Hyper Dynamic Growth in New Towns of Iran

The Case Study "Parand New Town"

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1. Introduction

Urbanization is a phenomenon that its rapid growth was started in 19th century or from industrial revolution and it still has a hyper dynamic growth whole around the world. Improving of industry and technology and increasing the attraction of urbanization encouraged rural people to urbanization. Urbanization has been seen in developing country in a very disorder manner and it is still continuing. Some large cities in Iran are being populated more and more and the problems of this severe centralization are creasing as well.

One of the solutions that have been suggested for decentralization is New Towns. Most of large cities in Iran such as Tehran have several satellite new towns that have been designed to absorb additional population and distributing services. In recent years we have faced with a dynamic growth in the population of whole of this urban complex.

The politics of government of Iran have caused that at least one million people were added to the population of urban complex of Tehran and this population will be settled mostly in new town in supportive housing that are being built by government which called *Mehr dwelling* project. This paper will discuss about the new towns of urban complex of Tehran.

2. A Short Description about Tehran and the Urban Complex of Tehran

Tehran is the capital of Iran and the largest one and the most populated city in Iran as well. During the history this city has been changed a lot and in recent century this city became the most important and largest city in Iran and of course it is a city with the largest problems.

2.1 The History of Tehran

Tehran the capital of Iran is an ancient city which its main growth is referred to 7th century. It was a small town which was famous mainly because of its good weather and the shrine of one of Shiite's leader whose name was *Shah Abdol Azim*.

This small town had a fortified wall which protects this city from enemies which was called *Tahmasbi wall* in 17th century (figure 1). During *Gagar* dynasty (1786-1917) this city grew again -because of electing as the capital of Iran- and attracted more population and in 1819 the old wall was destroyed and another bigger wall was erected around this city which encompassed the larger city of Tehran (figure 2).



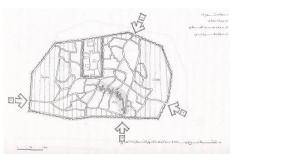


Figure 1: Tehran in 17th century



Figure 2: Tehran in 1819

In the next dynasty which was named *Palavi* Tehran grew very much again and the authorities decided to ruin the whole of fortified wall of Tehran –the capital of Iran- and they built some streets instead of them. The population and the area of Tehran in this time were doubled both (figure 3). Discovering of oil in Iran and earning more money caused that the large cities of Iran especially Tehran became very interesting for rural people and they leave their settlements in villages to live in cities. During 1966-1979 we faced with a rapid growth in urbanization in cities of Iran especially in Tehran. The capital of Iran had a great attraction for most of Iranian and the population of Tehran in 1966 was 2.5 million (figure 3).

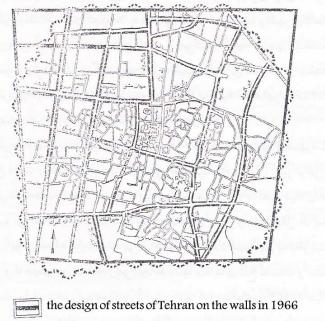


Figure 3: the map of Tehran in 1966

This situation was aggravated during the war between Iran and Iraq. Many people had to immigrate to large cities to escape from war and settled in them forever. This was occurred in Tehran as well and in 1986 the population of Tehran was over than 6 million people (figure 4).



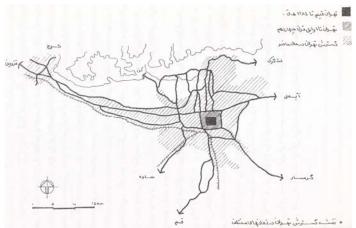


Figure 4: the map of Tehran during different eras

Increasing the number of citizens in large cities especially in Tehran is still continuing and one of the most important solutions that urban planners suggested was *new towns*.

2.2 The Urban Complex of Tehran

The design of Tehran urban complex has been approved in 2002 by the authorities of ministry of urban planning and housing of Iran. The urban complex of Tehran includes 9 cities: Tehran, Damavand, Ray, *Shemiranat, Karaj, Varamin, Eslamshahr, Savoojbolag* and *Shahriyar* and the main aim of this design is decentralization. The population of urban complex of Tehran in 2012 is approximately 12 million people (figure 5).

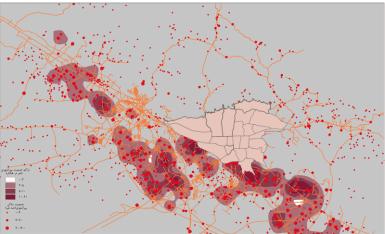


Figure 5: The map of urban complex of Tehran

3. New Towns

One of the solutions to develop the cities is development of cities and distribution of population and urban facilities as satellite pattern. In this design, usually main economic and commercial activities are created in the central core and they are located inside the city and the margins of city are dedicated for settling the population. In the other side this design can decrease the volume of traffic and air pollution by locating some urban activities and population in the rural of main city as a satellite form.

In the other word, instead of concentrating everything in a limited region some functions, services and residential areas are located around the main city with an adequate distance.



The buffer areas between main city and satellite city include open spaces, green spaces and saved lands that have some special economic functions such as industrial functions.

The idea of new towns is referred to *Ebenezer Howard's* idea he present garden cities as a remedy for the problem of industrial cities.

The idea of satellite cities is more practical than other ideas in urban planning. Satellite cities continue to their growth and their growth couldn't be stopped after their establishment.

3.1 Different Types of New Towns in Iran

Generally new towns according to their spatial features and functions are categorized in five patterns:

1- Industrial – administrative new towns: this pattern was designed for optimal utelizing from sources and potential possibilities in various parts of Iran. This kind of cities has a special role because of having a special geographical situation and special economic-social qualification and most of them are self-sufficient and create adequate jobs and services for residences, such as *Abadan* city, *Andimeshk* city and *Saveh* in Iran.

2- Satellite new towns: it is the most common type of new town in Iran. The necessity of establishing this kind of new town is because of the continuous increasing of population in large cities of Iran. This pattern has been used around large cities specially in Tehran and their major roles are spatial organization of main city and absorbing additional population of large cities such as *Shahin Shahr, Hashtgerd , Prand* and *Andishe* cities in Tehran.

3- New towns with individual identity: this pattern are used to balance the contribution of population and facilities, regional development, and making self-sufficiency in occupation and services, respecting environmental principals and finally it works as a solution of problems of large cities. In Iran we have no sample of this type.

4- Attached new towns: These cities are mostly located in the framework of comprehensive plan of mother city and their functions are residential or industrial. During the time most of these cities are merged physically with the main city such as *Ekbatan* in Tehran and *Safayeeh* in *Yazd*.

5- Company's new town: these are some planned societies to settle employees of new industrial complexes such as agricultural and industrial complexes. These cities are created to settle new industrial in far areas and utilizing from natural sources in new regions. This kind of complexes regarding their being faraway have features of an island and have various shortages in their services, such as *Boostan* and *Shoostar No* the cities which were established to settle the employees of *Karoon Kesht* o *Sanat* company in 1970.

3.2 New Towns of Tehran

The location of five new towns of Tehran (Pardis, parand, Andishe, Hashtgerd and Latyan) has been accomplished according to these criteria:

1-Suitable access to access network in the region and having adequate distance from large cities

2-The possibility of providing the essential necessities of infrastructure facilities such as water, electricity and power

3-The possibility of utilizing of potential economic abilities

4-Not near to agricultural regions

5-Having adequate qualification to establish the city according to requested human power and material

6-Having adequate qualification in climate, topography, environmental, and pleasant views

4. Parand New Town

As it was mentioned, *Parand* new town is one of the satellite new towns of Tehran which was designed in 1995-1997.



4.1 Introduction

Parand new town is located 30 kilometers far from Tehran. The design of this city was approved 20 years ago. At first this city was forecasted to settle 80.000 people but later after finding new special potentials in this city in 2005, it was forecasted to settle 150.000 people and in 2007 the area of this city was expanded to 17.000 hectares. The capacity of this city has been anticipated for 700.000 people.

The potentials of Parand city include:

- The variety in buildings and residential and nonresidential areas
- Connection to the subway train of Tehran
- Locating near the important high ways of Iran (figure 6)
- The suitable price of land
- Existing near the *Imam Khomeyni* airport complex
- Existing an industrial city in south of city
- Existing Islamic Azad university and Payam noor university with 20.000 studends
- International exhibition of *parand* (under construction) with 135 hectares area
- Existing natural parks and cultural and historical attractions in parand city

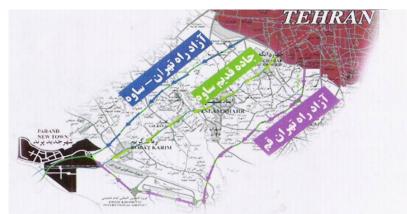


Figure 6: Locating near the important high ways of Iran

4.2 Different Districts of Parand New City

According to the design of this city there are several districts in this city that up to now three districts of this city have been completed and other districts of this city are being constructed.

District no. Zero

This district is the first residential district in city that several land uses such as commercial, athletic, educational and green spaces are located in it. The area of this district is 82 hectare and 50 percent of it is allocated to residential land use. The dwellings of this district are 2000 units.

District no.1

The design of this district has been prepared in 2001. In this district a major area has been allocated to green spaces and has various functions such as residential, green space, educational, facilities, commercial, athletic and religious functions. This district has about 125 hectare area and its number of dwellings is 1500 units.

District no.2

The area of this district is 240 hectares and 85.6 hectares are allocated to residential land use. Various residential complexes have been seen in this design and there are about 7000 dwellings in this district.



District no.3

In this district there are various land uses which the total area reaches to 246 hectare that 43% of it is allocated to residential land use. In this district 1182 residential units of *Mehr dwelling* project which belong to government of Iran have been constructed. The number of other dwellings in this city is 11.500 unites.

Townhomes gardens

This district has about 65 hectare area which 68% of it is residential. The residential density of this district is low and has been built as townhomes gardens.

District no.4

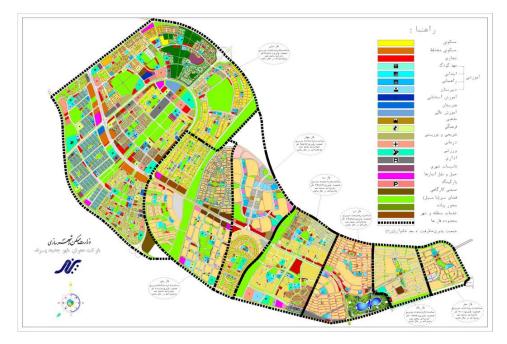
The area of this district is 302 hectares and 93 hectares (30%) are allocated to residential land use. In this district there are 18.600 residential unites under construction.

District no.5

The area of this district 427 hectares that 158 hectares of it (%37) are dedicated to residential land use. The whole of residential units of this district are allocated to *Mehr dwelling* project and the total capacity of this district is about 26.600 dwellings.

Development design (District no.6)

The area of this district is 1280 hectares and 35% of this area (450 hectares) is residential land use, the whole capacity of residential units is 67.500 units. 51.000 dwellings of *Mehr dwelling* project are being constructed in this district.



The map of Parand new town













5. *Mehr Dwelling* project

The *Mehr dwelling* project has been accomplish by the program of ninth government of Iran to solve the problem of shortage of housing specially to afford housing for poor people and homeless people. One of the targets of this project is settling the people of mega polices in satellite new towns.



Because of *Mehr dwelling* project the authorities increased the capacity of population of *Parand* city to 700.000 people. It is supposed to construct 110.000 dwellings in three years. This city is the largest place of accomplishing the great project of *Mehr dwelling* because of its suitable potential and most of residential dwellings have been constructed in this city (110.000 swellings).

6. Conclusion

The hyper dynamic growth of urbanization exists all aver the world and now this matter is an accepted phenomenon. But controlling and regulating of this phenomenon is so essential and important. Extreme concentration of population in a limited region of country always causes unbalanced situation in whole of the country and has many disadvantages.

In Iran the policy of creating new towns is a solution for the problem of centralization of population in large cities and The *Mehr dwelling* project is a solution to offer housing to poor people.

But actually this work has caused the extreme increasing of population in urban complex of large cities such as *Mashad*, *Esfahan* and especially in *Tehran* and it makes unbalanced distribution in population and facilities again.

In fact accurate and sustainable controlling of this hyper dynamic growth of urbanization in Iran needs some more effective policies that Iranian urban planners are still achieving it.

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