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## Changing Scenario of CBD: A Case Study of Shiraz City in Iran

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### Abstract

Urbanization is one of the dynamic and serious issues at present. Rapid urbanization causes disorganized and unplanned growth of towns and cities. The pressure of an ever growing population becomes a burden on the limited civic amenities which are virtually collapsing. Asymmetrical growth of urban centers consumes agricultural land adjacent to these, resulting in lower agricultural productivity. Understanding the central part of these cities is mostly the old part they usually reflect the ancient image of the city. The present study focuses on the CBD of Shiraz, which is one of the oldest cities of Iran. The paper has analyzed the changing scenario of the CBD of Shiraz city its historical growth, spatial growth, demographic profile, change in land use pattern, land value. The analyses of these variables have shown the indication of future threat to CBD of Shiraz city.

**Keywords:** Urbanization, Central Business District, Land Use Conversion, Population Growth,

### Introduction

The Central Business District is referred to as the heart of the city. Here one finds the greatest concentration of offices and retail stores reflected in the city's highest land values and its tallest buildings, chief focus of pedestrian and auto-mobile traffic. It has been demonstrated that the CBD is a very special part of a central area complex. The emergence of the CBD has been a long process which has involved large scale repercussions upon the immediately surrounding areas. That emergence has been conditioned by a number of controlling factors derived from the special development of this city (Carter and Rowley 1966). Central business districts may be a passing phenomenon of the city, for they generally are characterized by a declining centrality influence that results in an encroaching greenbelt. This characteristic, however, may be the result of shifting or changing functions and activities throughout the metropolitan area (Warren and Burton 1966). Central Business Districts throughout the country are capitalizing on their historic character, they offer a niche market for those seeking a "sense of place" (Rebecca and Lang 1999).

In any large urban community the central business district (CBD) plays a vital role. It would be impossible to understand the functioning of such a community without analyzing in some detail the ways in which the CBD serves as an integrating mechanism in such vital areas as communication, transportation, trade, finance and government (Donald and Gerald 1951). It has all the concentration of commercial activity with high land value, yielding high and increasing rentals and is the first one to go through the redevelopment (Reddy 1996). Cities which were the old manufacturing centers are losing population due to the newer suburban cities, which are the gainers. The most desirable approach would be to create empowerment and enterprise zones to revitalize the inner city (Rybczynski, W. 1995). The area of transition around the CBD, has put

across strongly that ageing and decay are inevitable and it is the city centre that suffers first, but wonders why deterioration persists and why is the sequence of decline and renewal disrupted (Carter Harold 2002). The decline in residential population giving a way to commercial activities as attributed to the improved methods of transportation within the city. The internal specialization with the city centre is unique in some aspects because of the history and the tradition of the place (Johnson, James, H 1974).

In spite of conscious efforts in designing of CBD, consisting of large number of complexes of high rise offices, buildings it has failed due to numerous inherent constraints such as unwieldy size and incomplete and strong aligned roads (Jon, A. 1977). One of the reasons responsible for the serious decline of the central areas has been positive policies of the decentralization, aided to large extent by the mobility of motor vehicle. It is considered as the heart of the urban community; it is here that the highest land value, the tallest buildings, the greatest intensity of development will occur. The city centre is moreover, the nucleus of the city region (Jensen, R. 1974). In a changing socio-economic situation, hierarchic system also responds to the change and gets restructured in the urban system. The restructuring occurs due to change in resource use, production pattern, transport technology and travel behavioral pattern of consumers and producers and change in the level of income. (Prakesh Rao 1983). The term CBD or Central Business District is the central district of a city, usually typified by a concentration of retail and office buildings in the present context. A central business district (CBD, also called a central activities district) is the commercial and often geographic heart of a city. It is not necessary that the CBD will be always located at the center of the city; it depends upon the dynamic nature of the city in all. The shape and type of a CBD almost always closely reflect the city's history. Cities with maximum building height restrictions often have a separate

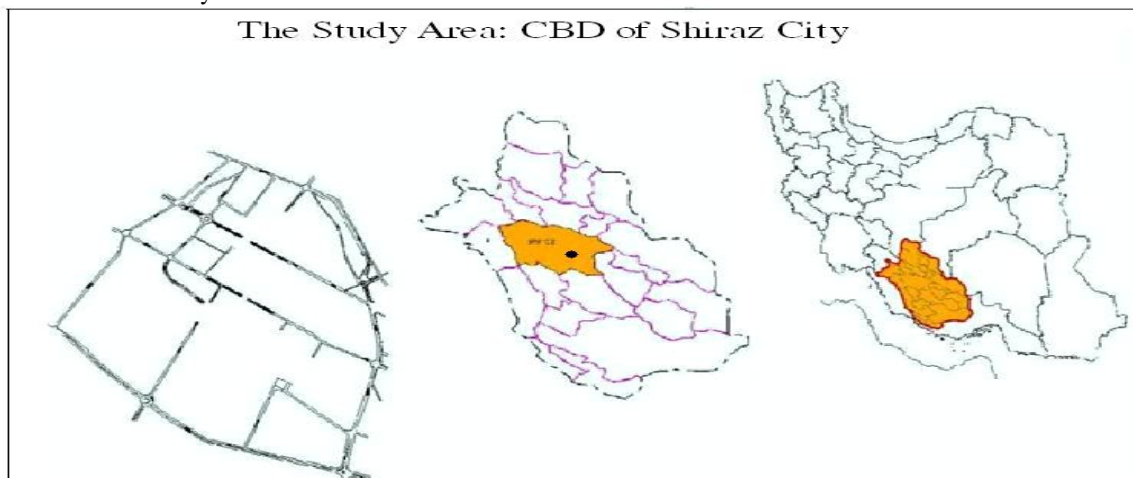
historic section quite apart from the financial and administrative district

### Study Area

Shiraz, in Iran is situated in the foothills of the Zagros Mountains. During the Zand Dynasty Shiraz was the capital

of Persia from 1750 to 1781 and the capital of Southern Iran from 1781 to 1794. CBD is located at 29° 40' 14.7086" N latitude 52° 30' 35.4309" E Longitude. It is surrounded by Ghaani, Tohid and Saadi in North West Ferdowsi in north east, Zinabiye in south east and Siboyeh in south west.

**Figure 1.** Location of Study Area



### Methodology

The research work should follow a systematic methodology with regard to collection and analysis of data. The present study presents the changing scenario of Central Business District of Shiraz city. The study has followed the descriptive research methods consisting of a fact-finding operation and survey of the opinion and characteristics of a given population. The study consists of principles, and researches that dealt with threats to CBD. To understand the existing problems of CBD, the data relating to various facts has been analyzed. The study is mainly based on secondary data collected from various offices as Municipality office of Shiraz, Centre of Statistic of Iran, Town Planning Organization, and City Development Authority. The collected data has compiled in tabular form to prepare diagrams and it was further statistically analyzed and maps were prepared with the help of collected information, in AutoCAD Software different maps and data of various periods have been analyzed to identify the changes in the land use pattern and different functions of the city and the CBD. The analysis of data has been interpreted and future indications have been made based on existing conditions, if similar trend continues.

### Profile of Shiraz and its CBD

The city of Shiraz is par excellence among the Iranian cities. Shiraz was one of the most important cities in the medieval Islamic world and was the Iranian capital during the Zand dynasty (1747-79). During the long history, different transformations can be recognized. One of its transformation started about 250 years ago when the city was designated the capital of Iran. During that period, the city changed to a renowned city, with the greatness of functioning urban spaces and infrastructure. The other transformation of the city happened in the more contemporary periods, when the city turned into a modern city. Shiraz, like any other Iranian

cities, has been the subject of a major program of road building and physical reshaping. Followed by these radical initiations, the comprehensive plans for the city have changed Shiraz enormously. Present-day Shiraz is a large, modern city, which has inherited a huge legacy from the past, but is confronted with the problems created by the clashes between its past and present. Whereas the 18th century development happened mainly in continuity with the Traditional structure of the city, the 20th century changes have been in total conflict with the past. A major network of new streets suitable for vehicular traffic seems to have been the main intention behind all changes in the city. Shiraz is still confronted with master planning proposals, which are more based on the wishes of the national and local planning authorities and urban designers rather than the true needs of the city. The historic fabric of the city is more and more invaded by construction of new roads that undermine the old structure of the residential and commercial quarters. To better understand the role and possibilities of planning and design, this study try to find the mechanism and the nature of these changes.

This paper attempts to address three main issues: first, the characteristics of the 18th Century in development of Shiraz; second, the influences of the modern planning decisions and comprehensive master plans of the city; and third, the effect of building underground road in the old Royal district of Shiraz.

- **Shiraz before the 18th century**

Shiraz history extends to the pre-Islamic era. Its formal architecture, the shape of its houses and street network, and elements like the covered bazaar, mosques and shrines, has made Shiraz known as a typical Islamic city in Iran. , Shiraz grew in importance under the Arabs and several local dynasties. The city was spared destruction by the invading

Mongols when its local ruler offered tributes and submission to Genghis Khan. Shiraz was again spared by Tamerlane in 1382. In the thirteenth century Shiraz became a leading center of the arts.

- **Transformation of Shiraz during the Zand period (18th centuries)**

Shiraz returned to prosperity under the enlightened rule of Karim Khan Zand who made it the capital of his reign in 1762. Karim Khan was a benevolent and wise ruler and one of the greatest patrons of the arts in Iranian history. He constructed a royal district, many Administrative buildings, a mosque and one of the finest covered bazaars in Iran most built around the city, According to the history, the first and most important act of town planning in this period was the creation of royal district. The key point in the design of this Royal Site is linking it with the main chain of the grand bazaar, which extends from the Old district, in a way that it becomes part of the overall structure of the city.

Significance to the Royal district, the design never undermined its relationship with the rest of the city. This part of the city was planned to accommodate the new residents needed for the important people of the capital. The endeavor of urban planning in this era was the renovation of the water distribution and sewerage system of city. . This is an exemplary achievement, which should have been appreciated and taught from contemporary urban design (Assari *et al.* 2011).

However Karim Khan's failed in prospering the further development of Shiraz city because when Aqa Mohammad Khan, the founder of the Qajar dynasty, eventually came to power, he wreaked his revenge on Shiraz by destroying the city fortification and moving the national capital to Tehran. Although, Shiraz City maintained a level of prosperity as a result of the continuing importance of the trade route to the Persian Gulf and its governorship was a royal prerogative throughout the Qajar era.

- **Modern Master Planning in Shiraz**

Master planning in Iran started in 1960s. Before this era the act of road building was heavily on the agenda in different cities, but these acts did not follow any predetermined plans. The decisions were rather casual and based on the time and location. The need for master plans started to emerge when cities grew enormously, and when the country was introduced to the achievement of the Western planning methodologies. This leads to a comprehensive program of producing master plans for all cities. These master plans had three important outputs: road network, land use, and building density or heights. Through the control of these three elements, the master plans attempted to achieve their initial goals. After the first program of road building in Shiraz, the first comprehensive plan was produced by Tehran University, department of architecture in 1966. The usable land area for different urban uses has increased from 22 sq. Kilometers in 1962 to around 80 sq. Kilometers in 1992.

In reality the comprehensive plan was not fully implemented. Only some of the major streets proposed by this plan were. New streets created by this plan together with the ones created before were enough to influence the whole integrity of the city. The bazaar area appears as simple polygons

### Demographic profile of the study area

The population of Shiraz city has increased from 170659 in 1956 to 1227331 in 2006. In contract to Shiraz city, the population of central area of Shiraz city, the population has shown decreasing trend. The negative trend of population growth rate of central is because of several reasons; physical development of Shiraz city in recent years has caused people move from central area to the new developed area of city. Then the central area became deprived from the most native people; besides lack of amenities, attentions from governmental and official authorities and municipalities, it has lend to worse conditions and has become a suitable place to absorb low income migrants

**Table1,** Population Profile of CBD of Shiraz

Year	CBD Shiraz City		
	Population	Number of households	Growth rate of population (%)
1956	102395	15483	
1966	78716	16665	-23.12
1976	78798	17375	0.1
1986	78911	17957	0.14
1996	67585	16639	-14.35
2006	56445	14846	-10.77

Source: Institute of Statistical center, Shiraz

According to the above table the overall scenario of household number in CBD has shown a decreasing trend from 1986 to 2006. Most of the rich people have shifted to out skirts of the CBD mostly in the north western direction for the availability of modern convenience, good

environment, better transportation etc. The rich people who have shifted from CBD to the north western part of the city have converted their land into other uses. As it has become the commercial hub of the Iran, the number of commercial center are going on increasing as the result of that the image

of central area has been changed from residential to commercial one.

**Table 2,** Land use area and percentage of CBD of Shiraz in 1992 and 2010

Land use	1992 hectares	1992 (%)	2010 (hectares)	2010 (%)	Change Hectare
Residential	199.2	56.9	171.96	45.63	-27.24
Commercial	24.6	7.03	29.75	7.89	5.15
Industrial	0.94	0.27	0.57	0.15	-0.37
Public and semi public	42.58	12.1	25.26	6.70	-17.32
Parks and open space	1.87	0.53	6.23	1.65	4.36
Traffic and Transportation	52.65	15.0	86.27	22.89	33.26
Public utility (urban infrastructure)	5.38	1.53	0.16	0.042	-5.22
Historical Centers and Tourism	4.33	1.83	2.63	0.69	-1.7
Others	18.45	5.27	40.21	10.67	21.76
Total	350	100	376.78	100	

Source: *The comparative of central area of Shiraz city 1992 and 2010.*

### Land use pattern of CBD

Out of the total area of the CDB in 1992 (350 hectares) residential area in the CBD has shown a declined trend as it has decreased from 199.2 hectares (56.91%) in 1992 to 171.96 (45.63%) hectares in 2010. The dominance of commercial area is one of the characters of the CBD and Shiraz city has no exception with it. The land area under commercial use has increased from 24.6 hectares in 1992 to 29.75 in 2010 indicating the increase of 5.15 hectares. The availability of good network of transportation is one of the characters of the CBD and increases with the increase in its functions. The area under transportation node in the CBD of Shiraz CBD has shown an increase of 33.26 hectares form 1992 to 2010. Parks open space form the cheapest source of entertainment for the young generation and the people fed up by urban chaos, urban hustle and bustle and the daily retune of work, the area under this use has shown an increase of 4.36 hectares

### Findings

- The existence of commercial units alongside the roads, leads to linear growth of the city.
- It seems that the integration core of the city has shifted from the old centre to the west part of the city.
- The urban blocks created by the modern streets are very huge to form any center. Therefore, as it can be observed in existing Shiraz, the center of the city is gradually defusing linearly shifting more the significance from the historic center.
- The residential area and land value has shown a decreasing trend.
- In recent years the historical area has faced population decrease. The population of this area in 1956 was 102.395 and has shown a decrease of (-23.12) 1966, from 1976 to 1986 the area has shown a small increase in population but after 1996 it has shown a decreasing pattern.
- Due to the lack of adequate facilities, rich people gradually left this area. This trend has accelerated the

devastation process in this area. The area faces serious social problems. The high rate of immigrants with different cultures, and reduction of the local population, has negative effect on cultural level of the area and has already generated cultural conflicts among residents.

- Because of old physical structure of the area and being enclosed (in the past by moat and at present by street), functional system of this area is a closed system and lacks the necessary interactions with others areas. Therefore, the economy and the whole activity of the city could not extend to this area.

### Conclusion

The present state of Shiraz is not the result of an evolutionary process of its traditional forms. New urban patterns in Iranian cities were introduced in the twenties by driving some long and straight streets through the old part of the city and by development of a rather regular grid outside the old city. This process had a dramatic effect upon the historical core of the city. The analysis showed, through two key strategies: continuation (and not interruption) of the old grid; and following the organic lines of natural elements and environment. In contrasts the modern master plans of the city, lack of objectives, understanding of the past, rushing for modernizing the city as soon as possible the major recommendation of this paper is urging for an effort to develop the city in a planned way. This is not only a lesson for the city of Shiraz, but a general guideline that has to be adopted for all urban designers and planner that are dealing with similar issues elsewhere. The most important task in designing a historical city is to determine how much of the past should be preserved to enable the city to cope with the needs of modern life.

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