CHAPTER IV

RESEARCH METHODOLOGY
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4.1 Introduction

Research methodology plays an important role in any research. It includes research design, data collection, analysis and interpretation of results. The term ‘methodology’ comprises this whole process. The final results of a research depend on the methodology that is employed and the methodology depends on the type of data needed to answer the research questions posed in a particular research. Social sciences researches use either quantitative research methods or qualitative research methods or both (triangulation). There is however a controversial argument between social sciences researchers and scientific researchers in regard to the use of the two methods in the social sciences and debates on quantitative and qualitative research methods is still continuing.

However these two approaches help to understand the socio-economic realities of the society. The qualitative approach use non-numeric data and the quantitative approach use numeric data. Selecting an appropriate methodology for specific research depends on the research objectives and research questions which are going to be answered through the research. The research methods must lead to comprehensive and clear results at the end of the research.

This chapter outlines the design, structure and the steps followed in the research. The methods used in the collection of data, processing and analyzing data and information used in the research are elaborated on. The description and motivation of the cases, selection of research design, data collection methods as well as the data analysis tools are also discussed in some detail in this chapter.
4.2 The Research Design

Research design serves as a logical manual to guide a researcher in the course of data collection, analysis and interpretation. Stating clearly each step in the manual can help a researcher collect the right kind of data and analyze them in the right way to address the primary research questions. The research design has been developed in three stages:

1. An extensive review of literature on urban renewal, urban development, slums and urban blighted area, sustainable urban renewal, affordable housing, citizen participation and socio-economic effect of urban renewal programs on the cities (A review of literature in Chapter II).

2. Consideration and analysis of current situation of socio-economic and physical aspects of urban blighted areas in Shiraz city and the Central area and also a discussion on residents’ opinions (Bala Kaf district) to identify the problems and nature of the area towards achieving sustainable and appropriate urban renewal approach in the Central area and Bala Kaf district (Chapter III and Chapter V).

3. Consideration, analysis and assessment of the current urban renewal initiatives and four different aspects of the Central area towards achieving the general urban renewal approach and proposed integrated strategies in detail and specifics for the Central area and Bala Kaf district (Chapter VI and Chapter VII).

4.3 Research Questions

A major research question of the study, as indicated earlier in the first chapter, is: **What is the best, appropriate approach to renewal of the blighted historical centre of Shiraz city?** In order to answer the broad question above and also to understand the problems of urban renewal of the historical centre of Shiraz city, the following main research questions are also being investigated:
1. What are the physical elements that are the causes and consequences of blight in the historical centre of Shiraz city?

2. Is the existing, and were the previous, approaches of the Municipality or Organization of Urban Development and Housing, the correct and appropriate ones to resolve the problems of blighting in the Central area?

3. What are the best approaches to resolve the blight in the central area and then Bala Kaf district in the Central area?

The additional and subsidiary questions that the thesis attempts at answering are the following:

- How do the socio-economic conditions of the Central area of Shiraz city lead to deterioration?
- What are the general reasons or the criteria of the blighted area in Shiraz city and its Central area?
- Does the Development Authority of the city concentrate greatly on the development of other parts of the city than the Central areas of Shiraz city?
- Are centripetal and centrifugal forces of the city the two causes that have created blighted areas in the Central area of Shiraz city?
- Is improper management of infrastructural facilities one of the causes of urban decline in the Central area of Shiraz city?
- What are the role of each factor (out of three characteristics) for identifying urban decline, in Shiraz city and central area?
- What are the ranking of factors that causing urban decline in public points of view?
- What are the effects of urban renewal initiatives for blight alleviation in central area of Shiraz city?
• What course of actions and strategies can be built on strengths, minimizing weaknesses, seizing opportunities and counteracting threats in central area of Shiraz city?

• What is most appropriate approach for renewal the historical centre of Shiraz city?

• What are the suitable strategies for urban blight alleviation in the historical centre of Shiraz city?

4.4 Hypotheses

1. Centripetal and centrifugal forces of the city are the two causes that have created blighted areas in the central areas of Shiraz city.

2. The Development Authority of the city has been concentrating greatly on the development of other parts of the city than in the central areas of Shiraz city.

3. The central area has further been deteriorated due to improper management of infrastructural facilities in the central area of Shiraz city.

4. The existing Master Plan for Shiraz City is not a right approach for either for urban renewal or for the renewal of the blighted areas in the central area of Shiraz city.

4.5 Sources of Data and Collection

Two types of data could be collected for the study, namely: primary and secondary data. Primary data are recognized as data that are gathered for a specific research in response to a particular problem through interviews, questionnaires or observations. Whereas the secondary data can be obtained from various kinds of documents such as research reports, annual reports, books, and articles (Schensul, Schensul, and LeCompte, 1999). In this study, both types of data are used.

A survey is often classified by the kind of instruments used. There are many methods of collecting data such as observations, interviews or
questionnaire survey. Saunders and others (2000) note that the greatest use of questionnaires is made by the survey strategy. Questionnaires can therefore be used for descriptive research such as that undertaken using attitude and opinion questionnaires and questionnaires of organizational practices enable us to identify and describe the variability in different phenomena (Lewis, Saunders, and Thornhill, 2009).

There are six different sources for data collection; documentation, archival records, interviews, directs observations, participant observations and physical artifacts. All of these sources of evidence have both strengths and weaknesses, but none is considered superior to the other. Yin therefore recommends using several of them while a good research should thereby include as many sources as possible (Tellis, 1997).

4.6 Triangulation (Combination of Methods)

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 by most social science researchers to achieve better results from their research projects. By combining multiple theories, empirical materials and research methods, the researchers 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.

Creswell (1994) stresses that the concept of triangulation was based on the assumption that any bias inherent in particular data sources, investigators, and methods would be neutralized when used in conjunction with other data sources, investigators, and methods. Creswell further describes a combined method of study is one in which the researcher uses multiple methods of data collection and analysis and also these methods might be drawn from ‘within methods’ approaches, such as different types of quantitative and qualitative data collection strategies.
If the social science researcher did not use qualitative research methods, he may overlook many phenomena that occur within the context of the settings. On the other hand, in the absence of quantitative methods, it is difficult to show the differences between different variables. So there are a number of benefits can be achieve by triangulation quantitative research methods and qualitative research methods.

4.7 Field Reconnaissance

Prior to setting up the research design, and deciding on triangulation, a reconnaissance of the historical city of Shiraz city was carried out by the scholar, to have her focus on urban renewal of historical centre anchored in some useful thinking on it. The reconnaissance did indeed make possible some good thinking on the part of the researcher to set down her methodology for the study. Every neighborhood in the Central area was visited with a view to gaining some relevant information on it, besides careful reading on the history, human resources, architecture and aesthetics of each of them.

Initially, of course, a discussion was carried out with one of the experts (Mr. Rahim Oji, the previous Mayor of the historical centre and the Head of Urban Council of Shiraz city) at the Government institution. We walked through the historical centre, observed and discussed about the area, its problems and the opportunities available for resolving the problems. This interview was of a general nature and aimed at obtaining useful information on the field reconnaissance from different aspects, urban renewal planning and management policies, and implementation of the policies and difficulties and constraints in urban heritage conservation. Further, a preliminary assessment of what was right and wrong in the renewal of the historical centre of Shiraz city and the impact of some Urban renewal programs on the local people and the country was also made. Table 4.1 shows the primary data collection methods used in the study, in a nutshell. Figure 4.1 on the other hand is the analytical framework.
<table>
<thead>
<tr>
<th>Category</th>
<th>Method</th>
<th>Definition</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solicitation of Public Opinion</td>
<td>Household Surveys</td>
<td>Can be face–to–face or in written form</td>
<td>Captures the opinion right at the moment of experience, no recall bias, a large number of households of Bala Kaf district in the historical centre of Shiraz city; surveys are collected allowing for cross validation of the results, the Census collects baseline information about households which helps calibrate results</td>
<td>Can be biased by an incident or other negative experience which has nothing to do with the research questions. Hard to extrapolate if not large sample Willingness to provide information, memory of respondents, understanding of the questions and knowledge of the topic</td>
</tr>
</tbody>
</table>

Source: Sketched in by the research scholar
Figure 4.1: An Analysis Framework for the Study of Urban Renewal of Central area of Shiraz City

Source: Conceptualized by the research scholar
4.8 Collecting Primary Data Using Questionnaire

The questionnaire is a measuring tool (Oppenheim, 1992) loosely; a questionnaire consists of a series of questions, checklists, attitude scales and a verity of other approaches in a structures sequence. They are used to provide descriptive and or analytical information which is suitable for statistical analysis. Questionnaires usually involve large samples and are costly so it is essential to plan the research approach. Who to question, types of question to ask, sample size, inherent biases, and these are amongst the factors that affect questionnaire measurement, specification and procedures. Questionnaires needs exploratory work, design and planning before any specification can be established. A certain rigidity of questioning and sampling procedure is needed to maintain the statistical validity which makes them relatively inflexible. Questionnaire assessments of consumption of fuel wood, fodder, and food grains are indirect unless a weighting measurement is included and are dependent on the accuracy of recall by the respondent (Oppenheim, 1992).

According to Saunders, Lewis, and Thornhill (2007), the greatest use of questionnaires is made by the survey strategy. In this case, the questionnaire for collecting primary data was prepared by using the literature review and the problems facing to the historical city of Shiraz in Iran. Accordingly, it is obvious that the citizen participation plays an important role in achieving the appropriate urban renewal for 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 southwest of the Central area, and 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. The readers of the thesis could also find the level of precision in the sample used in the present study. Before using the sample size calculation, there were two terms that needed to be known. These were: confidence interval and confidence level. The confidence interval (also called the margin of error) was the plus-or-minus figure. Confidence interval in Bala Kaf questionnaire sampling was 4.95. For example, if 47 per cent of our sample picked an answer you could then be ‘sure’ that if you had asked the question of the entire, relevant population between 42.05 per cent (47-4.95) and 51.95 per cent (47+4.95) would have picked that answer. The confidence level tells us how sure we can be. It is expressed as a percentage and represents how often the true percentage of the population who would pick an answer lies within the confidence interval. 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 have been two separate statistical methods to analyze the data that have been 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 is the perceptual analysis through $\chi^2$ statistical test and using SPSS software.

4.9 Quantitative Research Methodology

Quantitative research methods are research methods dealing with numbers and anything that is measurable. Quantitative research methodology called for what is known as hard data in the form of numbers. Quantitative research methodology is about the collection of data in their numerical form. So they can be easily measured or counted. This research methodology is highly prepared by the positive researchers who want to observe the social reality in terms of quantification and objectivity. By quantitative methods, researchers have come to mean the techniques of randomized experiments, paper and pencil “objective” test, multivariate statistical analysis, sample survey and the like (Cook and Reichardt, 1979; Neuman, 2000). In social sciences quantitative research methods express different social phenomena in numbers.

The questionnaire used in the present study has thirteen sections based on the blighting indicators (factors of blight) which are defined by HCUDA. Some of sections have four options (indexes) ranked using 1-4 for the questions raised and the options are as follows:

NR= No Response
U= Unsatisfied
S= Satisfied
VS= Very Satisfied
The rate at which the economic resources of the city and its region are utilized is determined by the size and growth trends of population. It may be concluded that the growth of population of Shiraz city from 1956 to 2006 and central area of Shiraz city from 1986 to 2006 in the chapter three (Regional Setting of Shiraz city). They have widely fluctuated from one decade to another, also the growth of population were calculated through the following formulas:

1. “Decennial Growth” or “Relative Increase for the ten-year period” is calculated through the following formula: \((P_n-P_0)/P_0*100\)

   \[P_n = \text{the number of the population or usual residential units at the end of the period}\]

   \[P_0 = \text{the number of the population or usual residential units at the beginning of the period}\]

2. The “average annual population growth” is calculated through the following formula:

   \[P_n = P_0 (1+r)^n\]

   In this formula:

   \[P_n = \text{the population at the end of the period}\]

   \[P_0 = \text{the population at the beginning of the period}\]

   \[R = \text{Average annual population growth}\]

   \[n = \text{the time interval between the beginning and the end of the period in years}\]
**Average Household Size**

The average household size is the average number of individuals in a household which is calculated through the division of the number of the population over the total number of households:

\[
\text{Average Household Size} = \frac{\text{Population}}{\text{Number of households}}
\]

**Population Density**

Population density is the average number of the population in a region within every hectare or square kilometer of that region’s area.

\[
\text{Population Density} = \frac{\text{population}}{\text{Area (hectare)}}
\]

**Sex ratio**

Sex ratio is the percentage of the number of men compared to that of women (M is the number of the men and F the number of the women).

\[
\text{Sex ratio} = \frac{M}{F} \times 100
\]

**4.10 The Questionnaire**

The questionnaire of this study has been attempted at considering the different socio-economic, physical aspects of the Bala Kaf district located in the south west of the Central area of Shiraz city based on some important criteria that defined the urban blighted areas, (Map 4.1).
Map 4.1: Location of Case Study
Based on the High Council for Urban Planning and Architecture (HCUDA) 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.

The other secondary factors to indicate distressed areas are the following:

1. Age of construction;
2. Construction materials;
3. Construction permission;
4. Plot deed (certificate);
5. Price of plot;
6. Infrastructure per capita; and
7. Percent of tenants;
8. Population density;
9. Number of households in one residential unit;
10. Sex ratio;
11. Patronage loading; and
12. Illiteracy.

The questionnaire of this study includes 13 sections, it consists the following sections:

I. General Information
II. Household Information
III. Particulars of the Family Members (10,12
IV. Housing Conditions
V. Household Amenities
VI. Availability and Problems of Drainage
VII. Social Infrastructure
VIII. Street Lighting
IX. Community Participation
X. Problem with Roads
XI. Status of Conservancy Services
XII. Living Conditions in the Central Area
XIII. Factors Causing Decline in the Central Area

The different sections of the questionnaire have covered all factors of blight (indicators) which are defined by HCUDA. All sections have been divided to different questions or tables that should be replied to / answered by the residents of the Bala Kaf district. All questions in the questionnaire have been custom-designed in achieving toward the most suitable answers for the “Research Questions” of the study.

Sections I, II and III of the questionnaire are named General Information, Household Information and Particulars of the Family Members that covered all indicators such as Age Group, Gender ratio, Education, Occupation, Household Size, Annual Income and Migration Status of the residents of Bala Kaf in the historical centre of Shiraz city. All descriptions of findings and conclusions of these three sections are shown deliberately in the “Respondents’ Profile “section here in this chapter. Sections IV to XIII of the questionnaire measure the most important parameters that affect the Bala Kaf district in the historical centre of Shiraz city, using the case that is a part of the city core. The full descriptions of these ten sections are considered elaborately in Chapter V of this study. Titles of these ten sections of the questionnaire are as follows:

- Housing Conditions
- Household Amenities
- Availability and Problems of Drainage
- Social Infrastructure
- Street Lighting
- Community participation
- Problem with Roads
- Status of Conservancy Services
- Living Conditions in the Central Area
- Factors causing decline in the central area.
4.10.1 Respondents’ Profile

As stated above 384 residents of different age groups were interviewed. 56 per cent of the respondents were from the age group of 35 to 44 years. On the other hand, 28 per cent of the respondents were from the age group of 25 to 34 years and 10 per cent were from the age group of 45 to 54 years, only 6 per cent were from the age group of 20 to 24 years while 6 per cent of them were from 55 years and above. The above description of age of respondents shows that most of them are middle-aged respondents, while a few are youth and aged persons. As for the gender, 36 per cent were male and 64 per cent were female respondents. There were thus an uneven percentage of male and female populations in the profile because of the obvious lack of access, reluctance as well as ignorance of the male sample (because they were invariably at work). With regard to education, 38 per cent were illiterates. Out of the 62 per cent literates, 65 per cent of them had studied up to primary level while 33 per cent up to diploma. In Iran, diploma is taken after 11 years study (1st grade to 5th grade = primary school, 6th grade to 8th grade = secondary school and 9th grade to 11th grade = diploma). On the other hand, only 2 per cent were graduates. This small survey indicates that illiteracy prevails in a majority of the areas and there are a number of people who have dropped out of their education either at the primary level or mostly at the school final level. This reveals that the most of the Bala Kaf district could not study or could not continue their further studies only because of their poor economic situation and poverty.

The important element of this section is the occupation of the householder interviewed for the study. Out of the 384 heads of the households, 54 per cent were engaged in businesses and small commercial establishments such as shops, market sales, workers, machine operators, assemblers and drivers; on the other hand, 20 per cent were laborers and elementary occupation workers, 6 per cent were employees in government and private firms, 10 per cent were retired persons, 4 per cent housewives and 6 per cent happened to be
unemployed. The occupational structure of the interviewed respondents shows
that almost all the respondents were engaged in petty jobs only. Their business
was also on a very small scale and was being run with a small capital
investment. Thus, their economic condition was very poor.

With regard to the size of the family, on an average, there were 4-5
members in each family. Out of the total households, 48 per cent of them had
the standard family size of 4 members each. In a few cases, there were joint
families also. It is stated that the average monthly income of the family ranged
from 1,500,000 RLS to 6,000,000 RLS. It was observed that the income of the
residents was not enough to meet their minimum requirements. The reasons
could be the high cost of living, the high rents and relatively larger number of
dependents.

About the status of the house, among the interviewed people, there were
42 per cent owners while 54 per cent were tenants and 4 per cent of the houses
were provided by the government or the respondents did not identify their
housing details. Some of the houses were owned because they were ancestral
property and they were living in the area since their birth. Though most of the
residents were frequently shifting their residences, they were willing to move
out of the Central area or even to some other neighborhoods inside the old city
with better life conditions. Most of the residents were tenants; they were living
in the old city for a few years or more while in search of petty jobs. The
conditions of a majority of the houses were poor and in dilapidated conditions.
This is discussed elaborately in another section.

One of the statistical methods that used in analyzing the questionnaire
data is the perceptual analysis through Pearson Chi-Square test ($\chi^2$), likelihood
ratio, linear-by-linear association, using the SPSS. Based on the perceptive
analysis, ‘number of different indicators” is supposed to be independent factors
(criterion) such as; “urban renewal initiatives”, “improper management”,

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“geographical concentrate of urban renewal plans” and “Centripetal and centrifugal forces of the city” in central area and Shiraz city.

‘Deterioration’ is assumed as a dependent factor. On the other hand, based on the case processing summary, the value of $\chi^2$ between the two mentioned criteria (between “one of independent” factors and “deterioration” as a dependent factor) is calculated at $p < 0.005$ or $p > 0.005$, so it could be true which say according to Pearson Chi-Square test ($\chi^2$), there is a direct or indirect relation between “deterioration” and “one of independent factors”. Through the direct relationship between deterioration (dependent factor) and other criteria (independent factors), the “Research Questions” could be answered.

However, there have been some difficulties while fill the questionnaire with 384 interviewed people. As for the gender, 36 per cent were male and 64 per cent were female respondents. There were thus an uneven percentage of male and female populations in the profile because of the obvious lack of access, reluctance as well as ignorance of the male sample. It means during sampling it was observed that women were more eager to reply the questions than male and sometimes men were at work. But during the interview and filling the questionnaire most of the persons complained about the previous performances of Municipality of central area and Urban Renovation and Development Company, unfortunately people do not have any trust and even hope to their activities. Because their projects have not been done on time and always it has delay, on the other hand it has been seen that the majority of the poor are not satisfied since their projects targets were not in favor of them, the urban authorities buy their house cheaply, eradicated them from the historical centre, people say, ’all the urban renewal projects are not in favour of the poor; it is kind of business for realtors and investors’. The people who are supposed to be evacuated, expected to be provided with alternative housing facilities, but it does not happen; finally, people have been relocate throughout the city and
they have just carried the blight with them wherever they went to in the city. So it is evident that people are reluctant or unwilling to participate in the performances of municipality and the other relevant organizations. Many of the residents in Bala Kaf district have stated that municipality does not readily offer fair price for their houses and on the other hand there is not any guarantee that they can come back to this area, because at the moment they are close to their work places, and so their projects are not an ethical action. They have stated that this kind of projects could not be the kind of the preservation of the old Shiraz, nor the sense of integration. So some of them have refused to reply to the questionnaire at all and some other was reluctant to answer the questions precisely and hopefully. Also the reliability of the residents’ answers seems to be high because the data assessments of residents’ ideas (primary data) in Chapter V have been the same as the data analysis that the researcher has taken from the secondary data in Chapters III and VI.

The questionnaire and the tables that show the relationship between the criteria was shown in Appendices at the end of thesis.

4.11 SWOT Analysis

A SWOT analysis provides an opportunity to impartially assess the competing but operational aspects of a place such as its land use pattern, urban management and public participation, traffic and transportation and also human resources.

SWOT analysis assesses the strengths, weaknesses, opportunities and threats of the four different aspects of the historical centre of Shiraz city such as land use patterns (physical and socio-cultural aspects), human resources (socio-economic and cultural), traffic and transportation, and urban management and public participation and then proposes an integrated strategy in detail, based on the main approach that has been taken from the chapter V (overall and appropriate approach as a general rule for the historical centre of Shiraz city, based on the experiences and considerations of the two former
approaches and in regard to the vital goal of urban renewal in favor of the poor people of the city). In other words, the integrated strategy emerges from the SWOT analysis, are based on the targets and objectives that emerge from the considerations in Chapter V.

For obtaining necessary information for this analysis, the required data have been collected through observations, discussions and informal interviews for the study. This study is on internal and external urban factors. The internal urban factors can be classified as those of strengths (S) or weaknesses (W), and external factors as opportunities (O) and threats (T), and strategic urban conservation in place in the city of Shiraz.

Assessment of strengths, weaknesses, opportunities and threats to a city forms the basis for preparation of a relevant city development plan. A city level SWOT analysis has therefore been done in Shiraz, based on an assessment of the status of various sectors and aspects of the city.

Following the individual SWOT analysis of the four dominant aspects of the Central and Historical Area of the city, the results have then been integrated into a SWOT matrix as shown below in the diagrams in Figure 1. All strategies are discussed keeping in view the four main aspects of the historical city, namely, (a) management and participation, (b) traffic and transportation, (c) human resources (particularly, socio-economic and cultural) and (d) land use patterns (physical and socio-cultural), in the context of (i) cultural heritage, crafts and tourism, (ii) housing and urban planning and (iii) the alleviation of urban poor in the historical centre of Shiraz city. SWOT analysis provides urban planners with action to bring about improvements, efficiencies and new strategies for success (Figure 4.2).
SWOT Analysis Framework

Internal Analysis
- Strengths
- Weakness

External Analysis
- Opportunities
- Threats

SWOT Matrix
Source: Conceptualized by the research scholar

Figure 4.2: SWOT Strategies

Source: Pardaraz Consultancy Engineers, 2007, adapted and designed by the research scholar
SWOT analysis is an investigation, on one hand, of the Strengths and Weaknesses of the enterprise examined and, on the other hand, of the Opportunities and Threats of its environments. Therefore, it is considered a general tool, traditionally used in the initial phase of the decision making process, as a forerunner of strategic planning (Houben, Lenie, and Vanhoof, 1999). Actually, this method of analysis helps in changing the mental attitude of the scholars towards the problems, investigating the elements of strengths to exploit, those of weaknesses to eliminate and the elements of threats that can be turned into opportunities.

- **Internal analysis (Strengths and Weaknesses):** The internal analysis should lead to an assessment of internal strengths / weaknesses that could be of competitive advantage / disadvantage.

- **External analysis (Opportunity and Threats):** The external analysis focuses on environmental characteristics that could produce opportunities as well as threats relative to competitive solutions.

SWOTs are defined based on the following criteria (Hay and Castilla, 2006), in the planning and management contexts:

- Strengths are the internal attributes of the organization that are helpful to the achievement of the objective.

- Weaknesses are the internal attributes of the organization that are harmful to the achievement of the objective.

- Opportunities are the external conditions that are helpful to the achievement of the objective. The following diagram shows how SWOT analysis fits into a strategic s

- Threats are the external conditions that are harmful to the achievement of the objective.
4.12 Secondary Sources of Data and Collection of Data

- Related data are searched, collected and analyzed from the following sources:
  - Local and overseas publications of books, journals and newspapers;
  - Papers, records, archival documents through Government departments, public libraries, archives and so forth;
  - Maps, cartographic and pictorial documents from Planning Department and Survey and Mapping Office of Lands Department;
  - Local and overseas electronic information through Internet; and
  - Telephone and face to face interviews with some members of Urban Development and Renovation Organization (UDRO), Pardaraz Consultancy Engineers (PCE) and Municipality of Central Area of Shiraz city. It could effect on general vision of this study toward achieving the appropriate urban renewal approach.

4.13 Qualitative Research Methodology

Qualitative research methods are widely used in the social sciences. Qualitative methods are concerned with understanding the world by collecting raw data on social experiences. Qualitative research methodology collect soft data in the form of words, sentences, phrases, pictures etc. By using qualitative research methodology, people’s attitudes, opinions and feelings can be identified. Qualitative methodology is inquiry process of understanding or exploring social or human problem. Qualitative data contain large amount of information and they are difficult to understand and analysis. In order to simplify them researcher has to code them (Cook and Reichardt, 1979; Creswell, 1994; Neuman 2000). So in this study for summarize and simplify the row information of the strengths, weaknesses, opportunities and threats of the four different aspects of the historical centre of Shiraz city such as land use
patterns (physical and socio-cultural aspects), human resources (socio-economic and cultural), traffic and transportation, and urban management and public participation, it was so difficult to draw the strategies from these much information unless they have been taken some codes and put them inside the SWOT matrix and then proposes as an integrated strategies in details, like Figure 4.3.

**Figure 4.3: SWOT Matrix**

<table>
<thead>
<tr>
<th>SWOT ANALYSIS</th>
<th>Strengths (Internal) Positive characteristics and advantages of the issue or situation</th>
<th>Weaknesses (Internal) Negative characteristics and disadvantage of the issue or situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities (External) Factors that can benefit, enhance or improve the issue or situation</td>
<td>S-O Analysis How can strengths be employed to take advantage of development opportunities?</td>
<td>W-O Analysis How can weaknesses be overcome to take advantage of development opportunities?</td>
</tr>
<tr>
<td>Threats (External) Factors that can hinder the issue or situation</td>
<td>S-T Analysis How can strengths be used to counteract threats that tend to hinder achievement of goals and pursuit of opportunities?</td>
<td>W-T Analysis How can weaknesses be overcome to counteract threats that tend to hinder achievement of objectives and pursuit of opportunities?</td>
</tr>
</tbody>
</table>
According to Limb and Dwyer (2001), the choice to use qualitative research methods for a research would be shaped by the dimensions of research questions. However, the choice to use qualitative research methods depends on the way of understanding the social reality. They state that the selection of qualitative research methods reflects the researcher’s attitudes and role of responsibilities of the researcher. However, qualitative methodology is a time consuming method in data collection and also analysis processes, because qualitative data consist of detailed descriptions. Sometimes, it is difficult to choose necessary data from the collected database due to huge quantity of data. Despite these difficulties, most social science researchers employ qualitative methodology because of its validity for the humans and problem solving contexts.

4.14 Conclusion

The research methodology includes research design, data collection, analysis and interpretation of results. The term ‘methodology’ comprises this whole process. The research design has been developed in three stages:

1. An extensive review of literature on urban renewal, urban development and other relevant concepts (A review of literature in Chapter II).

2. Consideration and analysis of current situation of socio-economic and physical aspects of urban blighted area in Shiraz city and central area and also a discussion on residents opinions of Bala Kaf district (Chapters III and V).

3. Suggested general urban renewal approach and proposed integrated strategies in details specific for central area and Bala Kaf district (Chapters VI and VII).
A major research question of the study, as indicated earlier in the first chapter, is: What is the best appropriate approach to renewal the blighted historical centre of Shiraz city? In order to answer the broad question above and also to understand the problems of urban renewal of historical centre of Shiraz city, some other research questions were also investigated that explained in details before. Two types of data could be collected, primary and secondary data, in this study, both types of data have been used. 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 by most social science researchers to achieve better results from their research projects. By combining multiple theories, empirical materials and research methods, the researchers 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. The whole thesis has been divided to two sections: a theoretical section that contains Chapters II and III and an empirical section that contains Chapters V and VI. Descriptive analysis and SPSS methods were used in the latter chapters and on the other hand descriptive and SWOT analyses were applied in Chapters V and VI. Through these chapters, all the research questions were answered and a general urban renewal approach for the Central area was introduced. Suggested planning solutions and integrated strategies in details were considered and proposed in Chapter VII.

The questionnaire is a measuring tool to collect primary data. In this case, the questionnaire for collecting primary data was prepared using the literature review and the problems facing the historical city of Shiraz in Iran. The Central area of Shiraz city includes eleven districts, of which Bala Kaf district is one of them and it is located in the southwest of the Central area. This region is the most populated among the other districts: 384 residents were identified from the Bala Kaf district as samples of the study. The sample size (of 384) was calculated through a public service of Creative Research Systems Survey.
software. The structured questionnaire comprises of 13 sections while each section comprised of several different questions. 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, The second method was the perceptive analysis through $\chi^2$ statistical test and using SPSS software. The questionnaire of this study considered the different socio-economic and physical aspects of the Bala Kaf district located in the Central area of Shiraz city based on some of the important criteria that defined urban blighted areas. All the questions in the questionnaire were designed in achieving the most suitable answers for the “Research Questions” of this study, that tried to answers all of them in chapter V, VI and VII. Also the hypotheses were approved in chapter V. SWOT analysis assessed the strengths, weaknesses, opportunities and threats of the four different aspects of the historical centre of Shiraz city such as land use patterns (physical and socio-cultural aspects), human resources (socio-economic and cultural), traffic and transportation, and urban management and public participation and then proposed an integrated strategy in detail, based on the main approach that was proposed from the perspectives gained from the study (overall and appropriate approach as a general rule for the historical centre of Shiraz city, based on the experiences and considerations of the two former approaches and in regard to the vital goal of urban renewal in favor of the poor people of the city). In other words, the integrated strategy emerged from the SWOT analysis, and was based on the targets and objectives that emerged from the considerations in Chapters V and VI.