Evaluating Economic, Social, and Physical Conditions of Unofficial Settlement of Gelsefid Neighborhood in Khoramabad, Iran

Zhila Sajadi, Maryam Beyranvandzadeh, Mohammadhosein Buchani and Hosein Hashemi*

Department of Geography and Urban Planning, Shahid Beheshti University, Tehran, Iran

*Corresponding author’s E-mail: Beyranvand28@gmail.com

ABSTRACT: Along with an increase in urban population, always new problems and issues have appeared in the cities. One of the most important problems is unofficial habitation. Unofficial habitation in Iran like many other countries is a growing phenomenon which makes difficulties such as unbalanced development of cities, unhealthy housing, environmental pollution, disparity in income level and etc. nowadays urban planners and managers have focused on empowerment of unofficial settlements as a unique strategy which needs applying thorough and proper management to be achieved. In this regard the present study have tried to investigate the causes leading to the formation of unofficial settlements especially Gelsefid neighborhood in Khoramabad, Iran, through an analytical perspective and alleviate the negative consequences (distress and anxiety of citizens, unplanned physical development of the city, ecological conflicts, socio-economic disorders) of this problem by providing suitable and proper guidelines. The study has utilized descriptive –analytical approach. Keywords: Unofficial Settlements, Empowerment, Khoramabad, Gelsefid Neighborhood

INTRODUCTION

Unofficial settlement is one of the most prominent symptoms of urban poverty which is formed inside or adjacent to the cities without any construction permit or any official city plan, and is usually populated by low-income people who live a low quality life (Kamanrodi, 2000, p:19). Due to lack of monitoring and support from states and municipalities, Spontaneous Settlements are also called unregulated settlements. They are also called popular settlements but mostly because of their position which is usually adjacent to cities are called marginal settlements (The Ministry of Housing and Urban Development, 1995).

The conducted studies in this field show that unofficial and squatter settlement is a vast phenomenon in developing countries. 17 cities out of 20 most populated cities in 1993 for example were located in developing countries where 20% of urban populations in these countries were slum dwellers. For instance in India 365, in Indonesia 40% and in Thailand 18% was slum dwellers. In the past few years, fast growth of urban settlement has caused marginal settlement which has led to bunch of social, financial, cultural, ecological and security problems in most of cities specially Tehran (Rabbani et al, 2008)

The problem is so evident and tangible too. Statistics showed that rural population growth rate during years 1998 till 2008 was negative although urban population has increased with 2.04% growth rate (statistical yearbook of Lorestan province, Iran, 2008).

Most of the villages in Khoramabad have facilities like electric power, water supplies and telephone but emigrants have abandoned them and some of the schools are not active there anymore. The above mentioned problems and those like physical limitations in providing desired urban services, lack of easy access to needed places for today’s life and high maintenance cost of old texture are of the factors that contribute to the development of marginal settlements in Khoramabad. As a result organizing marginal settlements in Khoramabad can pave the way toward sustainable development of the city. The current research aims at investigating and analysis of marginal settlement at Gelsefid neighborhood and providing proper guidelines for its improvement.

Theoretical background

Rapid growth of population and its accumulation in cities and surrounding are the important factors that affect long term prospect of human life. Sustainable development of human settlements has got different economic, social and ecological aspects that lead to an accurate and general impression. A city and its surrounding can be taken as a living thing or interconnected organs in a living system.

The capacity of adaptation and innovation has been granted to this living thing to let it to constantly move toward a livable human settlement (Moldan and Bilharz, 2004).

In 1967, in Vancouver, Canada, the United Nations held first conference on spatial and physical organization of human life on this planet where it required national and international functions to accommodate the growing population of the world in urban and rural communities (http://www.unescap.org/huset/index.html).

MATERIALS AND METHODS

Vancouver Declaration on Human Settlement (Habitat I)

As mentioned before, the first reactions and concerns of the world to mankind’s future and his settlement on this planet (earth) started in Vancouver, Canada in 1976. Within the last few decades, housing problem, lack of urban services, facilities and urban
infrastructures which is cause by population growth, migration and etc. became so important and sophisticated issue specially in third world countries that UN tried to focus the attention of the world on housing problems and related needs by holding a conference entitled “housing chaos” in Vancouver, Canada. Following the conference in 1978 the General Assembly of the United Nations approved a quarterly which added a foundation under the title “habitat” to the existing ones.

The UN held first conference on spatial and physical organization of human life on earth in 1967, in Vancouver, Canada where it required national and international functions to accommodate the growing population of the world in urban and rural communities.

**Habitat II, Istanbul**

Habitat II, the Second United Nations Conference on Human Settlements was held in Istanbul, Turkey in April, 1996. It brought together high-level representatives of national and local governments, as well as private sector, NGOs, research and training institutions and the media to discuss and endorse “City Summit”. Istanbul conference knows the Habitat agenda as a plan and action for achieving sustainable human settlements and believes that regional plans and Habitat agenda can be the main guidelines for each country to realize sustainable human settlements and to improve life quality. Now it’s time to discuss what is needed to follow the suggestion and recommendations of the Habitat agenda and regional plans in urban and rural textures with proper actions.

Habitat 2, the international conference aims at the two major themes -adequate shelter for all and sustainable human settlements development in an urbanizing. The existence of mankind is the core and focus for sustainable human settlements development ensuring adequate shelter for all and making human settlements safer, healthier and more livable, equitable, sustainable and productive.

We with a sense of urgency have considered the continuing deterioration of conditions of shelter and human settlements. At the same time, we recognize cities and towns as centers of civilization, generating economic development and social, cultural, spiritual and scientific advancement. We must take advantage of the opportunities presented by our settlements and preserve their diversity to promote solidarity among all our peoples.

We reaffirm our commitment to better standards of living in larger freedom for all humankind. We recall the first United Nations Conference on Human Settlements, held at Vancouver, Canada, the celebration of the International Year of Shelter for the Homeless and the Global Strategy for Shelter to the Year 2000, all of which have contributed to increased global awareness of the problems of human settlements and called for action to achieve adequate shelter for all.

Recent United Nations world conferences, including, in particular, the United Nations Conference on Environment and Development, have given us a comprehensive agenda for the equitable attainment of peace, justice and democracy built on economic development, social development and environmental protection as interdependent and mutually reinforcing components of sustainable development. We have sought to integrate the outcomes of these conferences into the Habitat Agenda.

To improve the quality of life within human settlements, we must combat the deterioration of conditions that in most cases, particularly in developing countries, have reached crisis proportions. To this end, we must address comprehensively, inter alia, unsustainable consumption and production patterns, particularly in industrialized countries; unsustainable population changes, including changes in structure and distribution, giving priority consideration to the tendency towards excessive population concentration; homelessness; increasing poverty; unemployment; social exclusion; family instability; inadequate resources; lack of basic infrastructure and services; lack of adequate planning; growing insecurity and violence; environmental degradation; and increased vulnerability to disasters.

The challenges of human settlements are global, but countries and regions also face specific problems which need specific solutions. We recognize the need to intensify our efforts and cooperation to improve living conditions in the cities, towns and villages throughout the world, particularly in developing countries, where the situation is especially grave, and in countries with economies in transition. Our cities must be places where human beings lead fulfilling lives in dignity, good health, safety, happiness and hope.

Rural and urban development is interdependent. In addition to improving the urban habitat, we must also work to extend adequate infrastructure, public services and employment opportunities to rural areas in order to enhance their attractiveness, develop an integrated network of settlements and minimize rural-to-urban migration. Small- and medium-sized towns need special focus.

As human beings are at the centre of our concern for sustainable development, they are the basis for our actions as in implementing the Habitat Agenda. We recognize the particular needs of women, children and youth for safe, healthy and secure living conditions.

We reaffirm our commitment to the full and progressive realization of the right to adequate housing as provided for in international instruments.

We shall work to expand the supply of affordable housing by enabling markets to perform efficiently and in a socially and environmentally responsible manner, enhancing access to land and credit and assisting those who are unable to participate in housing markets.

In order to sustain our global environment and improve the quality of living in our human settlements, we commit ourselves to sustainable patterns of production, consumption, transportation and settlements development; pollution prevention; respect for the carrying capacity of ecosystems; and the preservation of opportunities for future generations.

In this connection, we shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth’s ecosystem. In view of different contributions to global environmental degradation, we reaffirm the principle that countries have common but differentiated responsibilities. We shall also promote healthy living environments, especially through the provision of adequate quantities of safe water and effective management of waste.
We shall promote the conservation, rehabilitation and maintenance of buildings, monuments, open spaces, landscapes and settlement patterns of historical, cultural, architectural and etc.

We adopt the enabling strategy and the principles of partnership and participation as the most democratic and effective approach for the realization of our commitments.

As the implementation of the Habitat Agenda will require adequate funding, we must mobilize financial resources at the national and international levels.

We believe that the full and effective implementation of the Habitat Agenda will require the strengthening of the role and functions of the United Nations Centre for Human Settlements, taking into account the need for the Centre to focus on well-defined and thoroughly developed objectives and strategic issues.

As we move into the twenty-first century, we offer a positive vision of sustainable human settlements, a sense of hope for our common future and an exhortation to join a truly worthwhile and engaging challenge, that of building together a world where everyone can live in a safe home with the promise of a decent life of dignity, good health, safety, happiness and hope.

The dominant approach in the current study is descriptive – survey. The geographical study region is Gelsefid slum neighborhood with the area of 1.46 km² and the population of 500 in Khoramabad. The required information was collected from related organization (Iran statistical center, ministry of Housing and Urban Development and etc.). To study and investigate the social, economic and physical characteristics of the housing units and households, 85 housing units and households living there were randomly sampled. Their characteristics were recorded using a characteristics questionnaire and the obtained results were summarized and shown in a table. In the end we focus on summarizing contents and findings, suggesting some guidelines and recommendations for organizing the unofficial settlement in the study neighborhood.

RESULTS AND DISCUSSION

Scope of the study

Khoramabad is located at 48 degrees 22 minutes longitude and 33 degrees 29 minutes latitude and 1171 meters higher than sea level. The city is established in a valley that the Khoramabad River is flowing in a north – south direction at its bottom. Northern parts of the city are bumpy and have got a mountaneous view and its southern parts are mostly plain. The physical formation of the city is highly influenced by the nature, where ever the valley is a bit opened up and the slopes are mild which provides an opportunity of living for human, the city has developed in that direction and wherever the valley has become narrow, the city is also narrow and elongated. So the city is in a form of long narrow line that has widened in some places within each part a neighborhood like Falakodin and Manucherabad in northwest, Vakhmi in east and Hoseinabad in south has been built. This city had a population of 38676 in 1385. Table 1 shows the process of population changes in Khoramabad.

Table 1. Process of population changes in Khoramabad

<table>
<thead>
<tr>
<th>Year</th>
<th>Household Number</th>
<th>Population</th>
<th>Family Size</th>
<th>Population increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>6330</td>
<td>38766</td>
<td>11.6</td>
<td>-</td>
</tr>
<tr>
<td>1968</td>
<td>10903</td>
<td>59578</td>
<td>46.5</td>
<td>20902</td>
</tr>
<tr>
<td>1978</td>
<td>20111</td>
<td>104912</td>
<td>22.5</td>
<td>45334</td>
</tr>
<tr>
<td>1988</td>
<td>38749</td>
<td>208592</td>
<td>38.5</td>
<td>103680</td>
</tr>
<tr>
<td>1998</td>
<td>50976</td>
<td>272815</td>
<td>35.5</td>
<td>64223</td>
</tr>
<tr>
<td>2008</td>
<td>76026</td>
<td>333945</td>
<td>39.4</td>
<td>61130</td>
</tr>
<tr>
<td>1958-2008</td>
<td>Annual growth</td>
<td></td>
<td></td>
<td>4.31</td>
</tr>
</tbody>
</table>

Socio-economic characteristics

A: Literacy: based on the investigations done, 90.6% of the study population are 6 years and older that 71.8% of them are literate and 28.2% are illiterate.

B: Professional skills: Manual workers account for 36.6% of active male population of neighborhood who are 10 years old or older; this group has got the second place after unemployed males who account for 41.5% of active male population of neighborhood who are 10 years old or older. 88.2% of employed population of the neighborhood are manual workers, 5.9% are tradesmen and shopkeepers (retail sales) and 5.9% are administrative employees.

Gelsefid neighborhood, the study region has an area of 1.46 hectare that 50% of it is allocated to residential areas. The gross residential density of the neighborhood is 342 persons per hectare, net residential density is 684 persons per hectare and family size is 4.44 persons which is not much different from that of Khoramabad (403).

C: Employment structure and income/expenditure groups: regarding the conducted field studies, 10 years old and older population of the neighborhood consist 87.1 % of total population that females population account for 44.6% and 55.4% are males and 51.4% are active population.

The studies show that all of the active population is male and 88.2% of active population is manual workers, 5.9% are tradesmen and shopkeepers (retail sales) and 5.9% are administrative employees. The occupational distribution of neighborhood residents reflects the poor occupational conditions and as a result inadequate income which in turn leads to false jobs and sometimes illegal ones like Drug Trafficking, Drug dealing and etc. all above mentioned factors have contributed to insecurity in the neighborhood.

Table 2. income status of households in Golsefid neighborhood

<table>
<thead>
<tr>
<th>Income</th>
<th>Absolute frequency</th>
<th>Ratio (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without income</td>
<td>3</td>
<td>15.8</td>
</tr>
<tr>
<td>Lower than 500 thousand Rials</td>
<td>5</td>
<td>26.3</td>
</tr>
<tr>
<td>501 – 1000 thousand Rials</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>1001 – 2000 thousand Rials</td>
<td>7</td>
<td>36.8</td>
</tr>
<tr>
<td>2001 - 3000 thousand Rials</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>3001 - 4000 thousand Rials</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>All households</td>
<td>19</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 3. Income sources of households in Golsefid neighborhood

<table>
<thead>
<tr>
<th>Income</th>
<th>Ratio (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment of the head of household</td>
<td>20</td>
</tr>
<tr>
<td>Employment of other members of household</td>
<td>5.3</td>
</tr>
<tr>
<td>Eman Komeini Relief Committee (government assistance)</td>
<td>31.7</td>
</tr>
<tr>
<td>Employment of head and other members of household</td>
<td>22</td>
</tr>
<tr>
<td>Employment of the head of household and welfare organization assistance</td>
<td>21</td>
</tr>
<tr>
<td>All households</td>
<td>100</td>
</tr>
</tbody>
</table>

**Physical – spatial characteristics of Golsefid neighborhood**

**Quantitative housing indices:** Housing indices are useful tools to evaluate the criteria and terms of housing policies. Aim of housing indices is providing proper practical information as a reflection of different aspects of housing issue to determine the dimensions and to codify the related policies. Housing indices also easily show the quantitative and qualitative aspects of shortcomings and housing dimensions in current or any condition. Using the indices the housing conditions can be evaluated and obtain a tangible picture of residents' living condition. The most important application of the indices is raising the available information for a better understanding of residents' living conditions. It allows the decision makers to evaluate the impact of housing on residents' living better. Housing indices are considered as the most suitable tools to measure the progress and achievement of overall objectives and to evaluate all levels from micro to national.

A: **household density per each housing unit:** The field studies done on 15 housing units and 19 households of Golsefid neighborhood revealed that average household number per each housing unit is 1.3 which have increase comparing to year 1375 that this number was 1.03.

B: **population density per each housing units:** Population density per each housing units of Golsefid neighborhood is 5.6 which has increased comparing to year 1375 (in 1375 population density per each housing units of Golsefid neighborhood was 4.8)

C: **density of persons per room:** The field study conducted by authors on 15 housing units which consisted of 34 rooms, regarding the population of 85 persons revealed that density of persons per room in the neighborhood is 2.5 persons.

D: **room density per housing units:** The average room density per housing unit is 2.2 rooms.

E: **density of available rooms for households**

The average density of available rooms for households in the neighborhood is 1.7 rooms for each household.

F: **quality of housing units:** Among the available housing units in neighborhood, 1.65 are newly built, 79.6% are healthy, 18.8% need to be repaired.

G: **material types of housing units in Gelsefid neighborhood:** Among the housing units of study area, only 0.7% have metal structure, 0.6% have concrete structure, 79.4% have used metal and bricks and 19.3% have used clay bricks, wood and ephemeral materials.

H: **facilities in housing units:** Based on the conducted investigations on the study population, the following results in relation to availability or unavailability of residential facilities in housing units are obtained:

- 21.4% of the whole housing units in neighborhood have bathrooms but 78.6% lack baths
- All housing units had toilets but in most of cases it was used jointly by the households dwelling in a single housing unit.
- 73.3% of the housing units had a kitchen but 26.7% lacked this facility

I: **physical infrastructure characteristics**

- 6.7% of housing units are without electricity but 93.3% use electricity
- 20% of housing units do not have tap water but 80% have. 6.7% of those which have tap water use it illegally and without any water meter
- Among 46.7% of housing units of the neighborhood use landline phone whereas 53.3% do not have this facility available

**Street network conditions and disposal of sewage and surface water**

**Street network**

On eastern part of Golsefid neighborhood there exists a local street across the neighborhood that other access paths and other street have branched from it and continued to the structures of the neighborhood. The slope of theses narrow but long streets are high and their quality is poor. Accessing housing units through these streets, due to their steep slopes is only possible using steep stairs and on foot. Except the main motor road on eastern part, all other alleys and paths are dirt roads and have too poor quality.

**Sewage and surface water disposal and waste collection**

Being located on the slopes of Sefid Mountain, surface water originated by seasonal rains is disposed naturally. Lack of special canals in the alleys and streets for surface water disposal. Residents particularly children and elderly people face serious problems in commuting during cold seasons and frost. Domestic wastewater is mostly disposed through pipes that are connected to city sewage disposal system. Based on the field studies, it was found that 80% of domestic waste is collected by municipal waste transport vehicles but 20% of it is thrown away to barren lands, desolate places and margins of streets.

**CONCLUSION**

In the present time, the speed of urban development has gone far beyond the capabilities of governments and municipalities in developing and preparing the infrastructures and providing services and employment. As a result, unofficial settlements have spread fast and unruly.

Statistics indicate that 20% – 30% of the population of mega cities and even most of medium-sized cities live in slum settlements in margins of cities which have accommodated the poor groups of urban population.
Residents living in these settlements are usually below the poverty line or at the same level with it. Residents of these areas who are mostly immigrants from rural areas are dramatically challenging with unemployment. The investigations have shown that growth of unofficial settlements and development of poverty islands in margins of within cities are due to removal of low – income classes of the society from planning system or not including them actively as target groups during policymaking.

Khoramabad, a city with a three thousand-year history and population of 300 thousand persons is located in west of Iran. The slum neighborhoods in 11 spots of this city are facing problems in poor surfaces water and sewage disposal system, waste collection and providing adequate urban facilities. Physical and social detachment of the neighborhood is evident and it is known as one of problematic neighborhoods in Khoramabad. Unfortunately this neighborhood is challenging severe economic (shortage of income sources, false jobs), social (low literacy level, insecurity, drug trafficking), physical (poor condition of street network, ephemeral materials) and ecological (improper disposal of waste and sewage) problems. In order to lessen some of the above-mentioned problems some guidelines are suggested as following.

Table 5. Objectives, policies and strategies proposed to empower Golsefid neighborhood

<table>
<thead>
<tr>
<th>Major objectives</th>
<th>Minor objectives</th>
<th>Proposed strategies and policies</th>
<th>Proposed plans and projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social empowerment of the neighborhood and utilizing the existing capacities</td>
<td>Forming new decision making structures and local communities</td>
<td>Coordinating between urban management organizations establishing mutual relations between residents and urban officials and regulating bottom – up approaches to empowerment process and decision making system in neighborhood issues</td>
<td>Strengthening and supporting non-governmental organizations (NGO) and local communities (CB) Material, intellectual nad legal support of forming local communities by local governments Detailed education programs in different groups of population Increasing the level of relations between residents and city managers Cooperative attitude toward identified needs of the neighborhood Froming neighborhood council and giving enforcement to the performance of the neighborhood Providing preschool educational facilities in appropriate locations regarding the slope, ease of access and topography Holding meetings between municipality, the City Council and local councils, with empowerment headquarters of the province</td>
</tr>
<tr>
<td>Social empowerment of the neighborhood and utilizing the existing capacities</td>
<td>Promoting literacy and education Improving women's cultural and social status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social empowerment of the neighborhood and utilizing the existing capacities</td>
<td>Improving texture and housing units of the neighborhood physically and structurally</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social empowerment of the neighborhood and utilizing the existing capacities</td>
<td>Improving street networks Improving the environment of the neighborhood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizing and developing environmentally and physically</td>
<td>Improving texture and housing units of the neighborhood physically and structurally</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizing and developing environmentally and physically</td>
<td>Improving street networks Improving the environment of the neighborhood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making the bed ready for economic growth and connecting it to the economy of city</td>
<td>Increase professional knowledge capacities and expertise in the occupational structures of the neighborhood Extending insurance coverage in vocational and career groups</td>
<td>Defining and determining the employment of the vocational group in order to make them able to receive required facilities and insurance coverage</td>
<td>Providing technical support to the applicants Teaching and holding learning workshops for local handicrafts such as woolen cloth weaving, carpet weaving, etc. Financial and Institutional support of Women's Association in the neighborhood neighborhood Paying long-term low-interest loans to rehabilitate the neighborhood accelerate and facilitate paying self-employment loans to residents</td>
</tr>
<tr>
<td>Making the bed ready for economic growth and connecting it to the economy of city</td>
<td>Directing the employment structure toward required jobs and professions by the city and neighborhood</td>
<td>Define sustainable fields of employment required by the city</td>
<td></td>
</tr>
<tr>
<td>Making the bed ready for economic growth and connecting it to the economy of city</td>
<td>Promoting sense of cooperation between residents Providing opportunity for the cooperation of local communities and NGOs Facilitate the communication between governmental organizations and legislative bodies</td>
<td>Codifying medium-term and short-term plans for the executive organizations Making decisions based on the intersectoral programs Planning activities and policy making for empowering and organizing slum neighborhoods according to the jurisdiction of empowerment headquarters</td>
<td>Establishing public communication offices for the empowerment headquarters of the province Assigning responsibilities of state managemnet agencies in form of intersectoral programs Supporting an increase in financial and managerial capabilities of NGOs and establishing new ones Providing access to the reconstruction loans for low – income nad poor classes of the residents Cooperating with existing NGOs for solving the problems Codifying rules and regulation for construction in the neighborhood Getting property deeds for the lands and housing unit s</td>
</tr>
<tr>
<td>Social empowerment of the neighborhood and utilizing the existing capacities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social empowerment of the neighborhood and utilizing the existing capacities</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


REFERENCES


Department of Housing and Urban Development (2005), enabling document Lorestan Province, Research Center of Urban Planning and Architecture.


Statistical Yearbook province, 2008


http://www.anbohsazan.net
http://www.iiees.ac.ir
http://www.un.org/Conferences/habitatII
http://www.unescap.org/huset/index.html
http://www/weather.ir
http://amar.sci.org.ir/
http://mpo-ago.ir/
http://WWW.creatingminds.org/tools/delphi.htm
http://WWW.is.njit.edu/pubs/delphibook
http://www.ngdir.ir-States-PStateMap.mdi
http://www.khormoa.persiablog.ir