

Urban Blight in Historical Centre of Shiraz City

Neda Rafiee*¹ and T.M.Mahesh²

**1-Research Scholar, Institute of Development Studies, University of Mysore.*

2- Professor in Urban and Regional Planning, Institute of Development Studies, University of Mysore, Karnataka.

**Corresponding Author: Neda Rafiee*

Abstract

Rapid urbanization is bringing in its wake the urbanization of poverty as well as pressure on urban land and resources. In this context, the conservation and renewal of historical areas, often (but not exclusively) found in the Central core of the cities and towns, assume great significance. Of the total geographical area of Shiraz city (18,622.79 ha), the Central area of Shiraz city is 375.82 ha and it is deteriorated and "blighted area". The deteriorated Central area is located in the historical and cultural texture and so the places are full of historical monuments. The Central area of Shiraz city includes eleven districts, of which Bala Kaf district is one of them and located in the south west of the central area, this region is the most populated among the other districts. The purpose of this study is to find the main reasons and causes of blighting in the central area of Shiraz city. First of all by considering and documenting the socio-economic and physical characteristics of Bala Kaf district, the main causative factors is cleared and then by analyzing the questionnaire data through Pearson Chi-Square test, linear by linear association and using the SPSS, direct relation between the "Urban Deterioration" and "each blight factor" has been calculated and then more detailed and precise causative urban decline factors are gained and identified.

Keywords: Blighted area, Urban decline factors, Instability blocks, Tiny plots, Non-accessibility blocks.

Introduction

It is obvious that every country faces decline during its development processes because each city is a living organism and has a life cycle of birth, growth and decline. However, cities are the centers of civilization and culture: they are a place of tension and strain, as well. Further, urban decline as a process appears in three progressively worsening forms: (a) deterioration, (b) various degrees of decay; and (c) formation of slums. The term 'blight' can be applied to the first two stages of decline. So, blight is a degree of decline (Ansari, 2000). Though slums and blight seem to be identical, they differ in subtle respects. Blights occur in residential, commercial and industrial districts (Reddy, K.N, 1996). It includes a large number of slums. It is commonly agreed that the two basic characteristics of blighted area are: substandard and stagnation or deterioration. Blighted areas are always in a state of deterioration (Rao, R.N, 1990). They are not stand still; they spread from neighborhood to neighborhood (Reddy, K.N, 1996). Slums are just residential blighted areas with poor amenities (Rao, R.N, 1990). So, the 'blighted areas' of the city of Shiraz are considered in this study; they consist of residential and non-residential areas, including some levels of deterioration. The study has not focused on slums, which are the worst forms and grades of urban decline. The blighted areas of the Central area of Shiraz city are considered as the first two stages of decline of an urban area, which have not reached the stage of slums as yet, but they spread day by day.

As a city continues to expand outward, new infrastructures should be provided for newly developed areas. All these cause tax increases and the number of tax payers has not increased. The abandoned blighted districts cannot pay their share of the economic burden. (Wood, E.E, 1969).). Prevalence of depreciating values, impaired investments, and social and economic maladjustments and also blighted areas that are subject to being submerged by water provided that any ecologically valuable existing features in such areas shall, to a maximum extent feasible, be preserved (Gallion, A.B. and Eisner, S., 1950). Quin, James A. (1950) has treated the term 'slum' and 'blighted' as synonymous but Quin makes a difference between the terms: he holds that the term 'blighted' refers to both residential and non-residential areas while the term slum refers to only residential areas.

Methodology

Triangulation is the application and combination of several research methodologies in the study of the same phenomena. It can be employed with quantitative and qualitative studies. At the present, triangulation method is used to achieve better results from research project. By combining multiple theories, empirical materials and research methods, the researcher can overcome the weaknesses or biases that come from a single method. Combination of two methodologies may also increase reliability and present a more accurate picture of the problem.

- A major research question of this study is: What are the main reasons and elements that cause and consequences blight in the historical centre of Shiraz city?

The Central area of Shiraz city includes eleven districts, of which Bala Kaf district is one of them and located in the south west of the central area, this region is the most populated among the other districts: the number of population in 1996 was 18,322 persons. The population growth rate between 1986 and 1996 was -1.54 per cent and the population density were 164 persons per hectare which were in the fourth rank among the whole eleven districts which has the highest population density.

The purpose is to document the socio-economic attributes of the residents of Bala Kaf district in the old city including their views on the aspects like decline of the Central area, in civic services like the water supply, drainage, roads, street lighting, pavements; sanitation including community latrines, conservancy services, housing, community facilities, impact of renewal programs, community participation, and of course all with their suggestions.

Keeping the above aspects in mind, 384 residents were identified from the Bala Kaf district. Essential care was taken to ensure that the sample was not clustered in a limited area and that it did not reflect a disproportionate representation of any class, community, sex, section or group. Consequently, a stratified random sample was drawn.

The sample size (of 384) was calculated through a public service of Creative Research Systems survey software. It is used to determine how many people you need to interview in order to get results that reflect the characteristics of the target population, as precisely as needed. Confidence level in Bala Kaf questionnaire sampling is 95 per cent. The 95 per cent confidence level means that we could be 95 per cent certain.

The structured questionnaire comprises of 13 sections while each section comprises of several different questions. While framing questions, an effort was made to avoid scope for confusion, difficulty of understanding, surprises and distortions. There were two separate statistical methods to analyze the data that were gathered using the questionnaire, first of all a descriptive method, an analysis of the questionnaire, section-wise, which is presented below and it is accompanied by the researcher's observations. The second method was the perceptive analysis through χ^2 statistical test and using SPSS software.

Factors for Identifying Blighted Areas in Iran and Shiraz City

Tehran's Comprehensive / Master Urban Development Plan (2005) states that the decayed areas are the regions which are vulnerable for disasters, especially earthquakes. But based on High Council for Urban Planning and Architectural (HCUDA) of Iran definition, the blighted areas (urban blocks) are urban blocks that have at least 50 per cent of their plots with the three following characteristics:

1. Lack of stability;
2. Problems with accessibility; and
3. Tiny plots.

Instability block: At least 50 per cent of its buildings would not be resistant and that is mainly because of unsuitable construction materials or there are no technical observations made after building as to their nature.

Non-accessibility block: The urban block with at least 50 per cent of its roadways are less than 6 meters in width.

Tiny block: At least 50 per cent of this block consists of plots with an area of 200 m² and less.

Table 1: Area of Deterioration based on 3 factors in Shiraz city 2006

Factors	Area (hectare) ¹	Percent
Tiny Block	2,003.9	10.76
Non- accessibility Block	2,448.3	13.15
Instability Block	3,645.4	19.57
Total area of Shiraz city	18,622.79	100.0

Shahro Khaneh Consulting Engineering Company, 2007

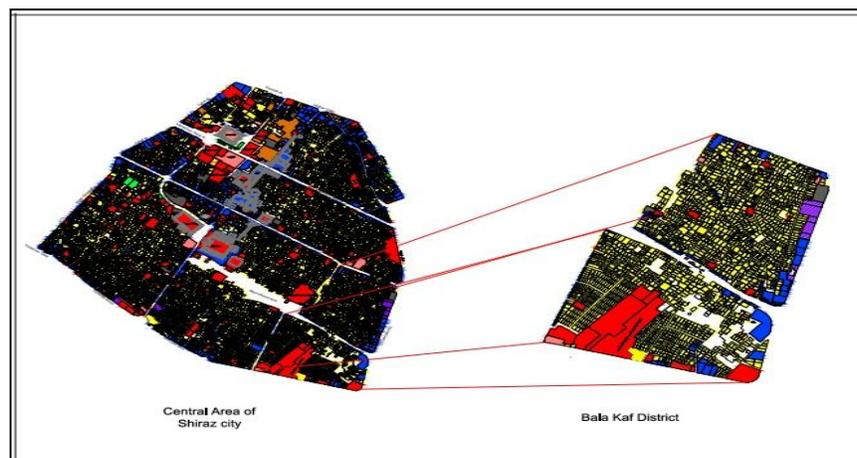
1. This is the area of each region with each specific factor. Each area may have one, two or three of the factors in one and same place. So the sum of them would not be algebraically 18,622.79 and either the total percent would not be equal to 100.

Table 1 shows deteriorated area in Shiraz city in 2006. As per this table each blighted factor considers separately. The area of urban blocks which have at least 50 percent tiny blocks and non- accessibility blocks are 2,003.9 and 2,448.3 hectare in order that constitute 10.76 and 13.15 percent of the total are of Shiraz city respectively. The area of urban blocks which have more than 50 percent instability constructions are 3,645.4 hectare that constitutes 19.57 percent of the total area of Shiraz city. In fact instability blocks in Shiraz city are the most signs of deterioration among the other factors such as tiny blocks and non-accessibility blocks. In other words At least 50 per cent of 3,645.4 hectare include buildings would not be resistant and that is mainly because of unsuitable construction materials or there are no technical observations made after building as to their nature.

Bala Kaf District

The Central area of Shiraz city includes eleven districts, of which Bala Kaf district is one of them and located in the south west of the central area (figure one), this region is the most populated among the other districts: the number of population in 1996 was 18,322 persons. The population growth rate between 1986 and 1996 was -1.54 per cent and the population density were 164 persons per hectare which were in the fourth rank among the whole eleven districts which has the highest population density.

Keeping the above aspects in mind, 384 residents were identified from the Bala Kaf district. Essential care was taken to ensure that the sample was not clustered in a limited area and that it did not reflect a disproportionate representation of any class, community, sex, section or group. Consequently, a stratified random sample was drawn.



Decline of Bala Kaf District

The causative factors for the degeneration of the quality of life in the Central area of Shiraz city were manifold: demographic, socio-economic, civic and administrative, namely (Table 2):

- A) Excess population;
- B) inadequate civic amenities (poor maintenance of roads, inadequate sanitation, water supply, electricity, gas, security and safety, hygiene and health facilities, sports and green spaces, education);
- C) Out-migration of affluent people from the Central area to other parts of Shiraz city;
- D) Imbalance in the distribution of urban amenities and civic services throughout Shiraz city and the Central area;
- E) Heavy traffic;
- F) Shifting of government and other offices to the other parts of city
- G) Neglect of historical monuments;
- H) Insufficient new and affordable housing (which is deemed affordable to those with a median and low household income residents);
- I) General decline in the level of income of the residents;
- J) Inadequate attention of urban planners to the experiences and lessons from previous schemes; and
- K) Lack of proper renewal approach (selection of a correct and suitable scheme) for each specific region.

Table 2: Factors Causing Decline in the BaLa Kaf District

Factors	A	B	C	D	E	F	G	H	I	J	K
Number of respondents who point each factor as priority among the list	65	292	184	184	104	58	115	273	280	107	203
Percent	17	76	48	48	27	15	30	71	73	28	53

Source: Questionnaire Survey 2012.

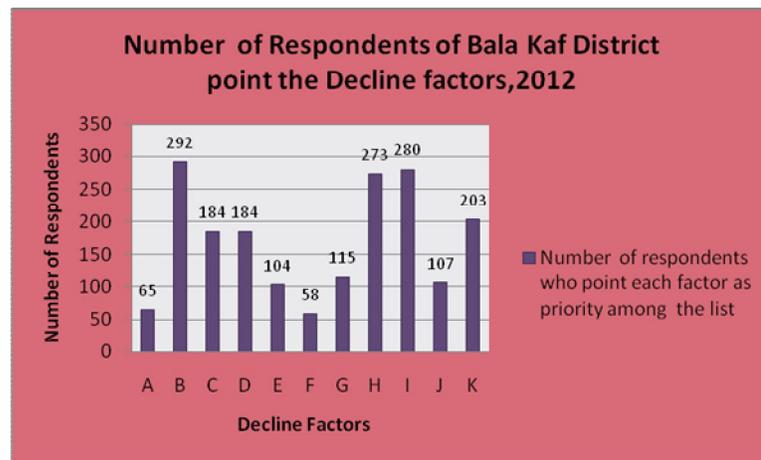


Table 2 shows the respondents, the priorities among the factors causing decline in the Bala Kaf district in the Central area of Shiraz city, The respondents were asked to indicate as to which of the above or any other was the most important factor, in order of priority, for the fast pace of urban decay in the Central area of Shiraz city. While all the causative factors of urban decay analyzed above were approved by the respondents in varying percentages, 76 per cent of the respondents considered inadequate civic amenities like the poor maintenance of roads, inadequate sanitation, water supply, electricity, gas, security and safety, hygiene and health facilities, sports and green spaces, education as the most important factor, in order of priority, for the decline of the Central area. Next to inadequate civic amenities, it was the factor of general decline in the level of income of the residents (73 per cent of respondents) which was causing decline in the old city.

The other factors were the insufficient new affordable housing which was deemed affordable to those with a median and low household income (71 per cent), lack of proper renewal approach (selection of a correct and suitable scheme) for each specific region (53 per cent), imbalance in the distribution of urban amenities and civic services through Shiraz city and Central area (as per the opinion of 48 per cent), which was causing decline in the old city. These were followed by out-migration of affluent people from the Central area to the other parts of Shiraz city (48 per cent of the respondents), neglect of historical monuments (30 per cent), inadequate attention of urban planners to the experiences and lessons from previous schemes (28 per cent), heavy traffic (27 per cent), excess of population (17 per cent), shifting government and other offices to the new city (15 per cent).

Thus, according to Table 2, the three dominant factors responsible for the decline of the central area were: (1) Inadequate civic amenities (poor maintenance of roads, inadequate sanitation, water supply, electricity, gas, security and safety, hygiene and health facilities, sports and green spaces, education); (2) General decline in the level of income of the residents; and (3) Insufficient new affordable housing (which was deemed not affordable to those with a median and low household income residents).

By accepting the following direct relations and with regard to the answers by the respondents, the first “research question” (**what are the reasons and causes of blighting in the central area?**) Could be answered as follows:

According to the answers by the respondents, the three dominant factors responsible for the decline of the central area were: (1) Inadequate civic amenities (poor maintenance of roads, inadequate sanitation, water supply, electricity, gas, security and safety, hygiene and health facilities, sports and green spaces, education); (2) General decline in the level of income of the residents; and (3) Insufficient new affordable housing (which was deemed not affordable to those with a median and low household income residents).

As mentioned in the methodology chapter, the second statistical method used in analyzing the questionnaire data is the perceptive analysis through Pearson Chi-Square test (χ^2), likelihood ratio, linear-by-linear association, using the SPSS.

1. Based on the perceptive analysis in this study, “open storm water drainage system” is an independent factor (criterion) and “deterioration” is a dependent factor; on the other hand, based on case processing summary, the value of χ^2 between the two criteria is 501.863 at $p < 0.005$, so it is true that, according to Pearson Chi-Square test (χ^2), there is a direct relation between “deterioration” and “open storm water drainage system”.
2. Value of χ^2 between “not cleared regularly” and “deterioration” is 211.760 at $p < 0.005$, so it is true that, according to Pearson Chi-Square test (χ^2), there is a direct relation between “not cleared regularly” and “deterioration”.
3. Value of χ^2 between “condition of the roads” and “deterioration” is 222.417 at $p < 0.005$, so it is true that, according to Pearson Chi-Square test (χ^2), there is a direct relation between “conditions of the roads” and “deterioration”.
4. Value of χ^2 between “satisfied with health facilities” and “deterioration” is 351.822 and $p < 0.005$, so it could be true which say according to Pearson Chi-Square test (χ^2) there is a direct relation between “satisfied with health facilities” and “deterioration”.
5. Value of χ^2 between “satisfied with post, bank, cinemas” and “deterioration” is 220.671 and $p < 0.005$, so it could be true which say according to Pearson Chi-Square test (χ^2) there is a direct relation between “satisfied with post, bank, cinemas” and “deterioration”.
6. Value of χ^2 between “cooperation at any time” and “deterioration” is 77.67 at $p < 0.005$, so it is true that, according to Pearson Chi-Square test (χ^2), there is direct relation between “cooperation at any time” and “deterioration”.
7. Value of χ^2 between “program delayed” and “deterioration” is 70.929 and $p < 0.005$, so it is true that there is a direct relation between “program delayed” and “deterioration”.
8. Value of χ^2 between “not represented to municipality” and “deterioration” is 14.032 at $p < 0.005$, and this means that there is a direct relation between “not represented to municipality” and “deterioration”.
9. Value of χ^2 between “non-reaction about participation” and “deterioration” is 0.88 and $p = 0.9$ and this is to say that there is no direct relation between “non-reaction about participation” and “deterioration”.
10. Value of χ^2 between “shifting government and other offices to the new city” and “deterioration” is 82.432 and $p < 0.005$, and this is to mean that there is a direct relation between “shifting government and other offices to the new city” and “deterioration”.
11. Value of χ^2 between “neglect of historical monuments” and “deterioration” is 172.224 at $p < 0.005$ which means that there is a direct relation between “neglect of historical monuments” and “deterioration”.
12. Value of χ^2 between “insufficient affordable housing” and “deterioration” is 409.043 and $p < 0.005$, so it could be true which say according to Pearson Chi-Square test (χ^2) there is a direct relation between “insufficient affordable housing” and “deterioration”.
13. Value of χ^2 between “inadequate civic services” and “deterioration” is 198.177 and $p < 0.005$, so it could be true which say according to Pearson Chi-Square test (χ^2) there is a direct relation between “inadequate civic services” and “deterioration”.

Thirteen direct relations have been considered; by the acceptance of the direct relations, it shows “**unfair distribution of civic amenities through the Shiraz city and neglect of managerial responsibilities and proper urban management**” can cause deterioration in the historical centre of Shiraz city. It could be one of the main reasons for “**inadequate civic amenities in the**”

central area". So the main reasons of the first dominant factors responsible for the decline of the central area was cleared and approved.

1. Based on the perceptive analysis, 'number in migrants' is supposed to be an independent factor (criterion) and 'deterioration' is assumed as a dependent factor. On the other hand, based on the case processing summary, the value of χ^2 between the two mentioned criteria is 191.354 at $p < 0.005$, so it could be true which say according to Pearson Chi-Square test (χ^2), there is a direct relation between "deterioration" and "number of migrants".
2. Value of χ^2 between "years of settlement" and "deterioration" is 170.219 at $p < 0.005$, so it could be true which say according to Pearson Chi-Square test (χ^2) there is a direct relation between "years of settlement" and "deterioration".
3. Value of χ^2 between "number of rented houses" and "deterioration" is 102.381 at $p < 0.005$, so it could be true which say according to Pearson Chi-Square test (χ^2) there is a direct relation between "number of rented houses" and "deterioration".
4. Value of χ^2 between "number of dilapidated houses" and "deterioration" is 6.481 at $p < 0.005$, so it could be true which say according to Pearson Chi-Square test (χ^2) there is a direct relation between "number of dilapidated houses" and "deterioration".
5. Value of χ^2 between "financial inability to connect to drainage" and "deterioration" is 18.056 at $p < 0.005$, so it could be true which say according to Pearson Chi-Square test (χ^2) there is a direct relation between "financial inability to connect to drainage" and "deterioration".
6. Value of χ^2 between "deterioration" and "migration of affluent people from historical centre" is 15.753 at $p < 0.005$, so it is true that according to Pearson Chi-Square test (χ^2), there is a direct relation between "deterioration" and "migration of affluent people from historical centre".

Six relations between six criteria and deterioration have been considered for analysis and it has turned out that these 6 factors ("number of migrants, years of settlement, number of for rented houses, number of dilapidated houses, financial inability to connect to drainage, migration of affluent people from historical centre") have direct relation with deterioration.

By the acceptance of all the above direct relations, it shows "**Centripetal and centrifugal forces of the city**" and it could be one of the main reasons to cause "**general decline in level of income of the residents in the historical centre of Shiraz city**". Because of following reason:

"Migration of the affluent people from the historical centre" is one of the important causes for historical decline; The ever increasing population of Shiraz city and densities, pressure of the market and growing demand for land uses other than residential, complex local governance arrangements, and still limited capacities of local authorities in the historical centre of Shiraz city in addition to geographical situation and sudden expansion of the city toward the gardens around have made the out-migration of local people from the Central area to its peripheries and the rural and urban migration of vulnerable people into the historical area, (Fars Jahad Daneshgaahi Report, 2000) These factors have also led to deterioration, and it obviously causes "**general decline in level of income of the residents in the historical centre of Shiraz city**".

Finally the main reasons of the second dominant factors responsible for the decline of the central area was cleared and approved.

1. Value of χ^2 between "lack of attention to the previous plan experiences" and "deterioration" is 313.925 at $p < 0.005$, and thus there is a direct relation between "lack of attention to the previous plan experiences" and "deterioration".
2. Value of χ^2 between "lack of knowledge to select proper approach" and "deterioration" is 43.084 at $p < 0.005$ to mean that there is a direct relation between "lack of knowledge to select proper approach" and "deterioration".

Two relations between two criteria and deterioration have been considered; the two factors (lack of attention to the previous plan experiences, lack of knowledge to select proper approach) have proven direct relations with deterioration.

By accepting the above direct relations, and also the three direct relation between these factors (program delayed, not representing to municipality and migration of affluent people) and "deterioration", it shows "**the existing urban renewal approaches and detailed plan of historical centre of Shiraz city are not right approach that is not match/ coincide with the socio-economic and cultural status of the current residents**". It could be one of the main reasons of "**insufficient new affordable housing**" in the area. So the main reasons of the third dominant factors responsible for the decline of the central area was cleared and approved.

Furthermore based on the perceptive analysis of the questionnaire, through Pearson Chi-Square test (χ^2), likelihood ratio, linear-by-linear association and using the SPSS, the first "research question" was replied in details as described above.

Conclusions

Though slums and blight seem to be identical, they differ in subtle respects. The differences between blight and slum areas are the following:

Blighted areas are a larger and more comprehensive a term in respect of size of area and also in their definition. Blighted areas include slums; and so blight refers to a large area, in size in comparison with the slums. Blighted area includes residential and non-residential land uses but slums include just residential areas. Besides, Blights are not as much deteriorated as slums. Slums are the worst forms and the worst grade of blights and finally, Blights as a phenomenon is not static; it spreads from house to house, but slums are the last step of deterioration process, the worst form and also static.

So, the 'blighted areas' of the city of Shiraz are considered in this study; they consist of residential and non-residential areas, including some levels of deterioration. The study has not focused on slums, which are the worst forms and grades of urban decline. The blighted areas of the Central area of Shiraz city are considered as the first two stages of decline of an urban area, which have not reached the stage of slums as yet, but they spread day by day.

Tehran's Comprehensive / Master Urban Development Plan (2005) states that the decayed areas are the regions which are vulnerable for disasters, especially earthquakes. But based on the Architectural and Urban Development Council definition, the blighted areas (urban blocks) are urban blocks that have at least 50 per cent of their plots with the three following characteristics:

1. Lack of stability;
2. Problems with accessibility; and
3. Tiny plots.

Shiraz city has 1,691 ha blighted area that approved by the Architectural and Urban Development Council of Iran. In other words 1691 hectare of Shiraz city has all three mentioned blighted factors together in one place. However the total deteriorated area of Shiraz city that is 4,119.2 hectare and it includes at least one of the blighted factors. Instability blocks in Shiraz city are the most signs of deterioration among the other factors such as tiny blocks and non-accessibility blocks. Central area of Shiraz city is 375.82 hectare that totally is identified as a blighted area by Developing and Renewal Organization of Shiraz city, and it constitutes 2.02 per cent of Shiraz city. It means central area is an urban block that more than 50 per cent of its texture includes non accessibility, instability and tiny blocks. The Central area of Shiraz city includes eleven districts, of which Bala Kaf district is one of them and located in the south west of the central area, this region is the most populated among the other districts: the number of population in 1996 was 18,322 persons. The purpose of this section is to document the socio-economic attributes of the residents of Bala Kaf district in the old city including their views on the aspects like decline of the Central area, as stated above 384 residents of different age groups were interviewed. The causative factors for the degeneration of the quality of life in the Central area of Shiraz city were manifold; the three dominant factors responsible for the decline of the central area were: (1) Inadequate civic amenities (poor maintenance of roads, inadequate sanitation, water supply, electricity, gas, security and safety, hygiene and health facilities, sports and green spaces, education); (2) General decline in the level of income of the residents; and (3) Insufficient new affordable housing (which was deemed not affordable to those with a median and low household income residents). On the whole, the Bala Kaf residents were not happy about the living conditions and the quality of life existing in the district.

As mentioned in the methodology chapter, the second statistical method used in analyzing the questionnaire data is the perceptive analysis through Pearson Chi-Square test (χ^2), likelihood ratio, linear-by-linear association, using the SPSS. Based on the perceptive analysis, 'one indicator' (as each criterion discussed in this chapter separately) are supposed to be an independent factor (criterion) and 'deterioration' is assumed as a dependent factor. By the acceptance of all the above direct relations, the following precise causative urban decline factors are gained and identified:

- Centripetal and centrifugal forces of the city are the two reasons that cause "general decline in level of income of the residents in the historical centre of Shiraz city" and it could be created blighted areas in the central areas of Shiraz city, so the main reasons of the second dominant factors responsible for the decline of the central area was cleared and approved.
- The Development Authority of the city has been concentrating greatly on the development of other parts of the city, more than in the central areas of Shiraz city, or in the other words "unfair distribution of civic amenities through the Shiraz city and neglect of managerial responsibilities and proper urban management" can cause deterioration in the historical centre of Shiraz city. It could be one of the main reasons for "inadequate civic amenities in the central area". So the main reasons of the first dominant factors responsible for the decline of the central area was cleared and approved.

- ” the existing urban renewal approaches and detailed plan of historical centre of Shiraz city are not right approach that is not match/ coincide with the socio-economic and cultural status of the current residents”. It could be one of the main reasons of “insufficient new affordable housing” in the area. So the main reasons of the third dominant factors responsible for the decline of the central area was cleared and approved.

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