American Journal of Engineering Research (AJER) e-ISSN: 2320-0847 p-ISSN: 2320-0936 Volume-03, Issue-12, pp-01-06 www.ajer.org

Research Paper

# Analysis the opportunities and threats of Mehr Housing in Mashhad Metropolis (A case of Golbahar New Town)

Hadi Ivani<sup>\*1</sup>, Mohammad Rostami<sup>2</sup>

<sup>1\*</sup> Faculty of Art and Architecture, Payame Noor University, Iran (Corresponding author) <sup>2</sup> MSc student of Geography & urban Planning, Payam Noor University, Iran

**ABSTRACT:** In recent years, the construction industry has been thriving due to an increase in national and international investment to the extent that it is now the largest in the Middle East region. In order to, the aim of current research is analysis the opportunities and threats of Mehr Housing in Mashhad Metropolis with point on Golbahar New Town housing project. Applied methodology is based on libraries, documents and field study. In the case of library, data were collected by studying books, articles and internet. In continuous it was used of interview and questionnaire for complete the data's. Results show that 70 percent of the Iranians own homes, with huge amounts of idle money entering the housing market and the annual turnover in the construction industry amounts to 38.4 billion US\$.

KEY WORDS: Golbahar New Town, Mehr Housing, Mashhad Metropolis, Housing industry

#### I. INTRODUCTION

The construction industry of Iran is divided into two main sections. The first is government infrastructure projects, which are central for the cement industry. The second is the housing industry (Ayse, 2013). In recent years, the construction industry has been thriving due to an increase in national and international investment to the extent that it is now the largest in the Middle East region. The Central Bank of Iran indicates that 70 percent of the Iranians own homes, with huge amounts of idle money entering the housing market. The annual turnover in the construction industry amounts to 38.4 billion US\$ (Merip, 2013). The real estate sector contributed to 5% of GDP in 2008. Statistics from March 2004 to March 2005 put the number of total Iranian households at 15.1 million and the total number of dwelling units at 13.5 million, signifying a demand for at least 5.1 million dwelling units. Every year there is a need for 750,000 additional units as young couples embark on married life (Xang, 2013). At present, 2000 units are being built every day although this needs to increase to 2740 units (Wikipedia.org, 2014). Different countries for resolving the housing problem have carried out some different techniques, some have tried to rehabilitate slums around the cities, some of them gave mortgage to eligible, and some gave land with cooperation of municipalities to eligible, some taking tax on uninhabited houses, giving facilities to mass manufacturers etc. We have high inflation and high cost of housing in Iran. Demanding more than supply housing has negative effect on inflation. Demanding housing is divided in two parts in Iran: a) Real demand of housing based on household needs. b) Investment demand to maintain equity. Needing more supply to improve situation. Mass housing project is the best way for more supply. Nowadays housing problem has been one of the greatest of people's concern. The ninth and tenth government has been giving mortgage, land and mass housing to eligible to decrease or eliminate housing problem in Iran. No ownership of housing or ownership records of housing or residential lands that hasn't used governmental sources for housing and is in charge a house, are eligible for taking facilities. The government decided to implement the mass housing project called Mehr housing in all cities. Thus after passing the Mehr housing project in cabinet in 2007 and passing the official process, the government started to build housing cooperative in cities and enrolling eligible individuals who lived in desired city for 5 years (Banaei & Parvizian, 2013). Acute problems of urbanization led to new theoretical perspectives and solutions that have been reflected in national development policies. Building new towns has been proposed as one of the basic policies toward population growth and inflation in large cities. In different periods of history, new towns have been built around the world (Frank, 1972). Building new towns in Iran goes back to past times; one can count many cities that were founded in a specified period (Piran, 1989). In Iran, during the last three decades, the rapid growth of urban population has not been in proportion to the capacities of urban space facilities, and due infrastructure and required profession were not also provided. Since, spatial distribution of cities and population has not been based on a comprehensive plan which is in congruent with regional and provincial sectors, the issues resulted from the rapid urban population growth have become multifarious and convoluted (Anabestani & et al, 2013). In this between Golbahar New Town has specific situation in Mehr housing project.

#### II. BACKGROUND

For a decade after the revolution, the land question, especially in cities, was among the most contested issues in the Islamic Republic. The collapse of state authority, coupled with the populist convictions of the new regime and spontaneous popular land occupations labeled as "revolutionary housing," led to the dramatic expansion of cities. Tehran doubled in size within two years, and Ahvaz tripled in area from 9 to 29 square miles (75 km<sup>2</sup>). But only a small fraction of this geographic expansion was confiscated private land. The rest, more than 90 percent of the total distributed, had been public land. From 1979 to 1993 nearly half a million hectares of predominantly public unoccupied land was converted into private and cooperative residential property. New state institutions like the Urban Land Organization and the Housing Foundation played the key role in this massive transfer of property. By the mid-1980s more than 60 percent of all urban residential land transactions were being allocated by the state (Middle East Research and Information Project, 2012). This largescale transfer of mostly public land, coupled with the absence of enforceable regulation, transformed Iran's urban geography. Between 1979 and 1982, 75 percent of all new construction in Tehran occurred outside the formal city limits, where satellite villages were transformed into sprawling suburbs. Remarkably, by 1986 urban housing stock had doubled, as Housing Ministry surveys showed that more than half of all urban dwellings in the entire country had been built after the revolution. It was private individuals who built these 2.3 million new units. The state merely transferred the public land into private hands; its share of investment in housing construction (affordable or otherwise) was less than 2 percent of the total after the revolution. Following an extraordinary boom in the Iranian real estate market between 2004 and 2007, activity in this market suddenly slowed down from early 2008. In 2009, construction activity was at its lowest level for the past eight years. Since 2010, this sector has experienced a modest recovery (Wikipedia.org, 2014; Athari, 1993).

Study of housing issue contain, economic decisions such as mortgage amount, taxes etc. government decisions such as services, issue priority etc. applicants interests such as the design of units, size of units etc. for addressing that issue they should be examined simultaneously. There is the interaction of various factors of social, economic and political in housing issue so we are faced with a complex system. We need to know the policies feedback to understand the efficiency of policies and applicant satisfaction of Mehr housing and also proposed alternative policies. On one hand system dynamics has ability of solving complex problems of nonlinear and feedback loops. In the system dynamics approach, first, we have a description of the problem then identifying the level and the rate of problem, on the next steps simulation and alternative policies will be discussed (Jarzynka, 2005). Considering the difficulties and problems that mainly rise in continuous development of metropolitan cities that are due to high and increasing demands for housing, providing the land needed for development inside the cities has practically been a thorny problem and charges high costs. New towns as the detached extensions have largely tackled the problem, and have been able to provide appropriate conditions for mass housing, and with mass production of land and urban services, they have managed to relatively control land price, and naturally reduce the land price in metropolitan cities as demand goes up. Despite the relative success in controlling the growth and development of metropolitan cities, new towns failed to realize their goals, their major shortcoming was their inability to absorb population (Gholamiyan, 2010). Kazemi-Sefat (2011) in evaluating the success of Hashtgerd new town in absorbing the overflow population of Tehran Metropolis believes that there is a big difference between the predicted population absorption and the number of residential units between 1996 and 2006 in Hashtgerd Comprehensive urban Plan and the status quo. Ebrahim et al. (2005) in an analysis of the necessity of building the new town of Golbahar and its role in decentralization of Mashhad Metropolis concluded that this town has failed to decentralize Mashhad Metropolis, to the extent that in terms of population, employment, housing and other predictions from 1996, even up to 2001, none of the above objectives were achieved. For example, until 2001 only about 10% (2397 people) of the predicted population for 1996 (24,000 people) have been achieved. Harirchi et al. (2009) in their study of citizens' quality of life in Pardis believed that increase in social capital improves the quality of life, and there is a significant correlation between satisfaction with neighborhood and quality of life, but there was not any significant correlation between the quality of life and the marital status and age groups (Anabestani & et al, 2013). Howard believed that the theory of "garden city" is a way for dealing with population growth in large cities, organization and spatial distribution of population and industry. He claimed that the goals of building garden cities are to create a functional structure, optimize population size and area, employment and selfreliance, development of green belts, optimum density and public ownership of land. He implemented two plans of garden cities (1928) before his death (Hall, 1992). As a result of revolutionary dreams of utopianisms and reformist ideas of Howard and their compliance with national planning policies in the UK and other countries, the notion of new town was accepted as a liberal opportunity for reform and providing a better way for urban life. However, urbanization expansion resulting from immigration from villages to cities and adjunction of surrounded villages to metropolitans in developed and developing countries has shaken the bottom of housing quality and quantity and it has changed the issue of housing into a great problem. Housing shortage, housing inacceptable quality, old textures, settlement in urban outskirts, inappropriate accesses of housings to urban services and etc are included among urbanization consequences and Iran is not an exception. Therefore, in metropolitans like Mashhad, as a second population pole of the country and commercial, historical and cultural center in national and international scale, which has always encountered with population growth rate, settlement conditions and living condition in urban neighborhoods have been inconsistent regarding urban sustainable development criteria (Zanganeh & et al., 2013).

### III. CASE STUDY REGION

Mashhad City is considered as Iran's second metropolitan and World's second religious metropolitan and largest population center of Eastern Iran. The city is provincial capital of Khorasan Razawi and its population is 2766258 (Iran Statistics Center, 2011). The city is located at 36.20° North latitude and 59.35° East longitude, in the valley of the Kashaf River. The city has 13 urban districts, totally 29000 hectares. Urban population density is approximately 119.4 people per square meter. As one of the old and historical regions on the Great Khorasan Province and Old Toos, Mashhad has been developed thanks to the Shrine of Imam Reza (P.B.U.H), Eighth Shiite Imam. Metropolitan Mashhad has historical-political, economic-administrative and cultural-intellectual centrality and religious function as well as border, beyond-country situation. It accepts 10-15 million pilgrims and tourists annually in such a way that it bears the title of the second religious city of Islam world and the second national metropolitan in terms of population (Mafi & Saghayi, 2008; Zanganeh & et al., 2013). Golbahar new town with latitude of 37, 36 and longitude of 59, 14 and the average height of 1250 m above sea level, is located in the plain between the mountains of Hezar Masjid and Binalood, 45 km northwest of Mashhad at Mashhad-Quchan road. Golbahar urban area is 4,000 hectares and its design follows a linear checked organization. The planned area includes two urban zones and four regions. The first zone includes some parts of the downtown, construction of eleven neighborhoods and two region centers were anticipated, and the central core of Golbahar new town was formed in this zone, and the resettlement program have been made for one project is being carried out in 1,000 acres of land in the town. According to the conducted researches, the physical progress of the project

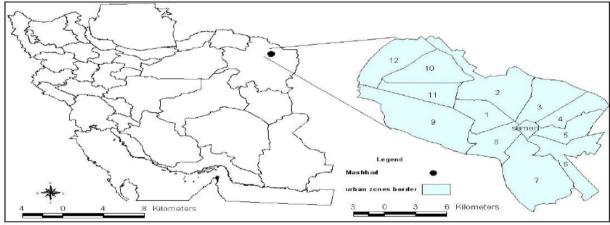


Fig. 1. Case study region map.

in 2011 were about 45%, for example in neighborhood 1 to 6, center of the first region, construction area included Golbahar recreational complex, and parts of neighborhood 7 and 22 (area for light industries) (Anabestani & et al, 2013).

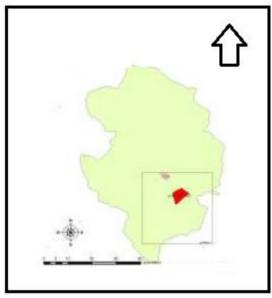


Fig. 2. A view of Golbahar new town.

# IV. MATERIAL & METHODS

In present study the data were collected from libraries, documents and field study. In the case of library, data were collected by studying books, articles and internet. Then, field study was done and including observation, discussion and filling questionnaire and data were analyzed by using a qualitative range. Finally, it is presented some solve ways.

# V. FINDINGS & RESULTS

Housing is one of the most important sections of development in a country and its economic importance has put it in the center of attention. It can cause rise and depression of habitation by its extended economic aspects. Mehr Housing plan is a state run housing project in most cities started 2007 in Iran to protect and provide cheap housing for poor people and young couples. Mehr housing project by its large scale and wide dimensions can affect the society's economy (Karshenasana & Beiranvand, 2013). Therefore, to investigate weaknesses and strengths of this project in terms of economic and applying necessary reformation can increase the success probability of this project. For this purpose, this study assesses the weaknesses and strengths of Mehr housing of province of Golbahar New Town in Iran. The trend of house production during current decade shows that about 600 to 800 thousands constructional permissions have been issued, annually. Therefore, 550 thousands constructional permission as Mehr housing during recent months, and increase of construction section rather than agricultural and oil groups in economic development, indicate the extension of this project. It also suggests that the trend of its implementation will lead to increase of GDP; economic prosperity in other related sectors associated with housing and will prevent from economic declination during future years (Soomelou, 2010). In Golbahar new town, a population of over 13/4 thousand people live in 3940 households, using Cochran sampling formula, a sample size of 143 households were selected from the residential units, and urban households questionnaires were filled out and the required data were obtained. Having collected and processed the data by SPSS, Data were analyzed and the subject was investigated.

Table (1): Housing Statistics in Mashhad city
---

Tuble (1) Housing Statistics in Hasinaa ery			
Mehregan town, self-owners	Binalod New Town	Golbahar New Town	
21761	3713	39785	

Overall, social conditions of life in the new town from citizens' perspective with the standard deviation of 0.65 were 3.016. Among the three indices of the mentioned variable, citizens' willingness to reside in the town with a mean of 1.3 and standard deviation of 0.79 had the highest ranking, and access to social security for citizens, with a mean of 2.96 and standard deviation of 1.1 had the lowest rank.

### 5.1. Applicant satisfaction

Several factors are involved in the applicant satisfaction, but we can consider some important factors which are the most weight or are of the highest priorities, such as the trend of project financing and power of

host of project, supply and demand market condition, project design and the size of project are main factors that each of them have a separate weight between [0, 1] and they have been considered for the sum of 1. Mehr housing applicants are considered as low-income deciles in society along with income close to work insurance rights. According to central bank of Iran, every household can almost spend 1 out of 3 of his income on housing issues. Project financing is expressed by purchasing power. If the total monthly repayment in section 2.2 of residential units like monthly charge per unit and land rent mentioned in section 2.1.1.6, were equal or low than cost in housing section for applicant, the related weight would be given them. As it is mentioned in section 1 in accordance with high inflation and high cost of housing in Iran, increase into housing demand instead of housing supply have negative effect on inflation. Thus, if housing supply and demand were equal or supply was more than demand, the weight of supply and demand market condition would be submitted. Project design is total of national regulations symbol of build (Industrialization) of Iran, apartment living culture, design and project specifications. As it is mentioned in section 1, due to low rise of building and lack of individual custom of living in apartments, apartment living culture isn't conventional and it is not a part of the individual culture. In addition, in section of designing and apartment specifications, useful space of residential units were reduced which is why, they want allocate the space to design hallways and elevator, in spite of lack of modern facilities such as shooting, etc. in view of the average of 3 factors considered for project design, we can give their weight. Generally, in small town, the area of houses is large and compatible with their life style. Although living in apartment with the area of 75 meters in large cities is typical, this isn't considered desirable in small towns. Due to the area of houses, their weight can be given (Banaei & Parvizian, 2013).

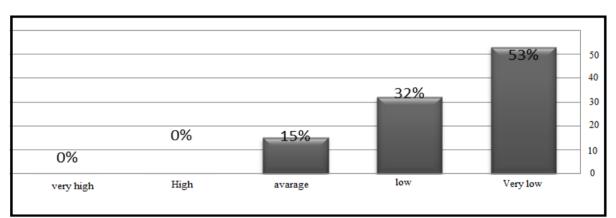


Fig. 3. properly implemented rate of Mehr housing project in Golbahar new town.

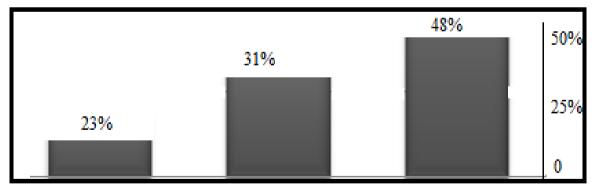


Fig. 4. properly implemented rate of Mehr housing project in Golbahar new town.

There are some advantages associated with the implementation of this project such as utilization of scale economy and low cost homes for needy and young couples faced weakness in urbanization and technical principles. In addition, quality of houses, national production and economic growth, family density, index of access to house, employment, investment, saving energy, landfill consumption pattern of reformation, use of urban rusty texture, paid facilities, role of targeting subsidies, satisfaction of applicants from payment way of facilities, and effect of low income people for providing financial resources are among other issues discussed in this paper. Therefore, by testing the main hypothesis of research, findings have indicated that Mehr housing had not achieved its economic goals. The individuals' opinion about access of Mehr housing to economic goals was estimated 3, which was medium (Karshenasana & Beiranvand, 2013).

### VI. CONCLUSION

In Iran, during the last three decades, the rapid growth of urban population has not been in proportion to the capacities of urban space facilities, and due infrastructure and required profession were not also provided. Since, spatial distribution of cities and population has not been based on a comprehensive plan which is in congruent with regional and provincial sectors, the issues resulted from the rapid urban population growth have become multifarious and convoluted. In this between Golbahar New Town has specific situation in Mehr housing project. Overall, social conditions of life in the new town from citizens' perspective with the standard deviation of 0.65 were 3.016. Among the three indices of the mentioned variable, citizens' willingness to reside in the town with a mean of 1.3 and standard deviation of 0.79 had the highest ranking, and access to social security for citizens, with a mean of 2.96 and standard deviation of 1.1 had the lowest rank.

#### REFERENCES

- Anabestani, A. Anandestani, Z. Heydari, A. (2013). Analysis the Satisfaction of the residents of Golbahar new town with the living conditions and its effects on Mashhad metropolis. International Journal of Management Sciences and Business Research, 2013 ISSN (2226-8235) Vol-2, Issue 11.
- [2]. Athari. K., (1999), development strategies, planning strategies and new towns, the new urban culture, new towns proceedings, Development Company of New Towns. (In Persian)
- [3]. **Ayes, J.** (2013). "System Dynamic Approach for Analyzing Cyclic Mechanism in Land Market and Their Effect on House Market Fluctuations", Proceedings of the 29th International Conference of the System Dynamics Society.
- [4]. Banaei, M. Parizian, J. (2013). Housing projects for the poor a plan with no aim.
- [5]. **Gholamiyan. T.**, (2010), the role of New Towns in the metropolises overflows Iranian population, geography and urban planning master's thesis, University of Mazandaran. (In Persian)
- [6]. Hall, P. (1992), Urban and regional Planning, Rutledge, London, pp21-24.
- [7]. Jarzynka, K., "U.S. (2005) Low Income Housing Policy A Dynamic System Evaluation", Proceedings of the 23<sup>rd</sup> International Conference of the System Dynamics Society, July 17-21, Boston.
- [8]. Karshenasana, A. Beiranvand, M. (2013). A review on weaknesses and strengths of delivering Mehr housing project in terms of achieving economical goals. Management Science Letters 2521–2530.
- [9]. Mafi, E. Saghai, M. (2008). Hashtgerd New Town huge overflow crowd in Tehran, Journal of Transportation and Development, No. 47, pp. 71-65.
- [10]. **Merip**, **H**. (2013). Transformation problems of New Towns, New Towns in Iran and the Proceedings of the experience, the first book, Development Company of New Towns. (In Persian).
- [11]. Middle East Research and information project. (2013).
- [12]. Statistical Center of Iran, (2011).
- [13]. Wikipedia, 2013.
- [14]. Xang, U. (2013). "Evaluation And Ranking The factors on The Time, Cost, And Quality Mass Housing Projects in Iran With AHP", Proceedings of the 5th International Conference of Project Management, Tehran.
- [15]. Zanganeh et al, (2006): The planning towns in Iran, AJSCSs, Vol. 23, No. 6, p. 412–422.