategy for improving boundary cities' sustainable condition?

#### **Theoretical basis:**

Development is a multi-dimensional process which leads to organization's renewal and different orientation of total social and economic system. (Azkia- 1998: 18). IN fact, development is a transition from a situation to another one and it is change, transformation and progress. (RokneddinEftekhari- 1999 :141).

Although different experts and researchers have always tried to offer different definitions of it respecting their own expertise regarding thinking about development, but a specific and same definition of it has not yet been offered respecting the variety of expert area and development's dimension expansion. But it is necessary to mention that the aim of this article of development is sustainable development.

The concept of sustainable development has been the central point of development paradigms in two recent decades. The most common definition of sustainable development is the definition of

Brantland commission which was defined in the global development and environment in 2008 as: sustainable development is a development which provides current needs and demands without damage to next generations' ability in granting their needs and demands. Bratland report has suggested various actions at the international, national and local levels which it want the government and local sovereignty, economic institutions and consumers that adapt some strategies for sustainable development. ) Apapagic and Perdan -2000:143, quoted by Faraji Rad and Kazemian – 1012:171).

Urban sustainable development theory is the result of environment's followers' discussions regarding environmental issues especially urban environmental which was offered following sustainable development theory for protection of environmental resources. This theory propose some subjects such as preventing urban environmental pollutions, decreasing capacities of local environmental production and support the recycling and lack of support the harmful development, It also know the way to receive to these purposes in urban, rural and spatial planning and paying attention to controlling the earth application method.( PapaliYazdi and RajabiSenajerdi – 2009: 340).

Urban lands' applied density changes in order to remove people's fundamental needs in the fields of housing, transportation, leisure, etc. in such a way that city is durable regarding economic and equality regarding sociality so that these technological and industrial changes consist of employment maintenance, is one the other urban sustainable development goals. (Mukomo -1996 :263).

Urban sustainable development influences the qualitative and human criterion, general comfort, social justice and culture richness. This viewpoint tries to return totality, vitality, variety and beauty which have been faded in modern urbanism to cities. So, in this viewpoint, the land's applied macro policies, transportation, environment conditions and social welfare are explained and the development and it guides and facilitates natural growth process and growth from within the city. In addition, this viewpoint answers the people's social, cultural and mental needs and provides the field of their participation and mobility. Of course, participation is an unknown and expanded social potential capacity whose appropriate method of benefiting from it in different areas must be specified. From the opinion of urban sustainable development viewpoint, it is required that establish a strong and continuous connection between planning and participation process. From this viewpoint, urban management will include different area of strategic management, executive management and evaluating management. Meanwhile, design's documents are develop very simple, clear and understandable for

public and they are published for awareness and giving comment and participation of general people in urban planning. This kind of planning aims to preserve city's totality and creating dynamic balance between main processes of physical development and long-term social processes and it entrust the planning for secondary and sub areas to their time and place special conditions and gradual development. (Saber Far – 2007 :114). From the sustainable development's viewpoint, living in a clean, pure and without pollution with appropriate transportation, accessible streets, having desirable green space and logical orientation for development and exercising urban management so that we reach from product to process is in the group of accepting rights and mutual responsibilities among city and citizens, because the urban sustainable development category is placed in a strong connection with power and justice transformation. As David Harvey consider social justice and environmental balance interdependent and he does not consider realization of no one without the other one. (Harvey -1999).

#### **The concept of urban development**

The population redistribution and communities urbanization process which were started from industrial revolution, at the second half of twentieth century was also extended to third world countries and it has taken new and complicated dimensions through the increase in urban city and metropolitan and city's role-seeking in the national and universalism development process. The role cities' increasing as development promoter engine and the issues due to urbanization and cities' expansion has caused that urban development was considered as the most challenge of sustainable development of human. (KamanroodiKajoori et al -2010:10).

#### **Sustainable development, urban development's new pattern**

The topics related to economic growth and development and their relation with environment and human communities was an introduction for creating new development paradigms. It is a development which protects environment and emphasizes on social justice, progress and some other interpretations like it. In fact, previous development paradigms which emphasized mainly on economic growth and limitless exploitation of resources, caused that many of planning were not responsive for various problems and face cities and their residents with multiple impasses such as limitless expansion of physical dimensions, mounted motion control, separating workplace of house, separating workplace and spending leisure time, stay far from nature and decrease open and identified space. In fact, these kinds of cities have long distance with sustainable city. (Saber Far - 2007:109).

The concept of sustainable development has been the central point of many development paradigms in two recent decades. The idea of sustainable development refers to this affair that there are various ways which can be replaced with development current patterns that they have led to expansive destruction of environmental resources and social increasing inequality. The most common definition of sustainable development is the definition of Brat land commission which it was defined in global commission of development and environment in 1998 as : sustainable development is a development which provides current needs and demands without damage to next generations' ability in granting their needs and demands. Brat land report has suggested various actions at the international, national and local levels which it want the government and local sovereignty, economic institutions and consumers that adapt some strategies for sustainable development. ) Apagogic and Perdan -2000:143, quoted by Faraji Rad and Kazemian – 1012:171).

#### **Borders' role and function**

The aim of establishing borders has been applied governments' sovereignty on the sections under itself and the people living in these sections' control, but the governments' sovereignty has been weakened respecting the transformation which have been taken place in universe. So, the traditional concept of borders has been also converted through new changes. Industry globalization, commerce, financial and sciences affairs, jobs and sport activities mean that there may be different borders for different goals. In the other words, the concept of border has been changed and it has been converted from one border to multiple borders, from one line to multiple ones, from physically to culturally and from spatial to functional and from impermeability to permeability. (Mohammad Poor et al -2006: 148).

The borders and cross-border regions have always been the topic of many studies. The borders specify legal scope and states power's domain both in land and also in map. The states have physical interaction with their neighbors over the borders. The borders have always been the source of encountering and friction between countries and the areas in which the borders are located, often being influenced by the presence of them very deeply. (Glassner&Fahrer – 2004:72). Each country's border and each border region are unique. The borders' meanings and importance can be changed tangibly around the space and time when the regimes are changed in one or a numbers of adjacent countries. When the borders are open or closed or when some valuable benefits are flowed from one side from to another. (Anderson &O Dowd,1999: 594). The borders own special features and conditions and the y have

special functions and conditions depending on locating among the countries with different governmental, economic and social structures and this is the reason of this fact that local specific features whether political, economic, social and cultural only can be understood according to more extended conceptualization.(Ibid)



Figure 5-2: borders' functions from the viewpoint of Hafeznia. Resource: Hafenia -2000

**The boundary situation role in urban development**

The study of role and effects of border interaction and role of cooperation and economic integration in regions and border settlements' development has been allocated the main section of theoretical literature related to borders from the decade 1950 and especially at the beginning of decade 1990. (Moloudi -2013).The border urban development regions especially during recent years have been changed to interesting study fields and important places for study the urban and regional strategies in economic development of many points of the world in the form of cross-border regions; literature.. (Pangsawat -2007, quoted by Moloudi – 2013).

The first studies have been conducted in the field of border regions' development in the form of spatial theories which they are mainly originated from that it was mainly search the lack of development balance analysis among border and central regions. (Matoof -2002, 476).

In spite of this, evaluation of theoretical and applied literature regarding border regions' development and conducted studies in this field indicates that this subject has been discussed in the form of three main approaches. (Moloudi– 2013&Mosavi et al -2010 &EbrahimZadeh et al -2012).

-Place-axis traditional approach

-Cross-border cooperation approach

Public approach-

**Place-axis traditional approach**

This approach has been mainly arisen from spatial and axis-place theories that we can refer to

Crystaller's central place theory, Fransvaprov's growth pole, Friedman's center-surrounding and August Lush's spatial economic as ones of the most important of them. In the part of most of these theories, borders and border regions have mainly been under discussion as the spaces which have been located in the margins. In these theories, earthy borders and border regions are seen as some phenomenon which cause some ground faults and gaps at the hhierarchicalsystemofcontinuousspace. This point is also referred in these theories that border points enjoy a kind of selection characteristic, it is this that they are close to which center or they receive more facilities. In the surrounding-center theory which is classifiable in the framework of place-orientation theories, this issue has been referred that the borders are completely neglected because firstly, they are located at peripheral regions and far from the center and the possibility of exploitation of their resources is less than the regions which are closer to center, secondly, because of this inattention, these regions' existing resources tend toward central regions or the regions closer to it.Also a mental border line and also tangible between center and surrounding the figure which actually face the border regions' development with problem because of emphasis in focus on all the usable resources in region's center. (Ezzati et al – 2011 :186-187).

**Cross-border approach:**

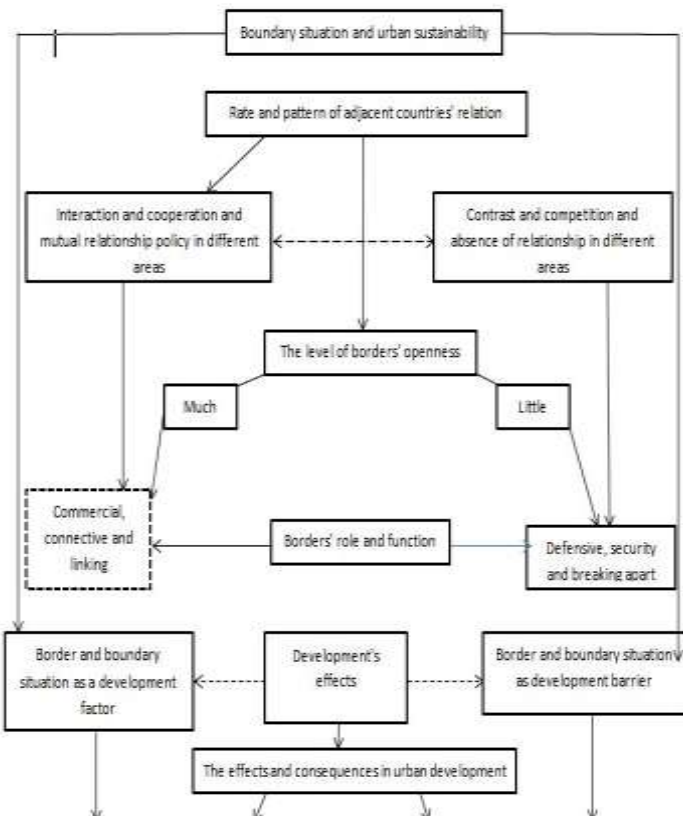
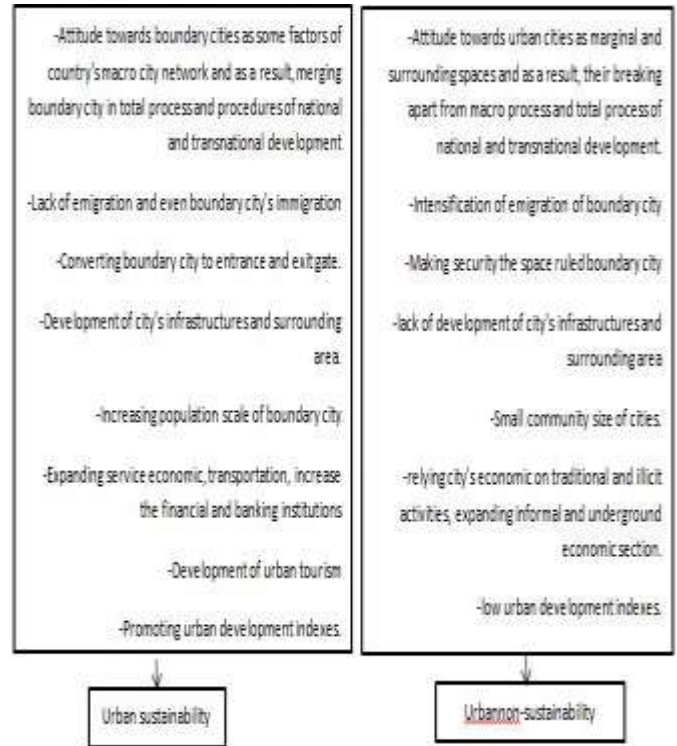
This approach is another flow which has been formed at the context of economic and regional l studies at the beginning of decade 1990.This approach has been connected obviously with integration general interests and cooperation in economic geographic. (Moloudi- 2013).According to this approach, border regions of two countries are similar different geographical, history, ethnic groups and economic opportunities aspects, but borders and political territories have separated artificially two sides of border. According to this approach, cross-border's homogenization and cooperation as organized interaction between two countries is necessary for regions' development and boundary cities. (Perkman – 2003: 167).

**Public approach:** This approach has been based on psychological and sociological theories in contrast with location-orientation approach which emphasizes on spatial dimensions and geographical distance and it emphasizes on the human agents role. This approach has been formed from the theories of some researchers who have been grown in the regional geographical context.They aim to enter human construction and reconstruction analysis from borders as a method to understand borders' durability and consistency and its meaning and applications for Europe's integration process. This approach emphasizes on creation (abstract), shaping

(symbolic) and reforming of borders by means of humans inclusive of politicians, business institutions, consumers and citizens. (Van Houtum – 2000).

**Theoretical pattern of relationship between boundary situation and urban sustainability**

Reviewing existing literature and experiences in the field of studies related to borders and boundary situations and its role in development of surrounding settlements and including city can be stated such this: cities' role and function in relation with urban city is a function of countries' macro policies, countries' foreign policy and the level of relations and interactions of the countries of two sides of border. In the framework of this viewpoint depending on countries' macro policies and the kind of regard which they have toward their surrounding countries, the boundary situation's role and function can have two different forms including A- border and boundary situation as a development factor, B- border and boundary situation as a development barrier. In the other words, we can deduce that boundary situation can be act as a doubled-edged sword in relation with development of cities located in such situations.



**Research's methodology:**

This research's method is analytical- descriptive (a combination of qualitative and quantitative kind) method respecting the subject under study and research's aim. In the descriptive method, theoretical basis in the field of subject has been studied and swot technique was used in analytical method.

Respecting this fact that swot method has been used to develop research, so these appropriate strategies have been developed in order to boundary cities' sustainable development, thus in this regard, strategic planning framework and swot strategic model will be used in in order to recognize and develop appropriate strategies for achievement the city's sustainability in Kurdistan's boundary cities. Swot model is a strategic planning tool and it is based on analysis (weakness points, weak, opportunities and threats). This method includes below points:

- Foreign analysis (organization, section or region) specifies main threads and offers opportunities from external environment.

- Internal analysis (organization, section or region) which it is actually an auditing of resources or preparing a list of weakness and strength points in relation with one of the strategic subjects.

- This method has been used in different planning texts differently and each one has stated different processes for this method. A six-stage process has been considered for this method in this research which they have been explained briefly below:



1-limiting the scope and specifying research's subjects: the first step in swot technique is defining and analyzing the subject under study and determining the domain of planning.

2-The second stage in swot technique is preparing internal factor evaluation and foreign factors evaluation matrix.

3-Determining the factors' weights and ranks: In the third stage, each one of internal and external factors which have a main role in strategic success are given a weight or coefficient between 1-4 in the columns beside each other of internal and external factors in order to determine the sum of strengths and weakness and opportunities and threads.

4- Swot analytical matrix: in the next stage, swot matrix will be adjusted in the process of development policies and strategies respecting previous stages and with respect to the kind of reaction and the method of any internal and external factor. It should be tried in this stage to preserve existing strengths and opportunities points in next stage by offering appropriate strategies and weakness and threads points should be omitted and they must be converted to strengths and opportunities.

5- Offering strategies: In this stage some strategies are offered through comparing each one of factors with together in the framework of coordinate axis. Thus, swot comparative matrix is drawn.

6-decision-making stage: In this stage, different offered strategies will be evaluated by using qualitative strategic planning matrix in order to specify relative attraction of each one of strategies. These processes must be passed for finalization of this stage:

1-6- Specifying attraction score: attraction score indicates strategy's potency and competence in appropriate encounter with each one of internal and external factors: 1= without attraction, 2=somewhat attractive, 3=having logical attraction, 4= very much attractive.

2-6-Calculating sum of attraction scores: the purpose of attraction scores is total product of multiplying third stage) in the attraction scores of final stages. However the attraction score is more, the strategies under study's attraction will be more.

3-6- strategies' prioritizing: Sum of the attraction scores of each columns of qualitative strategic planning matrix is calculated to prioritize strategies. The high scores indicate more attraction of strategies.

In order to collect information in the part of theoretical literature in this research, required resources and materials for developing basics and research's theoretical framework were collected through documental method and searching in information bases. In the part of information and research's experimental materials, collecting information through questionnaire, interview, and resources related to formal statistic of Iran's statistic center and also some statistics that organizations and provinces and counties' offices which authorize them were collected respecting research's variables.

Preliminary test of questionnaire was used in order to determine questionnaire's reliability, so that some of questionnaires were randomly completed firstly and then some meaningless questions and eliminating unrelated questions were corrected. The items and questions' reliability has been computed through Cronbach Alpha coefficient in SPSS software which was equal to 0.741. So, this result was obtained that discussed items and questions have been in the same way and they enjoy the high competency in the field of variables' assessment.

Two parts were used in this research in order to select statistical population:

At first, overall of Bane boundary city is considered as statistical population of this research. Secondly, city's residents and attendants: we face with two statistical population which are somehow separated in this part, the first group includes city's attendants whose selection will be targeted respecting limited number of them and targeted sampling will be actually used. The second group includes city's residents. Respecting large number of these people, cokeran formula was used firstly in order to determine sample size. The estimation of sample size through this formula is more logical because it also includes the statistical population size. According to the last general population and housing census in 2011, bane city has had 85190 populations which accordingly, sample size will be obtained 158 persons. So, quota sampling was used in the first stage. In the second stage, because some of the samples which were selected in the previous stage should be selected in Bane city and since these samples must be selected at the geographical level of city, so the cluster sampling method is used because of facilitation and exactness in work. The work method was in this way that the main city was determined divided to different main regions based city's main passageway. Then each region was repeatedly divided to different quarter inside the main regains based on secondary passageways and then one or three quarters were selected in each region based on regular simple random sampling method. One or three secondary streets were selected based on regular simple random sampling method inside the selected quarters and among them

one or three alleys were selected based on regular simple random sampling method. Then among each one of selected alleys, at least one registered plaques (or residential units) was repeatedly selected based on regular simple random sampling method and the questionnaire was put at disposal of householder.

The strategic planning framework will be applied in order to develop appropriate strategies to develop boundary cities' sustainable development and Swot strategic model will be used to recognize and develop the appropriate strategies in order to access to urban sustainability. Swot model is a strategic planning tool and it is based on analysis of weakness, strength, opportunities and threads points.

### The region under study:

Kurdistan province includes a remarkable part of country's western borders. This province has 22 urban parts presently from which some cities including Armordeh, Bane, KaniSoor, BueenSelfi, Marivan, Chenareh and Sarv Abad are ones of boundary cities that have been directly influenced the boundary situation and they have been more influenced by different economic, political and social changes and transformation of borders rather than other province's cities. These cities have been witness of remarkable development changes and transformation especially in the years after the fall of Baas regime and respecting relative self-determination which has been taken place in north of Iraq and as the result of those relationships and exchanges that have been formed and especially these cities' economic role and function presently have been discussed in the more extended level rather than other cities' province and they have been changed and transformed. It may be considered the main reason of this claim the boundary' growth and especially two main regions mean Bane and Marivan city which they have higher population growth of non- boundary cities of province from the decade 1365 that it means the end of imposed war. In addition, the average of boundary cities' population growth compared with province's boundary growth has been always higher than decade 1365 so that in the time period of 65-75, 75-85 and 85-90 the boundary cities' average population growth have been respectively 6.06, 3.36 and 3.56 while in the same period, the average population growth of province's non-boundary cities are respectively 3.81, 1062 and 2.69 percent which indicates remarkable potential and capacity of population attraction in boundary cities compared with non-boundarycities that this affaire indicates economic and social conditions governing these cities. The region under study includes Bane which has been located at the west of Kurdistan province and it plays as a boundary city at the region level.

The map number 1 shows the situation of the city under study.



### Research's findings

The presented hypothesis has been judged after developing research's theoretical and psychological discussions, because hypothesis is theoretical and temporary solution of research issue and their correctness should be judged through experimental test and reasoning.

The research's hypothesis had been developd in this way:

Respecting the set of opportunities, threads, strengths and weakness points by which the boundary cities are faced, it seems that appropriate strategy to improve this group of cities' sustainability is review strategy.

Research's hypothesis is one kind of the hypothesis which is based on qualitative reasoning and research's suggestive strategies in relation with boundary cities. With respect to this fact that presenting identification and appropriate strategies is based on qualitative discussion, strategic planning framework is used as appropriate method for hypothesis's development and test.

### Forming tables of internal factors evaluation and external factor evaluation

The first stage in strategic analysis is identifying key strategic factors related to considered issue. The effective key strategic factors on developing strategies have been identified in the form of two main categories of internal factor (including strength and weakness points) and external factors (including opportunities and threads) in this stage and finally the sum of strength and weakness points and sum of opportunities and threads are stated qualitatively. It is required to mention that rating of each one of factors has been obtained according to numerical amount compared to average. Table number 8 shows the method of scoring to each one of considered factor.

**Table 8- the method of rating to factors in table IFE and EFE**

Internal factors	External factors	Average amplitude	Rating
High strength	Exceptional opportunity	3-5	4
Ordinary strength	Ordinary opportunity	1-3	3
Ordinary weakness	Ordinary thread	1-3	2
Crisis weakness	Serious thread	3-5	1

Table 9 shows key effective factors on boundary cities' sustainable development according to internal factors (according to strengths and weakness) and external factor (according to opportunities and threads).

**Table 9: Internal factors evaluation matrix (IFE) and foreign (EFE) of sustainable development of boundary city under study**

	Key factors	average	coefficient	rating	score	
internal	S1	The presence of expert and educated forces in city	2.96	0.026	3	0.079
	S2	Paying attention to local culture and traditions in the city's development plans	2.85	0.026	3	0.077
	S3	Social integration and unification of city' people	3.16	0.028	4	0.113
	S4	People's high incentive to remain in city	3.63	0.032	4	0.130
	S5	The presence of appropriate context and fields for economic activities development	3.42	0.031	4	0.122
	S6	High quality of people's life	3.07	0.027	4	0.110
	S7	The existence of appropriate urban service and infrastructures	2.79	0.025	3	0.075
	S8	Presence of development plans and programs for city	2.74	0.025	3	0.074
	S9	Local people's active cooperation and participation	2.89	0.026	3	0.077
	S10	Private sector's investment in city	2.89	0.026	3	0.078
	S11	Enjoyment the efficient urban management	2.63	0.023	3	0.070
	S12	High cooperation of organizations responsible in related works	2.61	0.023	3	0.070
	S13	Nongovernmental organizations' incentive for participating in administration of affaires	2.72	0.024	3	0.073
	S14	Facilitate the possibility of investment in the land and housing sector for citizens	2.81	0.024	3	0.075
	Sum of strength points	41.17	0.368	3	1.223	
	W1	City's cold weather	2.75	0.025	2	0.049
	W2	Natural capacity (resources, water, soil, etc.)	2.66	0.029	2	0.048
	W3	environment destruction (inappropriate place for burying urban rubbish)	3.20	0.029	1	0.029
	W4	Shortage of green space, public space and open space in city	3.47	0.231	1	0.031



	W5	Shortage and unqualified consumed drinking water	3.14	0.028	1	0.028
	W6	Increasing process of resource of weather and soil's pollution	2.98	0.027	1	0.053
	W7	Changing usability and destructing agricultural lands around the city	3.39	0.030	1	0.030
	W8	Excessive use of city's natural resources	3.37	0.030	1	0.030
	W9	Inappropriate physical and structural infrastructures (such as passageway and sewage system)	3.61	0.032	1	0.032
	W10	Lack of people participation in planning and exploitation of urban development designs	3.35	0.030	1	0.030
	W11	Absence of expert forces in city	3.56	0.032	1	0.032
	W12	The large number of poor people in city	3.29	0.029	1	0.029
	W13	High price of land and house	4.01	0.036	1	0.036
	W14	Inappropriate condition of city's passageway network	3.72	0.033	1	0.033
	W15	Inappropriate quality of transportation and communication inside the city	3.68	0.033	1	0.033
	W16	Shortage of land for building house and commercial activities	3.27	0.029	1	0.029
	W17	the large number of city's population	3.03	0.027	1	0.027
	W18	Installations' weakness and shortage of appropriate construction facilities and equipment	3.61	0.032	1	0.032
	W19	Shortage of land for building urban parks and green spaces	3.39	0.030	1	0.030
	W20	Insufficiency in giving service to city's residents	3.63	0.032	1	0.032
	W21	Shortage and low quality of residential appropriate infrastructures	3.56	0.032	1	0.032
	Sum of weakness points		70.66	0.632	-	0.0707

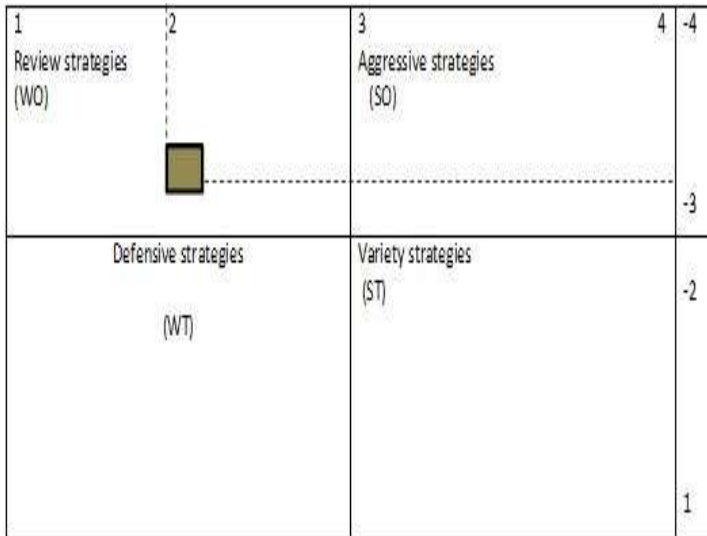
	O 16	informing and advertisement activities in relation with region's potentials	2.99	0.031	3	0.092
	O 17	The existence of enough security in region	3.69	0.038	4	0.152
	O 18	The increase in government's attention to planning and investment in the cities	2.89	0.030	3	0.089
	O 19	The existence of appropriate connective passageways to access to center of province	2.90	0.030	3	0.089
	Sum of opportunities		60.06	0.618	-	2.322
	T1	Unreliable conditions for investment because of border's change and transformation	3.65	0.037	1	0.037
	T2	The existence of larger and	2.99	0.031	2	0.062
	T3	Dead-end city	3.04	0.031	1	0.031
	T4	Lack of appropriate relationship with other cities of province or country	3.25	0.033	1	0.033
	T5	Far away from the main connecting passageway of country	3.54	0.036	1	0.036
	T6	Presence of security look toward cities and boundary regions	3.76	0.039	1	0.039
	T7	Lack of intend of government to investment in cities and boundary regions	3.70	0.038	1	0.038
	T8	Negative advertisement related to country's cities and boundary regions	3.58	0.037	1	0.037
	T9	The neighborliness with border	3.04	0.031	1	0.031
	T10	The existence of disorder and insecurity in neighbor country	3.34	0.034	1	0.034
	T11	Political instability and frangibility in neighbor country	3.30	0.034	1	0.034
	Sum of threads		37.19	0.382	-	0.413
	Sum of opportunities and threads		97.25	1.000	-	2.735

	Sum of strength and weakness points		11.83	1.000	-	1.930
external	O1	Government's policy regarding cities and boundary regions' development	3.00	0.031	4	0.124
	O2	Being closed to the cities on the other side of the border	3.63	0.037	4	0.149
	O3	Presence the communicative paths for access to cities other side of border	3.08	0.032	4	0.127
	O4	Increase the economic interaction with other side of border	3.55	0.037	4	0.146
	O5	Increase political interactions of provincial and state authorities with other side of border	3.05	0.031	4	0.125
	O6	Increase the cultural interaction with other side of border	3.12	0.032	4	0.128
	O7	The amount of investment of city's residents on the other side of border and vice versa	3.09	0.032	4	0.127
	O8	Facilitate social and cultural interactions with other side of border	3.32	0.033	4	0.133
	O9	Development and equipment of boundary terminals	3.39	0.033	4	0.131
	O10	Facilitate and making smooth administrative formalities and process of commercial interchange with other side of border	3.21	0.033	4	0.132
	O 11	Making transparent the rules and obligations for relationship with other side of border	3.20	0.033	4	0.132
	O 12	Appropriate application and exploitation of tourism attraction of city and region	3.12	0.032	4	0.128
	O 13	Appropriate access facilities (passageways, etc.)	2.86	0.029	4	0.088
	O 14	Region's security of passageway	2.79	0.029	4	0.086
	O 15	High region' natural potential	3.47	0.036	4	0.143

Following specifying key factors, some kinds of possible strategies according to set of existing strengths and weakness and opportunities and threats were developed by classification of the regions under study in the framework of swot analysis. Following developing four groups of aggressive /growth strategies, variety/ competitive strategies, review/ conservative and defensive strategies, the final strategies must be selected and then they should be prioritized. This affaire takes place through returning to evaluation matrixes including IFE and EFE firstly. In this manner that finally it should be specified that which group of strategies must be selected as final strategy by showing sum of strengths and weakness and sum of opportunities and threads. Respecting the cities under study, with respect to obtained digits from the tables IFE and EFE, the sum of strengths and weakness and sum of opportunities and threads are respectively 1.93 and 2.735 which this issue is specified through drawing these digits in swot analysis diagram that final strategies of boundary cities' sustainable development of study will be placed in the review strategies group which are based on a combination of weakness and opportunities. These kind of strategies are based on this principle that we must benefit from existing

opportunities regarding decreasing and eliminating existing weakness and converting them to strength points.

**Figure number 2: the kind of sustainable development strategies of boundary cities under study and result of evaluation matrix IFE and EFE and drawing them in swot analysis diagram**



As it is specified in above figure and swot matrix also showed, respecting special conditions of boundary cities and also effective internal and external factors for these cities' sustainable development, the developed strategies have been focused on certain dimensions so that it was specified according to evaluation matrix's results including IFE and EFE and drawing the results of this evaluation in swot analysis quantitative diagram that boundary cities' sustainable development strategies is in the kind of review strategies. These kind of strategies are based on benefiting from external opportunities to decrease and eliminate internal weakness and converting them to strength points. Thus, respecting obtained results, the developed hypothesis is based on:

It seems that appropriate strategy for improving sustainability of this group of cities is in the kind of review strategies respecting set of opportunities, threads, strength and weakness points which boundary cities are faced with them.

**Conclusion**

Respecting research's theoretical resources and conducted field studies, boundary situation has remarkable effect on boundary cities' development in different fields and the research's results also confirms this affair, so that in the most of the items which have been posed by content of positive effects of boundary situation on cities' development, the obtained averages are more than average levels. Boundary situations have left positive remarkable

effects from the opinion of respondents. Of course, we should not neglect the negative effects such as presence of some crimes such as indecent relations, divorce increase, etc., the intention increase to leave education among students, environment destruction and region's natural environment because of boundary interactions and the expansion without city's plan and destructing environment around the city which the respondents believe that these are the results of boundary situation.

In continuous of research and along with research's actions, researcher adapted some appropriate actions for effectiveness as more as possible of boundary regions on economic, social and environmental development which are based on qualitative argument and suggested strategies of research in relation with boundary cities. After specification of key factors, some kinds of possible strategies were developed based on set of existing strengths, weakness, opportunities and threads divided by the regions under study in the swot analysis framework. Respecting specific conditions of boundary cities and also internal and external effective factors on these cities' sustainable development, the developed strategies have been actually focused on special dimensions so that it was specified that boundary cities' sustainable development strategies is a kind of review strategies according to the results of evaluation matrixes IFE and EFE and drawing the results of this evaluation in swot analysis quantitative diagram. These kinds of strategies are based on benefiting from external opportunities to decrease and eliminate internal weakness and converting them to strength points. Thus, respecting obtained results and regarding set of opportunities, threads, strength points and weakness points by which boundary cities are faced, it seems that appropriate strategy to improve this group's sustainability is one kind of review strategies.

**Suggestions**

The theoretical subjects related to boundary situation and its effects on urban development commonly and urban sustainable development specifically showed that there are different approaches and theories in this fields which can be considered as basis theory. So more discussion and study regarding existing theories and approaches in the field of boundary situation's role in boundary sustainability can help the more comprehensive recognition and offering more various solutions for boundary cities' development in addition to rich the scientific literature of this subject.

-As this research's result showed, the main positive effects of boundary situation on urban sustainability have been observed as economic effects. In this regard, research and search regarding the way of benefiting from boundary situation in line with the increase in social, environmental and framework

indicators can help the richness of this subject. In addition, research regarding development policies and planning arisen from boundary situation and conditions in boundary cities can also be effective in potentials due to boundary situation.

-As it was specified in the hypothesis of this research according to strategic planning frameworks, the appropriate type of strategies to achieve sustainability in boundary cities is review strategies. These kinds of strategies are based on benefiting from external opportunities to decrease and eliminate internal weakness and converting them to strength points. In fact, obtained results in this field indicates the existence of different weakness in boundary cities in confront of many opportunities which boundary situation has taken them. O, it is suggested that the process of strategies' being operational by using specified opportunities should be specified in separated researches and it should study in line with decreasing and eliminating existing weakness points in the cities under study of bane.

#### **References**

- 1-Azkiya Mustafa, 1992, Development sociology, Tehran, Science publication institution, Tehran,
- 2-Papali Yazdi Hussein & Rajabi Sanajerdi Hussein, 2003, theories of city and surrounding, Samt publication
- 3-Perscut, 1975, new attitudes in political geographic, translated by Dareh Mir Heidar, Tehran, Tehran University Publication
- 4-Jome poor Mahmoud, 2006, an introduction on rural planning of viewpoints and methods, Tehran, Samt publication
- 5-Hussin Zadeh Dalir Karim & Qorbani Rasool & Shokri Firuzjah Pari, 2009, analyze and evaluate the urban sustainability qualitative criterion, in Tabriz city, Regional and urban researches and studies, first year, second number
- 6-Rokneddin eftekhari Abdol-Reza, 2003, farming and sustainable development management, farming publication, first year, number 2
- 7- Sheikh al-eslami Ali Reza & karimi Babraz & Egbali Reza, 2009, evaluating urban sustainable development of metropolis Shiraz, geographical quarterly of Zagros perspective, first year, number 2
- 8-Samadi Ali Hasan & Oji Mehr Sakineh, 2011, calculating the level of urban sustainable development by using hierarchy fuzzy inference system, (safe), case study: some of Iran's selected metropolis, urban management quarterly, ninth year, number 27
- 9-Faraji Rad Khadar & Qolam Reza Kazemian, 2012, regional and local development from the institutional approach perspective, Tehran, SID publication
- 10- Kalantari Khalil abad Hussein & Abobakry Taher & Qadery Reza & Poor ali Ali & Saied Anvar, 2012, evaluating the level of realization of urban sustainable development indicators in boundary regions, (case study: PiranShahr city), urban management, number 30
- 11-Mosa kazemi Muhammad Syed Mahdi, 2001, assessment of sustainable development in urban development, case research: Qom city, human geography PhD thesis with leaning toward urban planning, human science college of Training Teachers University.