

A Study of Iranian New Towns During Pre- and Post Revolution

Ziari, K.* and Gharakhlou, M.

Department of Geography, University of Tehran, Tehran, Iran

Received 27 Sep. 2007;

Revised 12 July 2008;

Accepted 22 Sep. 2008

ABSTRACT: The present paper studies the objectives and functions of constructing the new towns before and after the revolution in Iran. Before the revolution, new towns were established based on political – bureaucratic objectives, for the operation of huge oil resources and affiliated industries, to accommodate the workforce in industrial complexes, to implement the policy of regional decentralization, to provide housing for the government employees, to attract the surplus population of large cities and to reconstruct the cities destroyed by earthquake. A type of economic and social development strategy was involved in establishing new towns. Although these towns function differently, they are mainly well-populated and active towns. After the revolution, fewer towns were planned. One of the strategies of urban development was to absorb part of the population of the overpopulated cities to provide housing to low-income groups, to accommodate employees of industrial sectors, and to decentralize anatomic and industrial sectors of large cities. Except the new town of Baharestan, which has achieved the 10-year objectives behind its construction for population and housing purposes, other towns which have merely succeeded to attract less population as they were planned, the new town have generally failed to achieve the 10-year envisaged goals and have converted into housing warehouses. At present these 17 new towns has been able to attract only 320548 persons while the three new towns of Ramin, Ramshahr, Tis, have not yet been successful to attract population.

Key words: New towns, Objectives, Pre-Revolution, Post-Revolution, Iran

INTRODUCTION

During the reign of the first Pahlevid (1921-1941) and second Pahlevid (1941-1979), different measures took place to lead to the development of cities and urbanization in Iran. They include the policy of modernization of the urban system, approval of urban planning laws, construction of streets, squares and freeways, political, social and cultural changes, implementation of national development plans, the role of oil revenues in the national economy, the consequences of the land reforms, the deterioration of agriculture sector, industrialization of the country, expansion of roads and railways, establishment of development poles, land transactions and building constructions. The origin of establishing new towns before the revolution should be sought in the aftermath of social and economic changes and in the creation of political- bureaucratic or economic towns,

employees' residential complexes, absorbing the overflow of population, to provide housing to government employees, to accommodate workers in the industry sector and to reconstruct the cities destroyed by earthquake. Following the slogan of supporting the poor and the needy, irregular and incessant conveyance of land in the city margins to the people, the problems of war, economic ban, reduced living standards in rural areas and the consequent immigration of rural people to the cities and increased birth rate expanded the cities and urbanization after the revolution. After the revolution, in order to solve the urban problems in the country, the policy of creating new towns was assigned to the Ministry of Housing and Urban Development (MHUD) according to the approval of the government board in 1985. Based on this approval and in order to solve the urban problems, studies for locating and construction of new towns

*Corresponding author E-mail: zayyari@ut.ac.ir

around the large cities began (Atash, 2002). The major objectives of the new towns after the revolution and as one of the strategies of urban development were to absorb the overflow population of large cities, to offer housing to low-income groups, to prevent population growth and anatomic enlargement of the cities, to decentralize population and industries, and to accommodate workers of industry sector near the industrial poles. It seems that the policy of establishing new towns in Iran is in close relationship with the goals of establishing new towns in some other countries (Micarelli, 2008). The policy of constructing new towns in Britain is based on the law for master plan or national policy of territorial planning adopted in a process of deliberation and public support (Osborn and Wittick, 1977). The origin of new towns in Britain is in relation to the policy of decentralization of population and industrial centers, spatial distribution of population and industry, absorption of the overflow of London population and other big cities and regional economic development (Hazel, 1972). Different assessments have been carried out in regard to the functioning of new cities in England (Talen, 2002). Hazel (1972) believes that the new British towns could have been ideal for solving the post-war national problems, but in practice they provided for only 3% of the new housing demands in the country and absorbed only 12% of the population increased between 1951 and 1970 until the end of 1970. Lewis Mumford (1971) lists numerous problems in the new towns of England, but in general evaluates them as successful (Osborne, and Wittick, 1977). Evelyn Denington (1972) assesses the new British towns successful in accomplishing the objectives set for working conditions, inhibition of the expansion of large cities and reducing urbanization problems, but they seems unsuccessful in view of self-reliance (Denington,1972). It seems that the policy of creating new towns in Iran after the revolution had been affected by the model of new British towns. In the former Soviet Union, constructing new towns began since 1917 to persuade the goals of restricting further growth of large cities, distribution of industry and population to underdeveloped regions, accommodation of the industrial sector workforce and housing services. New towns in the former Soviet Union are

assessed successful in accomplishing the goals of accommodation and housing provision to industry sector workers and anatomic decentralization of large cities (Underhill, 1990). In Iran, the design and construction of Fuladshahr new town in the periphery of Isfahan city, the third metropolitan city in the country, follows the Soviet model of accommodating workforce of the industry sector (Friedman, 2000). In Africa, new towns are designed based on master plans and pursue major objectives including the absorption of population overflow of the mother city, economic development, operation of environmental resources, servicing rural areas, reconstruction or destroyed cities, decentralization, rural integration and providing house. These plans are mainly formed by foreign consultants (Somma, 1992). In Egypt, the new towns of Sadat and Ramadan were constructed to control overgrowth of large cities (Farid, 2002), prevent destruction of agricultural lands around the large cities, population and anatomic decentralization and regional development (Ziari, 2004). The new towns in Japan are constructed based on the policy of anatomic and bureaucratic decentralization, absorption of the overflow of population and scientific identity. The plan of Larger Tokyo in the form of new British towns is one of such plans (Ward, 1992). In South Korea, the construction of new towns started in 1989 with the aim of providing housing, industrial decentralization of Seoul, accommodation of industry sector workers, development of underdeveloped areas and absorption of population overflow around Seoul and other cities (Chioc, 1987, p.495). In Jordan, the new town of Abu Nasr was constructed to decentralization and to control the overgrowth of Amman and to respond the demand for housing (Ziari, 2004). New towns in Latin America have been constructed to fulfill the objectives for creating growth poles, regional development, to create employment opportunities, to respond to the housing demand, to offer public services and to provide commercial centers and welfare- recreational facilities (Bradford, 1972). It seems that the objectives behind construction of new towns in Iran are similar to those in the other countries indicated here. As no comprehensive research on the objectives and functioning of new towns of Iran before and after the revolution has not been conducted so far, the present article is of

special significance. Following the introduction, the article studies the urban changes, reasons behind the construction of new towns the present article mainly aims at urban planning and seeks to assess the objectives and functions of Iranian new towns and samples of new towns built before the revolution. This article also indicates the motives behind planning new towns after the revolution and studies some of the new towns designed and constructed after the revolution. At the end, an assessment of the overall status and functioning and the degree of achievement of the goals set are presented. The findings of this Article are an efficient help in knowing the latest changes in new towns of Iran and is of considerable use to the programmers and researchers in urban and regional studies.

MATERIALS & METHODS

Before the revolution, the new towns were constructed based on political- security aims or in regard to operation of huge oil reserves and oil affiliated industries, industrial poles and development of industrial complexes based the policy of regional decentralization, accommodation of government employees, reconstruction of cities destroyed by earthquake or as company –affiliated towns for housing purposes. After the revolution (1979), the objectives of building new towns turned out to be the control of population in large cities, decentralization of big cities, absorption of the large overflow of population and house supplication for low-income people. To study the pre-revolution objectives, the available sources and data are examined. The Statistical Center of Iran (SCI) provides a basis for studying the post-revolution policies of urban development, fast population growth, and predictions on future growth and other qualitative studies. The article takes advantage of existing sources in Iran and the personal experiences of the researchers. The statistics released from the MHUD go in association with questionnaires, qualitative interviews, and observations to form a basis for the assessment of the aims and functions of the new towns. The interviews and observations are conducted to a random selection of 10% of the head of the families residing in each of the new towns (especially Baharestan). At last, the results will be qualitatively presented.

RESULTS & DISCUSSION

Some of the new towns constructed before the revolution had political function that is bureaucratic and security centre were built without any master plan. The most significant of such cities are Zahedan, the Center of Sistan and Baluchestan province in the east, Noshahr in the north, and Yasuj in the southwest of Iran. For example, Yasuj was constructed in 1963 as a government center without any master plan and in order to settle the nomadic tribes of Boyrahmad and Kohkiluyeh which were a source of concern and fear to the government. The objectives behind the construction of this city was to control the nomads, to bring about cultural and social changes in the tribal region and to act as an administrative – political and health center for the villages in the region. This city was constructed on the basis of an initial rural nucleus (Talle Khosrow) with a population of 34 people. During 1966 through 2005, this city experienced an average population growth rate of above 13.6 percent. Currently, these cities are sufficiently developed and are considered lucrative centers. Another group of cities were constructed in different areas as the initial step to use the resources and potentialities available. Due to their special geographical location and socio-economic conditions, such cities have undertaken special functions. Most of these cities are oil resources cities and the residential blocks constructed for the employees working in oil industries. Some of these cities such as Lali, Anbar and Naft Sefid are economically dependent on one specific industry, i.e. oil industry and have a dormitory function. Some others are large residential blocks formed in the vicinity of an urban nucleus, but their expanse and power were so much as to undermine the original city. Among the most significant of this group, one can name of Abadan, Bandar Shahpour and Mahshahr cities. Abadan was constructed by Persia Oil Company (later Anglo-Persian Oil Company). Based on contract of 1901, this company had acquired the concession of oil extraction in the south of Iran and started oil production in 1908. The oil pipelines were laid from oil fields in Khuzestan offshore areas to Abadan. The Anglo-Persian Oil Company and Kastian company designed residential areas for the Iranian workers and the European technicians (Khosravian, 2003). At present, the

oil cities of Abadan, Mahshahr and Shahpour are in their bloom years. Another group is the new mining towns such as Sarcheshmeh copper mine city in Kerman which is built in line with the operation of mines and to accommodate the mine workers. From the second half of 1961 to 1979, the urban population of Iran increased due to the investment of oil money in industries and new economic sectors. New industrial towns and satellite towns in the periphery of large cities were constructed. These towns were built in large distances from the urban areas and without any dependence to the primary rural nucleus. A sample of these towns is Fuladshahr 40 kilometers west to Isfahan. This town was planned by Giprogor Company of the former Soviet Union in 1968 under a master plan for the accommodation of the workers of large steel mills. Based on the estimations of the initial master plan, the population of Fuladshahr was supposed to reach 320,000 in 1973. At present, this town is 700 hectares in area and it accommodates a population of 71600 people. In 1994, a new master plan was designed for the city and its development came under attention again. Another type of new towns during this period was the large residential complexes with a definite distance from main cities or even connected there to as dormitory towns, satellite towns or connected townships. The aim of their construction has been to accommodate the population who worked in the mother city. Therefore, they function to absorb the large overflow of population. For instance, they include Karaj, Kan, Lavizan and Ekbatan, around Tehran, Malekshahr and Khaneh around Isfahan, Kuy-e-Reza around Mashhad and Kuy-e-Valiasr near Tabriz. No financial, managerial, executive or legal standards or no master plan has been involved in the process of establishment of such cities. Many gardens and fertile farmlands have been destroyed due to development of such towns. Shahinshahr is another model which was constructed 35 kilometers northwest Isfahan during 1970's for the accommodation of the Americans working in helicopter and military industries of Iran. Before the revolution, Shahinshahr functioned as the dormitory of Americans working in military industries. At present, Shahinshahr is an active city but suffers from numerous social and cultural contradictions. Other towns were built to substitute

the places destroyed by natural catastrophes mainly by earthquake, for instance, Lar, Tabas, Ghir and Karzin cities are sufficiently active and have vast rural influence area. Another pattern of new towns is the company towns. Company towns are actually the towns constructed under agro-industry and agriculture development plans. These towns lack any locating pre-construction studies and problems such as heavy construction costs, lack of required natural resources, lack of proper transport facilities, shortage of water and undesirable climatic conditions have made them environmentally unattractive. Problems such as insufficient healthcare and education, recreation and pastimes and service demands are frequent. Samples include Boostan, Neyabad and Shooshtar Noe in Khuzestan province. The most important problems in these towns are as follow:

- Dependence on one economic activity and the single base of employment
- Exclusive ownership of the houses and lands of the city by the company
- Uniform organizational house pattern
- Dependence on the services of the company
- Separation of the town from the network of cities and villages of the area
- Lack of development
- Social and cultural conflicts
- Heavy maintenance costs
- Dormitory nature of the towns

Another pattern is the formation of townships outside the physical limits of large cities. During 1965-1977 and 1998 comprehensive urban plans were implemented in Iran. These plans paid no attention to the areas outside city limits. Lack of any physical plan and lack of necessary control outside the legal limits of master plans led to illegal construction, new neighborhoods and new towns in the marginal areas of large cities such as Tehran and Isfahan.

The important reasons for building new towns in Iran are as follow:

Iran's population will reach 130 million in 2021. It is estimated that about 74 percent of total population will live in urban areas by that time, that is, Iran's urban population is estimated to increase about 96 million. It means an annual growth of Iran's population about 3.8 per cent during 1986 - 2021 (Zanjani, 1992).

Therefore, the project demonstrates that Iran's population will reach 3.6 times in 35 years from 26 millions in 1986 to 96 millions up to 2021. It is estimated that the country will need about twice land levels of all existing cities, to settle the additional 70 million populations in the next 35 years (1986–2021). Due to these reasons, the periphery of big cities is covered by garden and fertile land agriculture. Therefore, the new towns will have to absorb 6 millions of surplus urban population in 2021 (MHUD, 1990). Besides these reasons and other aims that mentioned, Iranian new towns based on these factors were planned and constructed after Revolution. After Revolution (1979), Planning for national development was subordinate to planning for the war with Iraq which began in 1980 and ended in 1988.

The war era was characterized by rapid population growth, weak economic performance, a sharp decline in per capita and fall in living standards for the average Iranian household (Atash, 2000). Some 2.5 million people moved from the war zones to settle in large cities and refugee camps in other parts of the country, particularly in cities located in the centre and in areas adjoining the war zones. The end of the war with Iraq coincided with the implementation of the first Five-Year development plan for the period of 1989-93. The plan identified economic growth and efficiency as its most important objective. Other objectives of the plan included controlling population growth, optimizing resource exploitation and completing unfinished projects (Amirahmadi, 1996). Following the completion of the first plan, the government decided to prepare the second development plan for the period of 1995-99. The second development plan similar to the first one placed top priority on economic growth and did not address its spatial dimension and performance. The second plan emphasized industrial growth in areas with an adequate infrastructural base. To this end Iran's large urban areas will continue to attract a large number of migrants from the rest of the country. This would complicate the problems of areas and would burden the nearby communities and new towns to absorb the surplus population of large cities. Iran's new constitution of 1979 placed an emphasis on regional planning to balance national development (Amirahmadi, 1990). In order to address the problems of less

development regions, the post-Revolutionary government attempted to bridge the gap between sectoral economic planning and regional spatial planning (Sharbatoghli, 1991). Therefore, The Government has formulated a process to address the spatial strategy planning in three stages (Amirahmadi, 1990):

In the first stage, the document titled basic plan of the national spatial strategy plan is being prepared to address several issues including settlement patterns in urban and rural areas as well as the sectoral distribution of population and employment.

In the second stage, the document titled detailed plan of the national spatial strategy will be prepared to address comprehensively the details of the spatial organization of development. The document focuses on regional comparative advantage and specialization, settlement scale and function, the geographic distribution on productive activities, social services and infrastructural networks. In the third stage, the contents of the Medium – Term Socio – economic Development plan of the regions will be detailed with regard to the regional resources. The sectoral plans will then be formulated on the basis of the regional plans and co-ordinate in terms of their input and output requirements at the national level. After the Revolution the new towns development strategy was halted because of the war with Iraq. The recommended strategy directed the future population growth and economic activities away from the rapidly growing large cities into new towns around them.

New towns were constructed during Post – Revolution period with respect to the following main goals:

Control the rapid and disorderly growth of large cities by limiting the size of their populations.

Decentralization from big cities and absorption of 6 million surplus populations of big cities until 2021, by offering them new employment opportunities in surrounding new towns. The new towns should not be planned as dormitory communities. The strategy of new towns recommended that each new town should offer varied employment opportunities for people.

Overcoming the urban housing problems and to provide low-cost, affordable housing in new towns to deal with high living cost of the large cities.

Distribute and relocate some of the conflicting industrial establishments from the big cities to the new towns.

To prevent the formation of informal settlements in the periphery of the large cities.

The government selected the MHUD to formulate the new town development and to monitor its implementation. After the war (1988) the MHUD resumed its responsibility for new towns planning and development using for site selection, master plan and approval, financing and construction. Thus, the Ministry of Housing and Urban Development has selected the location of new towns sited in areas near Iran's major urban centers, large industrial establishments, and in areas where land is owned by the government. The main new towns which have been planned and constructed during the post-revolution period fall into satellite model. In 1985, the government officials announced the construction of new towns as one of the national strategies in urban development. Following this issue, the construction of 28 new towns was included in the work plan of the MHUD. But, in 2004, the above mentioned new towns of post-revolution was amounted to 17 towns as the following: Parand, Hashtgerd, Pardis, Andisheh, Majlesi, Baharestan, Fauladshahr, Sahand, Sadra, Golbahar, Binalood, Aalishahr, Mohajeran, Alawi, Ramin, Ramshar, and Tis. In addition, the new town of Namak-e-Abrod has been constructed about five kilometers away from Chaloos (Mazandaran province) with recreational roles. The Central Construction Company of New Towns (CCCNT) and the Ministry of Housing plan to construct 10 others new towns, namely, Eshtehard and Aftab (in urban area of Tehran), Shirinshahr (70 kilometers away from the south of Ahwaz), Malak Kiyani (in urban area of Tabriz), Salafchagan (in Salafchagan area of Qom province), Kalardasht (in the periphery of Chaloos), Incheh Broon (in the urban area of Gonbad-e-Kawoos), Ashoradeh (in the urban area of Gonbad-e-Kawoos), Aslooyeh (in the urban area of Kangan), and Parsoomash (in the urban area of Masjid-e-Soleiman) to provide housing facilities to industrial employees and to meet the shelter needs of the people. At present, master plan of Shirinshahr affiliated to the sugarcane Agro Industry Company is under study.

The construction of new towns around Tehran follows the objectives of absorbing the overflow population of Tehran and its urban area, decentralization of Tehran city, preventing increase of real property price in Tehran and offering housing to low-income groups. On this basis, the locations for the construction of four new towns of Hashtgerd, Andisheh, Pardis and Parand were specified. In the proposed plan, it was decided that about 830,000 people be accommodated in these new four towns during a programmed period. Construction of new town around Tehran has not been foreseen in the initial master plan of Tehran (1968). Only in 1985 and based on the studies carried out by ATEC Consulting Engineers Company, four new towns were proposed in the urban area of Tehran (ATEC, 1985). This Article studies two of these new towns, namely Hashtgerd and Pardis.

The location of the new town of Pardis was approved by the Supreme Council of Urban Planning of Iran in 1989 and the memorandum of association of its development company was passed in 1990 (Pardis New Town Development Company, 1995). This town is located in the urban region of Tehran 25 kilometers east of Tehran on the side of Tehran – North road. The area of the town is 2000 hectares and its capacity is 150,000 people. According to the master plan (1995), this town should accommodate 32,000 people until the end of the 2004. However, one year before the end of the 2004, the town has a population of 36,000 and 7933 residential units are completed and 6987 other units under construction. Scientific-research and tourist-recreational functions are also predicted for this town in addition to its servicing function. The findings of the studies show that Pardis town is ahead of the plan in view of accommodation and absorbing population. Actually the town has changed into a warehouse of housing. However, the other objectives, i.e. decentralization of Tehran and preventing increase of land price in Tehran have not yet materialized. No servicing, scientific-research and tourist-recreational structures have yet formed. In general, Pardis is still far from a genuine city in view of functioning, performance and activity. It is only of a dormitory nature and is dependent on Tehran for employment.

Hashtgerd town is located 65 kilometers to Tehran on the route of Tehran- Qazvin Freeway and on the foothills of Alborz mountain chain. The municipal activities, expansion of metro lines, parks, cinema town and the investment of construction companies are promising. According to the master plan (1993), the town is 4,000 hectares in area and the town is planned to accommodate a population of 500,000 in a 25-year period. The town is supposed to accommodate 35,000 until the end of the 2004, but by the end of 2003, Hashtgerd has a population of 28400 people. 6508 residential units are completed and 10750 other residential units are in process of construction. The findings of the studies show that the town has mostly absorbed the overflow of population from Tehran and Karaj cities. In general, the town is of a dormitory nature with no employment or servicing activities. This town is dependent on Karaj and Tehran cities and has not only failed to fulfill the set goals, but even the urban and servicing structures are not yet complete. The two other new towns of Andisheh and Parand in the periphery of Tehran are much behind the objectives set out in their plans.

The studies for construction of new towns in Isfahan were conducted within the framework of the Regional Master Plan of Isfahan (1985). Based on the forecasts of the master plan, the population of Isfahan region will reach from 2 millions in 1985 to 4.4 millions in 2016 (Naqshejahanpars Consulting Engineers Company, 1985). This region is considered as the second largest industrial pole after Tehran and accommodates heavy industries of iron and steel, military, petrochemical, cement and other industries. The new towns of Baharestan and Majlesi were put in the agenda for design and construction and two other towns of Fuladshahr and Shahinshahr which were constructed before the Revolution were also put for planning, design and redevelopment. The objectives of these plans were to absorb the overflow of population of Isfahan city and the region, provide housing to low-income groups, accommodate industry workers and for the anatomic, population and industrial decentralization of Isfahan city. After the Revolution until 1991, Fuladshahr was in a period of stagnation and some of its neighborhoods were used for accommodating was refugees during Iraq- Iran war. A master plan for Fuladshahr was

prepared in 1994. The new plan predicted a population of 85,000 in 2004, but up to the end of 2003, only 71600 people live in this town. At present, this town has lost its former function as a mere accommodation to workers of steel industries and different neighborhoods therein have been assigned to other groups of people. Therefore, in addition to accommodating the workforce in industries around Isfahan, this town also absorbs surplus population of Isfahan city and province. At present, Fuladshahr is of a more dormitory nature and is greatly dependent on Isfahan city and other cities in the region. 46 years after the construction of the town, still the economic, servicing, social and cultural foundations are not formed and the economy of the town is dependent on the subsidies by the industries and the salary of the workers and employees residing there in. Majlesi new town is located 65 kilometers southwest of Isfahan city and 6 kilometers away from Fuladshahr Mobarakeh complex. Based on the Isfahan Regional Master Plan, this town is supposed to accommodate a population of 140,000 from 1991 to 2016. The objective behind construction of this town is to accommodate the workers of industries in the west axis of Isfahan city especially Mobarakeh steel industries and to absorb part of the surplus population of Isfahan. According to the studies carried out, 57.7% of the objective of accommodation has been realized until 2003, but due to long distance from Isfahan, Majlesi has not been able to play a role in absorbing surplus population of Isfahan city and has not reached its other goals as well.

Baharestan new town is located 15 kilometers southeast of Isfahan on the road of Isfahan to Shiraz. This town is the result of studies and forecasts of regional master plan of Isfahan (1985). The executive activities for construction of this town started since 1988 (Baharestan New Town Development Company, 2001). Since 1994, Baharestan formally accepted population (Baharestan New Town Development Company, 1998). A population of 320,000 is estimated to be accommodated in Baharestan from 1994 through 2016. According to the studies of the regional master plan of Isfahan, the population of Isfahan city will reach 2 millions in 2016 and therefore the ratio of population of Baharestan to that of Isfahan will be 16% in the said year. For Baharestan,

objectives of attracting surplus population of Isfahan, providing housing for low-income groups, anatomical and social decentralization of Isfahan city have been planned. In 2003, about 65,000 people are residing in Baharestan. 76% of this population comes from Isfahan Province (37% from Isfahan City) and 24% from other provinces. 19124 residential units are completed in Baharestan and 8558 other units under construction. The family size is 4.1 which indicate of a younger population in Baharestan than in Isfahan where this index is 4.3. The average income of people in Baharestan is less than average income in Isfahan. In fact, Baharestan has reached its goal of providing housing to low-income people. A sample study showed that the main reason for residing in Baharestan are cheaper housing (35% of the interviewees), closeness to Isfahan city (14.6% of the interviewees) and lower housing rental compared with Isfahan (13.2% of the interviewees). In spite of the relative success of the city, the inhabitants call Baharestan a city with

no identity. 49 % of the inhabitants of Baharestan work in Metropolitan Isfahan, 25.1% in Baharestan, 11.8% in other cities in Isfahan Province and the rest (14.1%) in other provinces of Iran. Figs.1 & 2 illustrate the master plan and the formation of Baharestan New Town which is located 15 kilometers southeast of Isfahan. Fig.3 indicates the population of Iranian New Town up to 2004. According to this figure there is an uneven absorption of the population among Iranian New Towns.

Some people from other parts of the country have invested in housing sector in Baharestan, as owning real property is considered a popular way of saving in Iran. At present, due to too much construction, the space between Baharestan and Isfahan city is filled with houses, converting Baharestan into a neighborhood connected to Isfahan city. This has increased the traffic load in Isfahan and Isfahan- Baharestan road. Actually, Baharestan has not only failed in its mission for decentralization of Isfahan, but has added to the

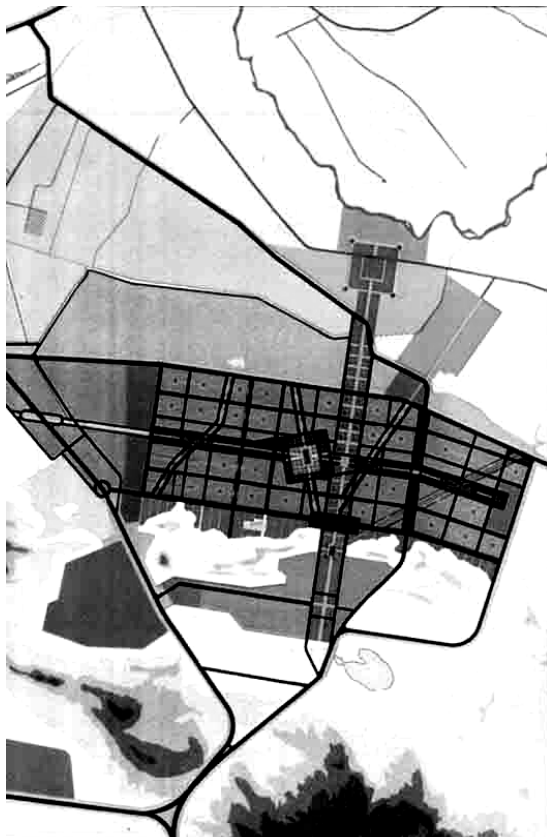


Fig. 1. Master Plan of Baharestan New Town(Source: Baharestan New Town Development Company, 1988)

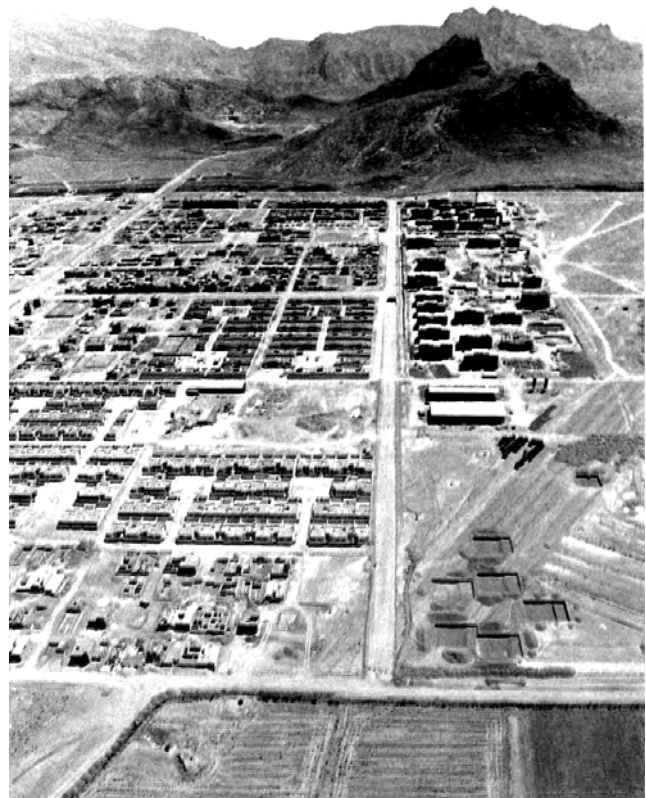


Fig. 2. Baharestan New Town in 1992

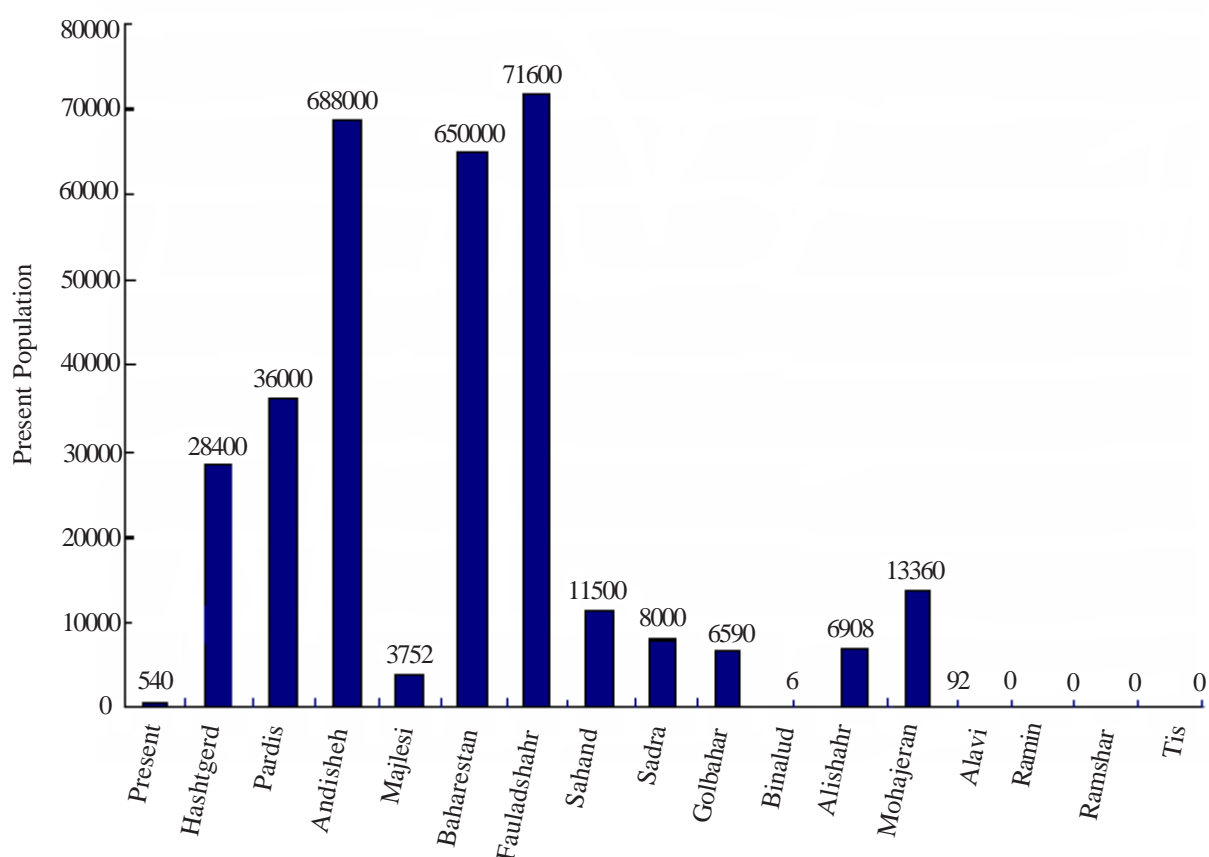


Fig. 3. Present Population of Iranian New Towns up to 2004: A Comparison

concentration of this city and has caused physical expansion of Isfahan. Baharestan is strongly dependent on Isfahan for economic, social and cultural services. About 69% of the inhabitants of Baharestan travel to Isfahan at least once a day for work, study, shopping, recreation and visiting relatives and friends. 35% of the people supply their service needs merely from Isfahan. 16% believe Baharestan lacks complete services. 28% of the people name lack of recreational facilities as one of the problems of the city. In Baharestan, industrial complex, higher education center, health centers, sport and recreational centers are under construction. At present, in spite of achieving its population and housing goals, Baharestan is a dormitory town. The other new towns of Iran including Sadra in Shiraz suburbs, Golbahar in Mashhad, Sahand in Tabriz, Mohajeran in Arak, Aalishahr in Bushehr and Alavi in Bandar Abbas have absorbed populations and residential units are built therein, but they are mainly similar to dormitory residential complexes and the servicing, economic, social and cultural infrastructures are

not yet formed therein. In three new towns of Tis, Ramshar and Ramin, no population has been absorbed and these towns are much behind their scheduled plans.

CONCLUSION

New towns have been constructed in Iran both before and after the Revolution. The new towns constructed before the Revolution for political, security and bureaucratic reasons are now lucrative centers with proper economic and social functioning (e.g. Zahedan, Yasuj and Noshahr). Some of the new towns established for special economic goals such as the operation of huge oil resources and the affiliated industries enjoy self-reliance and self-sufficiency and have achieved to provide employment and services to their inhabitants (e.g. Abadan, Bandar Mahshahr and Bandar Shahpour). Some others such as Lali, Anbar and Naft Sefid are highly dependent on the economic source of the city and are merely of a dormitory nature. The new towns which have been established for operation of mines and for

accommodation of mine workers are not lucrative enough and are dependent on the mine. After the end of the operation of the relevant mines, the capital invested in such cities should be probably considered lost (e.g. Sarcheshmeh Copper Mine city in Kerman province). This city is neither self-reliant or self-sufficient nor capable of providing services to the inhabitants and suffers from seclusion, cultural contradictions and social problems. The main reason is its dependence on the mining company for survival. Another group is the towns established for accommodating workers in the industry sector of industrial complexes (e.g. Fuladshahr). Fuladshahr is still far from the function of a genuine city. It both enjoys neither self-reliance nor self-sufficiency in view of urban services and economy and is only of a dormitory function. This town is dependent on the neighbor cities and metropolitan Isfahan. Fuladshahr is intensely dependent on the subsidies by steel mill and the salaries of the employees and workers living in the town. This town did not achieve its planned objectives before the Revolution. The connected new towns constructed to provide housing for the government employees have, over time, merged in the main city and created a dual living and productive space with the mother city (e.g. Malekshahr and Khaneh in Isfahan, Kuye Valiasr in Tabriz, Rezashahr in Mashhad, Lavizan, Kan and Ekbatan in Tehran). These areas are today considered main parts of the city. Another group of cities which have been established in a proper distance from large cities (e.g. Karaj) have now become very active cities and a metropolis of their own. Still another group of new towns are company towns constructed for the accommodation of workers of agro-industrial and agricultural complexes. Due to dependence to the company and exclusive ownership of the company, cultural contradictions and lack of economic infrastructures, these towns lack appropriate economic and social functioning and are highly dependent on the salary of workers. Heavy costs of maintenance and the problems of servicing in the city impose large subsidies on the Company. In general, construction of new towns was not considered a strategy of urban development before the Revolution and most of the new towns were designed for accommodation purpose and housing the workers in industry sectors. These towns were mainly in line with

social and economic development of the Country. Due to centralized nature of national plans and the requirements of the Constitution, these towns did not cause decentralization in national level. (Table 1). shows the general information and the situations of Iranian New Towns up to 2004.

After the Revolution, 17 new towns were planned, designed and partially constructed. The important point is that these towns achieved different objectives. From the four new towns under construction in the periphery of Metropolitan Tehran, three towns of Pardis, Hashtgerd and Andisheh have achieved their objectives in regard to absorption of population and provision of house as per the approved plans but Parand town has not yet achieved this end. All four towns are changed into housing warehouse. These towns still lack commercial, administrative and health services and other services and activities are not formed yet. All four towns around Tehran are similar to dormitory complexes. From the new towns around Isfahan, Majlesi has, until 2003, realized 57.7% of the goals of accommodation and population absorption according to the scheduled plan but is still far from becoming a genuine city. A large number of its population is students of Open University. Other objectives have not been realized until 2003. After one decade from the construction and habitation, Baharestan new town is in more desirable conditions compared with other new towns in Iran. This town has reached 81% of its objectives in attracting population and accommodation according to the plans. Baharestan has been able to provide housing to the low income groups. It is however dependent on the mother city of Isfahan for services and employment. Due to close distance to Isfahan, the space between Baharestan and Isfahan is filled with buildings and thus has concentrated Isfahan even more instead of reducing the congestion. The other reason for lack of success of the new towns in their decentralization mission is the centralization-oriented nature of national and regional plans and also some provisions of the Constitution of the Republic which encourage centralization. In general, except Baharestan, the other new towns which have been constructed after the Revolution lack the economic, social, cultural and infrastructural foundations. Employment is not organized therein. They are unable to provide the services needed by the inhabitants. Most of them

Table 1. Iranian New Towns after Revolution (1979) up to 2004

| Name of new town | Name of mother city | Distance from mother city (km) | Area (hectare) | Predicted population | Present population (2003) | Predicted Population up to 2004 (Planned) | Establishment year of company | Year of approval of master plan | Number of residential units Completed | Under construction |
|------------------|---------------------|--------------------------------|----------------|----------------------|---------------------------|---|-------------------------------|---------------------------------|---------------------------------------|--------------------|
| Parand | Tehran | 35 | 1467 | 80000 | 540 | 10000 | 1990 | 1998 | 242 | 6059 |
| Hashgerd | Tehran | 65 | 4000 | 500000 | 28400 | 35000 | 1990 | 1993 | 6508 | 10750 |
| Pardis | Tehran | 25 | 2000 | 150000 | 36000 | 32000 | 1991 | 1995 | 7933 | 6987 |
| Andisheh | Tehran | 30 | 1100 | 100000 | 68800 | 75000 | 1991 | — | 16430 | 7476 |
| Majlesi | Isfahan | 65 | 3000 | 140000 | 3752 | 6500 | 1989 | 1993 | 1500 | 881 |
| Baharestan | Isfahan | 15 | 3000 | 320000 | 65000 | 80000 | 1989 | 1993 | 19124 | 8558 |
| Fauladshahr | Isfahan | 40 | 7000 | 320000 | 71600 | 85000 | 1989 | 1994 | 14350 | 1172 |
| Sahand | Tabriz | 20 | 3148 | 90000 | 11500 | 17000 | 1991 | 1998 | 2325 | 4824 |
| Sadra | Shiraz | 15 | 2040 | 200000 | 8000 | 10000 | 1991 | 1995 | 12400 | 2325 |
| Golbahar | Mashhad | 40 | 4000 | 400000 | 6590 | 1042 | 1990 | 1993 | 1750 | 2000 |
| Binalud | Mashhad | 45 | 4000 | 120000 | 6 | 15000 | 1991 | 2001 | 2 | 219 |
| Alishahr | Bushehr | 24 | 4000 | 100000 | 6908 | 8000 | 1989 | 1996 | 10505 | 703 |
| Mohajeran | Arak | 28 | 821 | 60000 | 13360 | 14000 | 1990 | 1997 | 4577 | 410 |
| Alavi | Bandar Abbas | 40 | 3000 | 100000 | 92 | — | 1990 | — | 60 | 140 |
| Ramin | Ahwaz | 35 | 1000 | 65000 | 0 | — | 1990 | — | — | — |
| Ramshar | Zabol | 35 | 1000 | 60000 | 0 | — | 1991 | — | — | — |
| Tis | Chahbahar | 30 | 1000 | 100000 | 0 | — | 1991 | — | — | — |
| Total | --- | --- | 46676 | 2905000 | 320548 | 388542 | --- | --- | 97706 | 52504 |

depend on the salary of workers and employees and lack self-reliance and self-sufficiency. These towns survive on the subsidies of development companies. They mainly lack municipality and are of dormitory function. One of the reasons for the establishment of new cities in the post – Revolution period is the estimation of country's population about 130 millions and the population of country's cities to 96 millions. This estimation was based on the total fertility rate of 6.5 in 1986 and the population growth of 3.7% from 1986 to 1996. According to statistical figures, the population growth of the country in the years 1985 to 1996 reduces to 1.96%. The calculations of Iranian statistical center, the rate of T.F.R in the year 2003 reduced to 2.5 and the crude birth rate reached 19% in 1000 and the population growth reduced to 1.4%. It is also estimated that settlement of population in 17 new towns will reduce from 6 millions to about 2.9 millions. At present these 17 new towns has been able to attract only 320548 persons while the three new towns of Ramin, Ramshahr, Tis, have not yet been successful to attract population.

REFERENCES

- Afshar, S., (1987). Report on Study of Master Plan, Department of Town Planning. Tabriz University Press, Tabriz.
- Amirahmadi, H., (1990). Revolution and Economic Transition: The Iranian Experience. State University of New York Press, Albany.
- Amirahmadi, H., (1996). Iran' s Development: Evaluation and Challenges. Third World Quarterly, **17(3)**, 123- 147.
- Atash, F., (2000). New Towns and Future Urbanization in Iran. TWPR, **22(1)**, 67-86.
- Atash, F., (2002). Urban Dimension of the Population Explosion in Iran: Prospects for the satellite Town programme in the Esfahan Region. cities .**11(4)**, 253 - 263.
- ATEC Consulting Engineering, (1985). Urban Region Plan of Tehran. ATEC Press, Tehran.
- Bradford, T., (1972). A New Town in Town for old Bogota. Third World Planning Review, **2(1)**, 12 -28.
- Construction Company of Baharestan New Town, (1988). Report on Baharestan. CCB Press, Isfahan.
- Construction Company of Baharestan New Town, (2001). Report on Baharestan. CCB Press, Isfahan.
- Construction Company of Hastgerd New Town ,(1995), Master Plan of Hashtgerd New Town, CCH Press. Tehran.
- Construction Company of Naqshejahanpars New Town, (1985). Urban Region of Isfahan, CCN Press, Tehran.
- Construction Company of Pardis New Town, (1995). Master Plan of Pardis. CCP Press, Tehran.
- Construction Company of Iranian New Towns, (2004). Statistical Bureau, Tehran.
- Chioc, J., (1987). New Towns of South Korea. Policy Issues and Regional Seminar on Major National Urban, Manila.
- Denington, E., (1972). New Towns for Whoms: The British Experience. Charles knight and Co. Ltd, London.
- Farid, M., (2002) .An Assessment of the Cairo City, Journal of Engineering and Applied Science, **4(49)**, 41 – 56.
- Friedman ,J,(2000).The Good City, In Defense of Utopian Thinking. International Journal of Urban and Regional Research , **24(2)** ,460 – 472.
- Hazel, E., (1972).New Towns: The British Experience. Charles Knight and Co. Ltd, London.
- Mashadzadeh, N., (1995). An Analysis Urban Planning Characteristics in Iran, University of Science and Technology Press, Tehran.
- Ministry of Housing and Urban Development, (1990). New Towns. MHUD Press, Tehran.
- Mojtahedzadeh, G., (1996). An Introduction to Regional Planning in Iran. Paiam-e Nour Press, Tehran.
- Osborn, F. J., and Arnold. W, (1977). New Town: Their Origins Achievements and Progress. Leonard Hill Press, London.
- Saraf, M., (1999).The Fundamental of Regional Planning, PBO Press, Tehran.
- Sharbutoghlie, A., (1991). Urbanization and Regional Disparities in post-Revolutionary of Iran. Co. Ltd West View Press.
- Somma, p., (1992).New Towns in Dependence Africa, Trialog Journal, **20 (3)**, 65-80.
- Talen, E., (2002) The Transcend Strategy: Help for urban planning. Journal of Urban Design, **17(3)**, 32 – 37.
- Underhill, J.A., (1990). Soviet New Towns: Planning and National Urban Policy. Town Planning Review, **61(3)**, 263-280.
- Ward, S., (1992). The Garden City: Past Present and Future. E&FW SPON, London.
- Zanjani, H., (1992). Population and Development, Research Center of Urban Development Press, Tehran.
- Ziari, K., (2004). New Towns Planning. Samt Press, Tehran.
- Ziari, K, (2006), the Planning and Functioning of New Towns in Iran. Cities, **23(6)**, 412-422.