



Determining The Capacities Of Shabby Towns To Reach Sustainable Development

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Abstract. Downtown districts, because of their geographical centrality, their easy accessibility, their economic importance and historical and cultural features, have a very high potential. But they often suffer from skeletal weariness and need actions to be organized and optimized and also appropriate programs to guide the future development of the city in these districts. The center of North Khorasan province in recent years has grown unsystematically due to the speeding of the city development and the increase in the population and also the number of the people who immigrate to it, whereas the capacity of the infill districts of the city and its shabby towns has been looked over and neglected. Therefore, the following study aims to help realize the stable urban development by determining the amount of the weariness of the city's downtown and showing ways for using the capacity and the potential of interior development of shabby towns. In order to reach this goal, the three factors of instability, impenetrability and minuteness have been selected to determine the shabby towns in downtown in block scales and the amount of the weariness of the blocks have been determined by the hierarchical analysis method and the utilization of GIS and Expert Choice soft-wares. In the end, suitable methods for the utilization of this capacity are presented.

Keywords: Shabby town, Infill development, Stable development, The City of Bojnourd

INTRODUCTION

The daily increase of the population of the cities has caused several problems and issues in them from which the lack of spatial balance, drastic changes in the prices of land and properties, urban creeping and dispersion, construction in desirable agricultural fields, environmental contamination, higher rates of energy consuming, unplanned development, increase in the costs of infrastructures and multiplication of urban territorial limits can be mentioned.

The present patterns for urban development and human activities have deranged the environmental discipline and have faced the remainders of the human race and the stability of life on earth with serious threats. Ever since 1970 there has been a unanimous agreement upon the notion that present and common patterns for development on the one hand and the behaviors and functions of the citizens on the other, have caused environmental transformations and ecological crisis. Therefore, the Rio conference in 1992 reached the conclusion that such a development pattern on the long run and without basic changes and alterations will not be stable and several major changes must be applied in order to reach stable development. As the consuming of energy for transportation and environmental contamination caused by that in the cities are two main subjects with regard to stability, the role of the city and urban areas in a direct way and city construction and physical building of the cities in an indirect way and their share in the present instability have growingly attracted the attention of academic, governmental and political circles and also the urban programmers and architects alike. Also it is clearly stated that the role of the cities in raising the stability is very essential. The advisors suggest that cities should be regarded

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and utilized as main points and centers for resolving global issues and reaching stable development (Brehney. 1992); but even with the clarity of the ecological and environmental issues and their consequences, there has been no common field for a paradigm for city construction and design. Furthermore, there are certain vague points and theoretical arguments regarding the concept and the way through which the urban stability is reached that only make the situation more complicated. These vague points and theoretical conflicts can serve as potential hazards or more; become basic obstacles on the route to realization of stable development.

In fact, if we considered the urban stable development to be economical functionality, social justice and environment preservation, one of the most important preconditions would be the optimization of urban land utilization. Today, this important issue does not get enough attention in most of our country's cities. The city of Bojnourd is among these cities.

The development of the city of Bojnourd with turning into the province's center, has gained more speed. The increase in the immigration to this city and the need for land for residential and services needs have caused the excessive offer of lands in connected, separated forms and incorrect utilization of this asset. This is happening when inside the city, especially in the downtown districts, there are several hectares of shabby towns that have appropriate capacities for offering urban facilities and services for development. But the lack of programming has caused the negligence of high capacities of shabby towns and these areas to be left without use and inactive, while the borderlines of the city are ever expanding. Therefore, it is vital to recognize the shabby towns and present appropriate ways to utilize them in order to guide the pattern for the skeletal development of the city to reach stable development according to the factors which were introduced and defined beforehand.

The Necessity of the Study

Because of the increase in the skeletal development of the city of Bojnourd after turning into the province's center, and the high costs for preparing the lands located around the city to obtain the needed lands, it is necessary to avoid the unmethodical and horizontal development of the city and its unwanted consequences by using infill methods and policies and recognizing the potentials of the downtown districts for future development. The infill development of shabby towns can be looked upon as a valuable opportunity, which if used in the right methods and with the right programming policies, can create a shift for the city of Bojnourd on its way to stable development.

The Aim of the Study

The aim of this study is to recognize and prioritize the shabby towns (in the scale of blocks) of the city of Bojnourd in its downtown and presenting suitable ways for the utilization of the capacities for development in them.

The History of the Study

Among the studies done in recent years in relation with the present article the following can be mentioned:

The study done by Rahnama and Biniiaz (2011) in their accommodation analytic comparison of the three of hierarchical, roaster calculations and weight synchronization in order to recognize and prioritize the development of the cities' central districts based on the three models of hierarchical, roaster calculations and weight synchronization, located the areas which are a priority in terms of weariness, and in the end attempted a comparison in order to revive the downtown districts of the city including the Eiydgah district of the city of Mashhad from the above mentioned models from the standpoint of functionality in recognition and prioritization of shabby towns.

Determining The Capacities Of Shabby Towns To Reach Sustainable Development

In the article by Zebardast, Khalili and Dehghani (2013), named the function of the factor analysis method in the locating of urban shabby towns, the recognition of urban shabby towns is reviewed through the presentation of an appropriate model. This article locates and prioritizes the shabby town of Robat-Karim in the city of Tehran by the utilization of the geographical information system and the factor analysis method.

Also the study done by Naderi et al (2013) named recognition and prioritization of the intervention of the urban shabby towns, has recognized and prioritized the shabby towns within the borders of the city of Saghez by the utilization of the phase hierarchical analysis model and by using the phase hierarchical analysis process method in the geographical information system, the shabby towns were categorized in to the three groups of high priority, low priority and without priority to optimize and restore.

The Basis of the Study

Infill development

One of the most prominent patterns in the field of urban stability is the infill urban development pattern. The infill development considers different aspects in defense of its functionality to solve the problems with shortcomings of the urban spaces. Regarding the issue of infill development several different definitions and theoretical frames have been presented and in all these definitions, common concepts have been focused on, some of which will be mentioned in the following passages:

Infill development or development on the inside or inner development is a form of urban development which takes place in abandoned, obsolete and useless lands within the boundaries of the city (Falconer and Frank, 1990: 137). Infill development normally occurs in already developed areas. In definitions regarding infill development we see that it is stated that inner development occurs in constructed areas, old districts, developed districts, sites that are surrounded by urban spaces etc. (Infill Development Standards and Policy Guide, 2007). These districts normally do not have good qualities, but they often enjoy the accessibility of urban infrastructures (services and facilities) prepared by the government. The utilization of such fields in order to provide residential areas or other types of urban development if a more desirable option in comparison with the horizontal expansion of the city which has more costs and the infill development in comparison with other types of development causes a better utilization of resources and it is much more economical when it comes to economic policies (Davidson and Dolnick, 2004)

Infill development is done with the aim of procuring residential areas and it is an alternative for development in agricultural fields or in the margins of the urban areas. This method is the intelligent development strategy tactic on a regional scale. In order to reach this goal, normally one of the following three activities must be done: constructing new buildings on lands that are not developed yet or do not have an appropriate function, reviving buildings that are currently out of use or changing the functions of the buildings (Mirmoqtadaei, 2008). Urban infill development is a fully functional way to prevent the expansion of the city in the undeveloped fields on the margins of the city and green rural fields and development of abandoned lands within the urban areas and in a way it supports the revival and renewal of the urban life (EPA. 1992:2).

This type of development which has strong social, cultural, economic and environmental aspects, is not only one of the physical-skeletal endeavors of city construction but also a complicated multi layered subject, which works between and beyond different sectors. In the infill development cities instead of horizontal expansion, expand vertically, old shabby towns that are no longer useful are revived, optimized and rebuilt. The obsolete and abandoned urban fields are utilized. Inappropriate functions that do not fit the present urban life like recreational facilities, military

camp, factories and industries that are obstacles to a good urban life are reformed. Therefore the surface of the roads and accessibility networks, green spaces and the likes of them get closer and closer to city construction standards (Aeini, 2008).

In fact the infill development of shabby towns, rebuilding, reviving and somehow rehabilitating the city districts, fair and equal distribution of buildings and urban facilities in all of the city's districts and at all levels, is to secure and prepare the revival and reorganization of the skeleton of a city (Varesi, 2004) and this happens in areas that have lost their solidarity and are on the verge of cracking up and collapsing. In the sense that a part of the urban infill development is to utilize the potential and in use capacities in urban programming, trying to create rapport and harmony between the basis of social and cultural life, avoiding urban and distributional poverty of the life of the population in quantity and quality and raising the rate of the accessibility of services and facilities for the residents of urban old and shabby towns. Therefore in the infill development of cities, the city expands vertically rather than horizontally and urban old and shabby towns that are no longer in use, are revived, optimized and rebuilt (Mohammadi and Zavvareh, 2011: 28).

Shabby Town

Till now several studies have been carried away on the subject of urban shabby towns and multiple definitions have been presented by academics and scientists regarding this matter, some of which are presented in the following passages:

Urban texture indicates the way skeletal spaces, communication network, the ways of accessibilities, the way of the activities' distribution and in the end the forming and expansion of the city during history is organized and takes place (Chapin, 1979: 47). The urban texture in general is formed by two main parts: 1. Skeleton (form) 2. Function (role). The mixture of skeleton and function in terms of the amount of the weariness results in a pattern. There are parts in the urban textures whose skeletal and functional qualities have reduced and are malfunctioning, these are called shabby towns. The weariness in the texture and the interior elements of the texture are either caused by the fact that they are old or the lack of a fixed development plan and technical supervision on the formation of the textures (Loosum, 1996: 79).

Shabby towns are fragile areas when it comes to natural dangers that require planning and a coordinated intervention for organization. The features of this texture are instability and a set of skeletal, functional, dynamic, environmental, social, economic and managing shortcomings (Falamaki, 2005). They are textures which have lost their citizen values and their residents are not satisfied and do not feel safe living in them and their basic needs are not secured (Andalib, 2008: 37).

In the law of supporting of revival, optimization and rebuilding the shabby and out of use towns (passed in 2010), urban shabby and out of use textures are those whose consistent elements, including surface facilities, infrastructures, buildings, road and accessibility facilities are suffering from weariness and have lost their functionality and their residents suffer from several economical, social, cultural and skeletal issues (Zebardast et al, 2013: 28).

Shabby towns are all or part of an urban space whose living system is suffering from derangement and malfunction from both the built in side and also the function of its vital sectors. In other words it can be said that parts of the city that are suffering from urban shortcomings and there is a congestion of issues regarding economical, social, skeletal, space and mind issues are called areas on the verge of collapsing, shabby textures or urban poor districts. These types of textures are suffering from shortcomings or derangements in their skeletal and functional qualities (Toupchi, 2010: 32-33).

Determining The Capacities Of Shabby Towns To Reach Sustainable Development

Factors for Recognizing Urban Shabby Textures

The malfunctions of shabby towns are resulted by several different shortcomings that have serious effects on the functional and skeletal conditions and social life qualities in these districts. Finding these shortcomings is of high importance and necessity and it is discussed in this part. Research studies, technical review of related organizations and checking the conditions of shabby textures indicate that these areas suffer from a mixture of different types of weariness, shortcomings and also the following issues that have caused different urban turbulences and uneven development and expansion in these districts. According to all of the international experiences, the features for shabby textures can be categorized into the three sets of skeletal, social and economical, functional and environmental; their basic features are mentioned below:

1. The urban shabby texture is often old and has an identity.
2. It has some prominent urban elements like the city theater, the old city hall etc. as urban signatures.
3. It can be reached through all of the city's districts and its suburbs.
4. The weariness of some of its buildings and the existence of desolated buildings.
5. There is a lack of consideration for the regional height in the construction of solo buildings.
6. The textures are weary and the downtown is decayed due to the companies and services that were moved from there.
7. The authority's buildings and important urban structures are not rebuilt.
8. There are not enough parking spaces.
9. The communicational network is malfunctioning and the dense construction of buildings has reduced the ability of the cars' maneuver.
10. The movement of the people on foot is intervened by cars and vice versa (due to the fact that people walk on the roads that are made for cars).
11. It is very crowded and there is always heavy traffic in the shabby structures.
12. The historical center of the city is torn apart by creating transportation roads and facilities.

According to the above mentioned skeletal features the general factors for urban shabby towns can be called as the age of the buildings, the way they are organized and their height, the type of their material, the conditions of the accessibilities, the conditions of the services and the urban infrastructures and quality factors (Kalantari and Pour Ahmad, 2006: 31-32).

The age of the buildings: The buildings that are in these types of districts are often old or technical standards have not been thoroughly considered in their construction, in a way that their lack of standards is obvious even from the look of the building.

The organization and the number of the floors: The buildings in these areas are more solitary and in one or two floors.

The type of the material: The material used in these types of districts are more bricks, bricks and stone and wood or bricks and metal without considering the right horizontal and vertical connections and they also have no appropriate basis. On the other hand as the amount of the resistance of wary buildings against natural disasters is very low, some of these building are destroyed even by out pouring of rain and snow which has diminished the level of mental security of their residents.

The conditions of their accessibility: The shabby towns which are often constructed without prior planning, have uneven structures and their accessibility is more for the people on foot and they are often dead ends with widths less than 6 meters, and the rate of their accessibility is less than 30 percent, the average size of the buildings in these areas is less than 200 meters (same source).

The conditions of services and urban infrastructures: Weary urban textures have considerable shortcomings when it comes to services and open spaces and green spaces and they also suffer from the lack of some cultural, educational and urban facilities in quantity and quality and there are also shortcomings in some services. Within these districts the cultural and public centers like public libraries, cultural centers, kindergartens, health care facilities, and emergency and rescue centers are seldom seen.

Quality factors: Skeletal features, urban view and look, the amount of the accessibility of services, economical features and funds are among the factors that have caused the down fall of these districts.

According to the main features of the shabby towns factors and standards can be designated to evaluate the amount of the weariness of urban shabby towns. The high committee of civil engineering and architecture of Iran, has called the three following features to be the basis for the recognition of urban shabby towns:

1. Instability: The unstable block, is a block that at least 50 percent of its buildings are not resilient due to the lack of an appropriate building system and inconsideration of technical standards. Also the buildings in whose execution the terms of the constitution 2800 are not considered or cannot be matched with the above mentioned constitution (Kalantari and Pour Ahmad, 2006: 299) are considered to be unstable buildings.

2. Inscrutability: The inscrutable block is the one that at least 50 percent of its sections (numbers) are dead ends or has a width that is less than 6 meters or its permeability is less than 30 percent which is an indicative of inappropriate accessibility and shortcomings in the roads for cars. According to the definition given above, the permeability of each urban texture is resulted from the dispensation of the sum of half of the roads space surrounding the block on the space of the block itself.

3. Minuteness: A minute block is a block that at least 50 percent of its sections (numbers) have less than 200 square meters spaces which indicates the compression of the textures and the quantity of small portions of land with small spaces (same source).

Intervention in shabby towns and the way they are treated have been one of the most challenging issues in urban planning and there are different approaches with regard to the special conditions and desired goals. While there are differences in the approaches in shabby textures planning in different cities we need to see that the method of intervention in shabby towns needs to follow a systematic approach, in the sense that planning for these textures needs a unanimous approach in different fields of population, economical, cultural, skeletal and environmental matters and the mutual effects these fields have on each other and on relations and the mutual effectiveness between this system and the larger system, the city, is a vital matter and needs special attention.

In a shabby texture, projects are constructed that can drive development but in order to reach the desired goals of a plan, we must choose the most efficient method with regard to the new structures of the shabby textures by precise knowledge and repeated reviews.

The Methodology of the Study

In order to reach the goal of the study, the present research is categorized in the category of functional researches and the method of this study is a description-scaling type. In order to locate the shabby urban textures in the downtown areas, after introducing the used factors in this field and with consideration of the measurability and accessibility of the information of the three main factors of inscrutability, instability and minuteness which have been defined by the high committee of civil engineering and architecture of Iran have been chosen. The quantities of each

Determining The Capacities Of Shabby Towns To Reach Sustainable Development

of these factors were extracted from the information of the complete plan of the city done in 2009 and the related maps were taken out by the utilization of the geographical information system (GIS). Then by the hierarchical analysis method (AHP) and the use of the Expert Choice software, the importance ratio of the above mentioned factors were determined. The hierarchical analysis system gains the attention because of its simplicity and high preciseness is superior to all methods and as it has the ability to merge the quality and quantity factors simultaneously and reduces the application of personal interest. Then by applying the resulted ratios in the scores for each block in the related factor, the amount of each block's weariness was determined and according to the priority of the blocks suitable methods for the utilization of the capacities of these areas in future developments are presented.

Knowing the city of Bojnourd and the Studied Area

The North Khorasan province is located in the far north eastern parts of the country and in the location of 36 degrees and 37 minutes to 38 degrees and 17 minutes of the northern width and 55 degrees and 53 minutes to 58 degrees and 20 minutes of the eastern length. This province has 270 kilometers of common border with the country Turkmenistan on the north. The city of Bojnourd, the center of the North Khorasan is located in 250 kilometers west of the city of Mash'had. Studies done on the development of the city of Bojnourd in different periods is an indicative of the fact that the development of this city works hand in hand with the amount of the population growth and this rate has not experienced the same rhythm in different periods of censuses. Studying the process of the evolution of the city's population during the years 1956-2006 shows that the population of the city, without considering the four later merged villages (Malkash, Halqe Sang, Yenge Qalee and Mohammad Abad), has grown from 19253 people in 1956 to 199791 in 2011 and in general the population has grown 10.4 times during the years 1956 to 2011, some of which is a result of a natural population growth and immigration and some of it is to the merging of the neighboring villages on the margins of the city.\

Studying the process of the city's growth rate in different periods shows that from the formations of the city's primal center till the Qajar dynasty period, the city growth has been continuous and with a slow pace, but in the Qjar dynasty the cities' skeletons were left to expand and were able to accept change and develop with a much more faster and freer pace. In this period there were even other population centers formed separately outside of the city and suburbs were constructed in the northeastern parts outside the city. The turning point for the development of the city of Bojnourd came at the time of the first Shah in the Pahlavi Dynasty. In this period the policy of forcefully habituating the nomads was carried away and its consequences were considerable, but the city of Bojnourd remained a small city any way. The other major change in Bojnourd took place in 1963 when the law of land modification was applied. As a result to the application of this law some of the work force were freed and came to the city. The impact of this sudden rush of population was the city's expansion in the south. At the periods after the revolution, the lands located in the north and north eastern parts of the city around the villages became a place for the habituation of villager immigrants and the poor people from the city. Lands with very cheap prices because of their change of functionality from agricultural to residential, were sold to the unofficial costumers of lands and homes by the land owners in the black markets (consulting engineers of the Naqshe Jahan Pars group, 2007). But in general, the growth and development of the city of Bojnourd prior to the year 2004 can be described as a slow development, often effected by infill factors.

After the uplifting of the status of the city of Bojnourd to the center of the province, to the high demands for houses, many lands were designated to habituate people by organizations and governmental offices. Furthermore, the lands of Takhte Arkan with a space of around a thousand hectares located in the southern parts of the city were separately designated for the construction

of an international exhibition, universities, a stadium and also some of the government facilities. A look through the statistics and information regarding the approvals for different buildings by the municipality shows a growing trend in the construction activities, the housing market and also a growth in the number of the government buildings.

In general, the city of Bojnourd, after being elected as the center of the North Khorasan province have faced several drastic shifts, and these shifts have affected the process of the city’s skeletal growth. At the moment, the city is experiencing a form of expansion that can bring about so many costs and undesirable consequences. Separate expansions which brings with it self-issues like higher costs for infrastructures, increasing traffic, dependence on cars, higher rates of energy consuming, lower quality of life etc. and not separated but dispersed and unorganized expansions which in its turn causes the loss of agricultural fields around the city. This issue is another indication of the necessity for consideration of the infill development potentials and the potential of the interior weary textures of the city for the guidance of the future development of the city. Therefore and in order to find these opportunities and reach the goals of this study, the downtown textures of the city of Bojnourd which consists of the constructions done from the time of the formation of the city till 1977 as the studied area of the research which covers an area of an estimated 755 hectares. This space covers the downtown by borders of the Shohada Avenue and the amusement park on the north, the trespassing rout on the west, Moalem Blvd., parts of the Modarres Dr. and the University Avenue on the east and the middle of the cemetery and the north part of the purifying center and Tufan Avenue on the south.

Map number 1: The location of the studied area and its condition in terms of the city expansion stages.

Source: Authors, 2014

Evaluating the Factors of the Shabby Textures in the Studied Area

Instability

The instability factor indicates the lack of resilience of the buildings in the block. In order to calculate the instability of the urban blocks the number of the destroyed or rebuilt buildings were counted in comparison with the number of all the buildings and resulted in a percentage. Therefore, as the resulted number gets bigger the stability of that block is less than the other blocks. In table 1 the number and the space of the blocks are presented and organized based on the conditions of their instability. According to the information there were 88 blocks with and approximate space of 34.60 hectares which had the worst condition in terms of the stability and then 189 blocks with a space of 163.97 hectares that were put in the second place in terms of instability.

Table1. The number and spaces of the blocks located in the middle textures of the city in terms of their instability conditions.

Instability	0-20 percent	21-40 percent	41-60 percent	61-80 percent	81-100 percent	Total
Number of blocks	192	125	163	189	88	757
Area of Blocks (Hectare)	111.58	96.60	134.02	163.97	34.60	540.79

Source: The Authors’ Studies, 2014

Map number 2: The conditions of the blocks located in the middle textures of the city of Bojnourd in terms of minuteness

Source: Authors, 2014

Determining The Capacities Of Shabby Towns To Reach Sustainable Development

Inscrutability

In order to reach the amount of the inscrutability of the urban blocks, the number of the buildings with the accessibility by less than 6 meters roads was calculated in comparison with all the buildings in the block which resulted in a percentage. Accordingly as the resulted number becomes bigger the permeability of that block is less than the other blocks. Table 2 presents the number and spaces of the blocks based on the conditions of their inscrutability. According to the resulted information 75.95 percent of the blocks located in the middle textures (575 blocks) were in a good condition in terms of permeability and accessibility and only 0.79 percent of them with space of approximately 2.81 hectares had an inscrutability of more than 61 percent.

Table 2. The number and spaces of the blocks located in the middle textures of the city in terms of the conditions of their inscrutability.

Inscrutability	0-20 percent	21-40 percent	41-60 percent	61-80 percent	81-100 percent	Total
Number of blocks	575	130	46	5	1	757
Area of Blocks (Hectare)	353.20	141.87	42.89	2.72	0.09	540.79

Source: The Authors' Studies, 2014

Map number 3: The conditions of the blocks located in the middle textures of the city of Bojnourd in terms of their inscrutability factor.

Source: Authors, 2014

8.3 Minuteness

In order to reach the amount of the minuteness of urban blocks the number of the buildings with spaces less than 200 square meters were counted in comparison with all the buildings in each block and a percentage was resulted. Accordingly, as the number of the resulted calculation gets bigger, the minuteness of that block is higher than the other blocks. Table 3 presents the number and spaces of the blocks based on their minuteness. According to the resulted information, in 253 blocks located in the middle textures (33.41 percent), less than 20 percent of the buildings had a space of less than 200 square meters, but on the other hand 38 blocks in the studied area covering a total space of 7.73 hectares had the highest amount of minuteness.

Table 3. The number and spaces of the blocks located in the middle textures of the city in terms of their minuteness conditions.

Minuteness	0-20 percent	21-40 percent	41-60 percent	61-80 percent	81-100 percent	Total
Number of blocks	253	169	168	129	38	757
Area of Blocks (Hectare)	124.18	195.75	129.64	83.48	7.73	540.79

Source: The Authors' Studies, 2014

Map number 4: The conditions of the blocks located in the middle textures of the city of Bojnourd in terms of their instability factor.

Source: Authors, 2014

8.4 Weariness

In the end and after studying the conditions of the blocks located in the middle textures of the city of Bojnourd with consideration of the three factors of instability, inscrutability and minuteness, in order to calculate the amount of the weariness of each block the importance ratio (weight) of each of the factors was determined by the utilization of the hierarchical analysis method and

through the Expert Choice soft-ware. Therefore the factors were compared two by two with each other based on the hour quantity table 9. The following diagram shows the ratios for each of these factors.

Diagram number 1: Weighting the shabby textures’ factors in the Expert Choice soft-ware.
Source: Authors, 2014

After determining the ratio for the importance and significance of each factor, the score for each block in each of the above mentioned factors were designated as follows:

- 0 percent to 20 percent: 1 point
- 21 percent to 40 percent: 2 points
- 41 percent to 60 percent: 3 points
- 61 percent to 80 percent: 4 points
- 81 percent to 100 percent: 5 points

From the merging of the ratios for the significance of each factor in the points of the blocks, the amount of weariness for each block was calculated and categorized in to the five groups of very high weariness, high weariness, moderate weariness, low weariness and very low weariness. Table 4 indicates the conditions of the middle textures of the city in terms of the amount of weariness. According to this, the priority for intervention is also determined. Therefore the blocks with very high weariness are the first priority for intervention and the blocks with very low weariness have no priority for intervention.

Table 4. The number and spaces of the blocks located in the middle textures of the city in terms of the amount of their weariness.

Weariness	0-20 percent	21-40 percent	41-60 percent	61-80 percent	81-100 percent	Total
Number of blocks	192	152	257	146	10	757
Area of Blocks (Hectare)	111.58	109.37	231.76	82.09	5.96	540.79
Percent	25.36	20.07	33.94	19.28	1.32	100

Source: The Authors’ Studies, 2014

According to the resulted information 5.96 hectares from the middle textures of the city have very high weariness and 82.09 hectares have high weariness and these blocks also have low inscrutability and high minuteness due to the low quality of the material used to build them and how old their buildings are and need to be organized correctly and suitable resolves must be carried away in order to better the skeletal and social quality of these blocks. Some of the resolves are as follows:

- Creating a good situation for the old inhabitants of these areas to take part in the optimization and rebuilding of the middle textures
- Creating a possibility for the inhabitants to be present in all the stages of making the decision, funding, executing of the plans with their direct intervention
 - The readjustment of the lands by the municipal’s office by removing the owners in the time of rebuilding and acquiring the needed land for public services
- Creating rules for giving building densities based on the ability, structure and traffic capacity of the present roads network
- Giving permission for buildings with mixed functionality of residential-commercial or services based on the proposed densities and the structure of the present network
- Giving short and long term loans with the least amount of percentage in order to encourage citizens to rebuild the shabby textures
- Giving free of tax permissions for those inhabitants of these areas who rebuild their homes

Determining The Capacities Of Shabby Towns To Reach Sustainable Development

Map number 5: The condition of the blocks located in the middle textures of the city of Bojnourd in terms of the amount of weariness and the priority for intervention

Source: Authors, 2014

CONCLUSION

With the rise of the new theories regarding the infill development from the beginning of the twentieth century until now, is an indicative of the necessity for reviving the urban shabby textures (Rafi'eian et al, 2010: 235). The policy of the infill development because of the reducing in the costs for preparing, storing, safeguarding and order in the city and easier accessibility to urban services, has a relatively better chance in comparison with other urban development policies. Therefore it is necessary that we look upon urban shabby textures not as threats and issues but as opportunities, opportunities created by incorrect planning (Mohammadi and Zavvare, 2009: 28). In the present study and in order to recognize this opportunity the amount of the weariness for each of the blocks located in the middle textures of the city of Bojnourd was calculated by the utilization of the three factors of instability, inscrutability and minuteness and determining the significance ratio for each of them. According to the study that was carried away the blocks in this area were categorized into five groups and the priority for the intervention in each of them was determined. Then suitable solutions were presented in order to organize the present texture, increase the ability to accept more population and attracting citizens to these areas, acquiring the needed services for them and encouraging inhabitants to take part in the rebuilding process. Therefore with correct planning in this field, the collapse of the inner parts of the city and unorganized expansion in the margins of the city and the undesirable consequences of dispersed development can be avoided.

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