

# Utilizing sense of community of marginalized areas to achieve sustainable urban development (case study: Ahmedabad neighborhood in Tabriz, Iran)

## Abstract

Concentration of poverty in suburban areas not only leads to contamination of landscape, but also causes escalation of crime in those areas. "Increased crime and other social disorders in the City" is an obstacle to the sustainable urban development, causing a sense of insecurity, fear, depression and anxiety in citizens. Municipality and other public institutions are frequently facing requests of the marginalized residents to provide services and infrastructure. Unfortunately, urban planning and provision of public infrastructure in the major cities in Iran have often stimulated partial growth rather than sustainable urban development. The main question of this study can be stated as the following: How favorable atmosphere with a cleaner environment, crime-less situation and strong sense of belonging and attachment in urban shantytowns can be achieved? In this research in order to achieve sustainable development in the slum area of Ahmedabad, Tabriz, the residents' sense of belonging to their field space has been assessed. The methodology of this research is based on an analytical approach, utilizing documents, field studies and interviews. Local participation processes have been investigated in four components including membership, influence, integration and fulfillment of needs and shared emotional connection. The results show that increasing each of the previously mentioned four independent components leads to an increase in the dependent variable of research, i.e. the sense of belonging. Physical and structural reform as well as improving the in place activities causing modification of the conceptual and semantic knowledge, could increase the participation of people with low literacy. Considering the proper road map could prevent the uncontrolled development and provide the sustainable development for the marginalized areas. Balancing small and large urban centers, cooperation of private and public institutions, as well as planned local strategies could be considered as parts of the general policy to achieve the sustainable urban development.

**Keywords:** slum, sense of community, citizen's empowerment, sustainable urban development, participation, Tabriz

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Hassan Mohammad Jafari Sadeghi,<sup>1</sup> Shaham Asadi<sup>2</sup>

<sup>1</sup>MA student, Department of Architecture, Zanjan University, Iran

<sup>2</sup>Master of Architecture, Teacher of Architectural Drawing, Education of East Azarbaijan Province, Iran

**Correspondence:** Shaham Asadi, Master of Architecture, Teacher of Architectural Drawing, Education of East Azarbaijan Province, Iran, Email [Shahamasadi@gmail.com](mailto:Shahamasadi@gmail.com)

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## Introduction

For the developing country context, poverty alleviation combined with equitable distribution of resources and access to basic services is crucial to develop sustainable cities) Degert et al.<sup>1</sup> (The sustainable development is a kind of development that in the long run promotes human health and ecological systems. Various specialists dealing with transportation, land use, housing, urban development, economic development and environmental protection, should not act as separated and isolated experts, but should also be fully integrated as much as possible even when a particular activity is taking place. Social dimensions of the sustainable development should be as important and significant as its environmental objectives. Kasarda considers poverty as the most general index of social disturbances and argues that the disturbed areas are the regions where official statistics simultaneously show high poverty levels, unemployment, female-headed households and recipients of prosperity. Extremely poor areas in addition to all of the above-mentioned characteristics, holds also the high rates of teenage school dropouts.<sup>2</sup> The main reason in this case originates from the affair officials and government planners' inattention to fair division of welfare, economic, social and environment service for all people and this is one of the principles of the sustainable development. The sustainable development structure will meet the needs of the present and next generation. It considers the subject with a broad and equal vision.<sup>3</sup> Robert Neuwirth<sup>4</sup> in his book "Shadow Cities, a billion marginal settlers and the new world",

notes that one individual from among every six people in the world is a marginal settler, he also mentions that supporting and protecting the marginal settlers require a political "solution" rather than a legal one.<sup>4</sup> David Harvey states: Based on social justice, it can be said that a society should expend more in order to reduce the social danger in the high-risk areas. Provision of the social justice and consideration of the environmental standards are correlative of each other. One of the requirements to achieve the sustainable urban development is the creation of beautiful and harmonic landscapes. The existence of the landscape contamination indicates a social-economic inequality among the inhabitants of a city. This definition is anthropocentric and includes not only the social, economic, political, and spatial aspects, but also adds an ecological dimension since it has been shown that people's endowments with land and other natural resources are critical determinants of poverty and marginality.<sup>5-7</sup> This ecological dimension is not incorporated in other definitions of marginality.

Economic growth also brought about socio-demographic changes. Higher income and improved health reduced child mortality and increased life expectancy.<sup>8</sup> Of course, presence of a social and economic justice cannot open the knot of our problems; one of the factors that can absorb us to its environment is enhancing the sense of belonging to that place, i.e., life environment should be an atmosphere which we love and is notable for us. Adding the environmental components in order to make a place meaningful is among the tasks that must be performed in the marginal settling

recovery process. The mission of architecture and urban planning can be considered as changing of the space into a place, i.e. activation of the potential environmental content (Simon, 1982). In fact, the place is an environment where the present perceptive potential in the environment and its potential memorandum, due to the presence of its special character and personality is activated in the beholder's mind and the environmental perception comes through.<sup>9</sup> Therefore, the environment is a place which a person, due to the type of his perception, has a sense of belonging to it. Also, the space like any other phenomenon will have identity for us when on the one hand we could consider it as an independent and objective being, and on the other hand we could act and behave in it as an objective being, and finally to be able to adapt its mental perception with our mental perception.<sup>10</sup>

## Research background

The term marginal settling has first been used by Robert Park, one of the great members of the Chicago sociology school. In his article "Human migration and the marginalized human", he considers the marginalized settling as a result of economic and political functions.<sup>11</sup> Following Park, his student Everett Stonequist by expanding his teacher's theories, studied the marginal settling from a psychological perspective and found the marginalized person in a passive and unknown range that he never has a sense of belonging to a given community and culture and he is faced with a type of identity schism.

**Table 1** Conducted research on the marginal settling and its results; Source: authors

Author	Year	Results of the research
Zangi Abadi and Mibaraki	2012	The results of this study indicate that the marginal settling in Tabriz is the result of unemployment, low income, low housing rent and mass migration from small urban areas and villages in the province, that result from economic factors (economic attractions of Tabriz city, repulsions of the neighbor cities and villages) and social-cultural repulsions in the previous residence.
& Jennifer Day Robert Cervero	2008	This research studies the marginal settling in three districts of Shanghai in China and most of the author's focus is on the transportation and use of motorized vehicles that not only increase traffic, but also increase casualties and environmental degradation. For this reason improvement of the public transportation such as subway brings about the residents' ease and comfort. And this affair not only improves the marginal settling, but also reduces the load of urban population.
Sajasi Geydari et al.	2014	In this study the author considers Bonab city as other cities in Iran, the result of the centralization of economic, social, cultural structure and inappropriate planning at the macro- national and regional levels. He considers the main reason as the lack of officials' appropriate planning and concentration of all facilities in the city centers and the way to solve it is resolving the problem of unemployment and productive and dynamic employment and appropriate management of human capitals and the regions' existing potential.
Wilson AG <sup>40</sup>	2010	The lack of manual production and low-skilled occupations and continuous emigrations of workers and middle-class families have economic, cultural, demographic and ecological consequences and from the economic, theoretical and urban perspectives, they have less access to formal economy opportunities.
Shaw & McKay <sup>41</sup>	2012	In this article, Shaw considers the urban crime as the results originated from specific urban areas called the ghetto (Gettos) that have the marginal settling features. He states that crime is the major problem in these areas. These regions are an appropriate environment for the criminal activities such as buying and selling drugs, stolen properties, alcoholic drinks, acts of sabotage and aggression, and indecent public behaviors. Criminal activities in these areas begin from childhood as a game.
Tahera Akter <sup>42</sup>	2010	This paper depicts the socio-economic condition of the slum dwellers and their consumption pattern, while it has been found that majority of them can't afford nutritious food which is expensive to them.
Ben C Arimah <sup>43</sup>	2012	This paper accounts for the differences in the prevalence of the slums among African countries. Conversely, the external debt burden, high levels of inequality, unplanned and unmanaged urban growth, and the exclusionary nature of the regulatory framework governing the provision of planned residential land contribute to the prevalence of slums and squatter settlements— thus increasing levels of social exclusion.
Tsion Lemm, et al. <sup>44</sup>	2006	In this article, we describe a participatory approach that could improve slum monitoring processes. It involves various actors with local knowledge and uses Geographic Information Technology (GIT). The approach reduces resource requirements while providing locally relevant and spatially detailed information. The data can be used for both planning and monitoring the effectiveness of slum intervention projects.
Christine Husmann <sup>5</sup>	2015	Marginality refers to a position at the margins of social, political, economic, ecological, and biophysical systems. The paper applies this concept to the case of Ethiopia. The marginality hotspots are mapped by overlaying seven different indicators using Geographic Information System software. The results show that people in the South-West and in the North are most marginalized. Overlaying the marginality hotspots with a map of agro-ecological belts shows that a large portion of the marginality hotspots is located in areas with a low agricultural potential.
Degert, Parikhv& Kabir <sup>1</sup>	2016	This article presents a holistic methodology for evaluating sustainability and poverty reduction impact of the infrastructure projects in the developing countries through social, economics, institutional and environmental dimensions.

The results of a number of articles and research that are conducted in the field of the marginal settling and its effects have been noted in Table 1.

The marginal settling is an issue that happens due to different reasons in most cities and countries of the world and most of it happen in the developing countries that bring about major problems. Various policies are taken to tackle and solve these problems in different countries in order to somehow reduce the housing prices, but this policy also has some problems. The private sector which used to supply housing only to upper middle and high-income families, responded to these trends by moving down-market through smaller units, mass production and simplified finishes.<sup>8,12,13</sup> Some governments try to regulate the supply of low-income housing by demanding that private developers build a number of low-cost houses as a condition for a permit to build other types of housing.<sup>8,14</sup> But this policy has also brought some problems, for example: The policy increased private-sector low-cost housing supply in Kuala Lumpur, but many units are still too costly for the poor or are of low quality.<sup>8,15</sup> Man has long been trying to change the world around him in order to access a place with better living conditions. The common thread you could find between the modern man and the primitive man is their desire to control and harness the environment and environmental factors based on their different innate and acquired needs. Peace, beauty, integrity, order, etc. are among our innate needs.<sup>16</sup>

IGH seeks to serve as a central hub to help support international efforts to address homelessness, guided by policy- and practice-focused research. One key aim of IGH is to build the ‘infrastructure’ required for the key stakeholders across the globe to communicate effectively about the nature, causes and impacts of homelessness in their world regions, and to share promising approaches and interventions that may be transferable beyond their original sites.<sup>17</sup> International attention is increasingly and deservedly focused on the acute housing needs of people in slums and other makeshift settlements. A common language and understanding of the distinct needs of people experiencing outright homelessness could help to assure that no one is left behind in international efforts to address housing needs more broadly.<sup>17</sup>

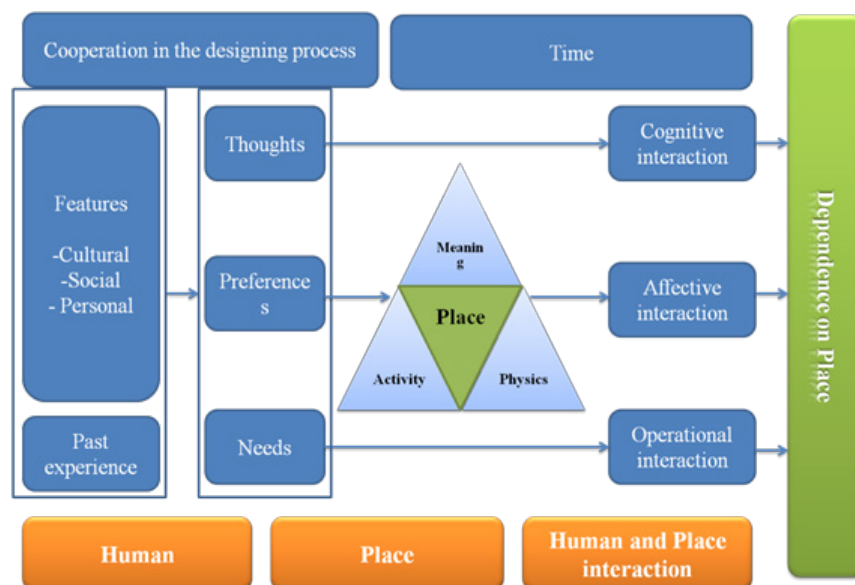
## Social belonging to a place

In the environmental psychology, spatial belonging denotes to the cognitive relationship of an individual or a population with an environment and in terms of identity, spatial belonging is one’s identity relationship with the social environment.<sup>18</sup> At this level not only the person is aware of the names and symbols of the location, but also has a feeling of being and having common destiny, in this case the symbols of the place are respectful and whatever happens for the place, is important for tomorrow.<sup>19</sup> Belonging to a community is one of the effective factors in creating the sense of the place as Humann

described that the spatial sense includes belonging to a community and a locality sense.<sup>19</sup> A collection of individual and collective anecdotes and narratives that occur along with the environment are effective in creating social belongings to this place. This sense leads to a bond between the individual and the place in a way that human being considers himself/herself as part of the environment and according to his/her experiences about symbols, meanings and functions, envisages a role for these places in his/her mind. This role is unique and different before him/her and so the environment is important and respectful for him. Due to the possibility of occurrence of a social relationship and common experience among people, a place forms a sense of belonging and attachment. In Figure 1, a diagram is presented for the model of attachment to a place where various affecting factors and interactions are shown. Part of the personality of every human that creates the social identity is a place which he/she identifies himself / herself with it and introduces others as well, in a way that it can be called self-identification with the environment and in this regard social processes are important in the formation of the place attachment more than the physical quality. In this case, one envisages a role for the place in his mind that makes the environment important and respectful. Cross believes that relationship with the environment and attachment to it is shaped through establishing types of relations that individuals form with the place; he considers types of relations with the space and its process as the following (Table 2).

**Table 2** (Relations with space): Pirbabaei & Sajadzadeh<sup>18</sup> quoted in Cross

Relationship	Type of bond	Process
Biography	Historical and family	Being born and living in a place is a complementary part of personal history which is created gradually.
Spiritual-mental	Emotional-unobservable	Feeling the sense of belonging-merely sensed instead of being created- its description is difficult- almost is unexpected.
Ideological	Ethical and consciously	Living according to the ethical guidelines regarding human being’s responsibility towards the environment- religious and non-religious guidelines.
Narrative	Mythical	Obtaining information about an environment through stories such as creating myths- family histories- narration of events.
Comparative	Cognitive	Selecting one space according to the optimal characteristics and preferences about lifestyle- comparing the real places with the ideal ones
Dependent	Physical	Limitation due to lack of selection- dependence on a person or opportunities



**Figure 1** Model of delineating attachment to place: (Source:Author).

In fact, it can be said that in the process of attachment formation regarding the place, two elements of human and space through the third element of human and place interaction form a cognitive, emotional and functional perspective which enter into a process where the fourth element or time is important. If we consider the results of the studies form a designer's perspective and also consider the category of human and space, a fifth element, i.e., interaction in the designation process, can also be added.

## Reasons of the marginal settling formation

The marginality can be defined as: "An involuntary position and condition of an individual or group at the margins of social, political, economic, ecological, and biophysical systems, that prevent them from access to resources, assets, services, restraining freedom of choice, preventing the development of capabilities, and eventually causing extreme poverty".<sup>20</sup> In many cities, the poor are pushed onto hazardous land or to the urban fringe. Although factories also move to the fringe, they do not offer employment for the poor, as they do not fit the recruitment criteria. In hazardous locations, the poor are exposed to the impacts of natural disasters and climate change which are increasingly affecting coastal cities.<sup>8</sup> Manoel Kastelz (1997) in his book "city issue" regarding the marginal settling groups in the developing countries states: City dwelling is expanding with a growing pace while the facilities for creative employment such as infrastructural, social and physical facilities have not yet been provided for the newly arrived population (immigrants), and the unusual settlements and districts such as the marginal slums and huts which are built by the newly arrived and the poor are built in a self-productive and self-created manner. Finally, he considers the marginal settlement as the creator of socio-economic disparities and uneven urbanization and the transfer of rural poverty to the urban poverty.<sup>21</sup> In fact, migration leads to uncontrolled growth of the cities which is followed by urbanization; in other words, migration and urbanization are two related aspects. Migration expands urbanization and urbanization is the cause of immigration.<sup>22</sup> Zahed Zahedani believes that: the presence of disparity in the prevailing technology in a society is the cause of the formation of squatters and since technology is dependent on the social relations system, therefore, it is the existence of inequality in the social relationships system that ultimately leads to the marginalization.<sup>23</sup> Neither the term "marginality" nor attempts to analyze causes of poverty are new, however. Marginality is usually used to describe situations of exclusion, inequality, remoteness, or discrimination.<sup>5,24-27</sup>

The marginal settler is a person who from a cultural point of view is a two-race man that intimately is present in the cultural lives of two distinctive populations and shares with both of them, do not tend to speak about his/her own past and has not accepted the entire dimensions of the host community.<sup>28</sup> The factors affecting marginalization in Iran are considered as the following: The social fragmentation caused by transition from the traditional production system to the capitalist system, the way of distribution and dispersal of population and activity at the country level, high population growth and its impact on the rapid growth of metropolitan areas (Hosseini, Sarrafi, 2005). Albeit, the speed of this demographic developments the consequence of which is the expansion of the marginal settling, is very high in the less developed countries since they are in line with the urbane expansion in the developed countries and growth of the number of the slum settlers in the areas who lack the standard conditions and live in the marginal areas.<sup>29</sup> With the high rates of population growth

and urbanization, it is crucial to ensure that cities grow sustainably with equitable access to the basic services.<sup>1,30,31</sup>

In general, the reasons for the marginal settling in Iran could be examined by the two following factors: 1) structural and macro factors, and 2) non-structural factors:

### A) Structural and macro factors

- i. Unparalleled growth of country population during the past decades;
- ii. Lack of coordinated policies and strategies for economic, social and planning development at the macro- and regional level;
- iii. Intensification of inequality in the distribution of power, wealth and income;
- iv. Lack of socio-economic mechanisms towards empowerment and participation;
- v. Failure of management and planning system of urban and regional development.

### B) Non-structural factors

- i. Lack of proper development of vocational education in smaller urban areas and villages;
- ii. Lack of plans for socio-cultural development, preparation and empowerment of marginalized settlers;
- iii. Lack of attention to investors of affordable housing in the metropolitan suburbs;
- iv. Lack of social policy for the disadvantaged communities and regions;
- v. Lack of an all-inclusive approach, planning and policy in management and urban planning system.<sup>31</sup>

## Consequences of the marginal settling

The marginal settling is like the demise of the cultural foundations of the previous generations and leads to the emergence of the environments that do not have the determined cultures and that human beings do not find a definite identity. Urban organizations always faced with the marginal settlers' demands regarding the provision of services and facilities. The adverse conditions of their settlements, ugly buildings and tangled streets and the inappropriateness of the land they occupied make it difficult to provide these services. And the main reason is the inclination of the low-income population, due to the low value of the property and land, or the low house renting prices in these regions is one of the main reasons in the formation of the marginal settling. And these factors attract immigrants and low-income urban people to these areas.<sup>32</sup> And one of its consequences is the assembly of the settlers from every race and culture that results in the emergence of cultural interventions that brings about an environment which is neither systematic, nor rule-governed, but a real anarchism.

Squatters are persons who live on land in a city without owning it. They may be very poor or of moderate income. The building may be a shanty without water, electric or sewage services, or may be well-built homes, but the occupants have no legal tenure in the property.<sup>33</sup> Social damages such as dominance of delinquency and crime, drug addiction or distributing and selling it, imposition of heavy traffic to the urban fabric, high population density and congestion in the city,



expansion of vending, cadge and unhealthy delicatessen, and creating insecurity for the residents quickly spread among them. According to the available statistics, in the developing countries, 50% of the urban population lives in the slums and the marginal settling areas which in some cities this proportion increases to 80 percent. With the urban development and population growth in the dominant and large cities in the third world, the slum settling and marginalized areas also expand rapidly. Eldering & North<sup>34</sup> explore the marginal settling in young immigrants and its consequences on their daily lives in the Western Europe. This study states that immigrant youths compared to the native youths are most in danger. Also it shows the problems and issues of the immigrant families in the northwest Europe, especially immigrant youths who are faced with the first migration period. The results of this study indicate that the migrant families upon arriving to the destination face with cultural conflict and heterogeneity.<sup>34</sup>

Today, most governments in Asia adhere to the enabling strategy, as it has been proven to be effective in delivering adequate housing to large sections of the urban population.<sup>8</sup> The strategy was not an isolated initiative, but part of a broader agenda of national and global market liberalization which has brought rapid economic growth in Asia and an expansion of its urban middle class. Without economic growth, the enabling strategy may not have been as effective. Yet, millions of urban poor still remain without adequate housing despite a host of innovations, because rapidly rising land values and policies to optimize land use blunt any attempt to secure land for housing the urban poor. Based on the studies conducted in the field of marginalization in different marginal areas of the big cities in Iran, its main characteristics are as the following: Overcrowding population, inappropriate constructions, cultural, social and economic poverty, unemployment, false employment, lack of considering collective health, lack of access to well-being and educational facilities, and expansion of crime and corruption (Bani et al., 2009) that now we are faced with the expansion of these areas in big cities in the country, and in order to solve this problem, we should search for its origins, and through investigating the causes and reasons of its formation, provide an appropriate approach to eradicate this problem. The marginal settling in Tabriz city does not expanded in all the four sides of the city but most of the marginal settlers are settled in the north and with a less concentration in the south of the city. Based on the last consensus of the statistical central of Iran that took place in 2006, Tabriz with a population of over 1,378,935 individuals is considered the fourth most populous city in Iran after Tehran, Mashhad and Isfahan. This city due to hosting many of the mother and big industrial plants and also due to the presence of over 600 piece building firms is regarded as the second industrial city in the country after Tehran and because of being an industrial city is one of the most important host cities in Iran. Based on the announcement of the mayor of Tabriz in 2008, of the total population of the city 400 thousand individuals are the marginal settlers who have been settled in the north, northwest, south and southwest of the city.

## The role of locality belonging sense in increasing cooperation

McMillan and Chaveas are social theorists of the sense of the local belonging. According to them, the reasons of the local belonging importance on the processes of neighborhood participation can be explained through the four components of this conception including membership sense, effectiveness, fulfillment of needs and affective attachments. These four components and their relationships with the neighborhood participation are defined as the following.

**Membership:** In the first step if a person has a sense of membership and affiliation with the neighborhood community and assesses and understands his own fate and living conditions in the realm of the neighborhood in which he/she is a member, the possibility of participation in the collective actions in the neighborhood will be greater. This membership can simply be understood as the rate of unification sense, homogeneity and acceptance on the part of the neighborhood; that means how much the person believes that he is accepted among other members of the neighborhood. For this reason, the reclusive individuals in the neighborhood usually have lower tendencies towards participation. One of the previous actions of the community participation schemes can be escalating the possibility of the marginalized groups' participation through instilling a sense of membership and acceptance in society. In contrast to the reserved individuals, those individuals who have a strong sense of membership probably will have a greater sense of the neighborhood responsibility and participation.

**Effectiveness:** In a determined way if people have more sense of influence and effectiveness on their neighborhood and evaluate their action, cost and time which they spent in participating in the neighborhood actions as fruitful, the possibility of their active participation in the projects and programs that are provided for the development of their neighborhood, will dramatically increase. This influence can simply be interpreted as the fact that the community members should have seen the changes that they were looking for and time and money spent for them has happened in practice and their longing has been realized. One of the ways to increase the local settlers' effectiveness sense is that from the first steps of planning to the final administration the local designs should be conducted with the local residents' counsel and attention.

**Realization of requirements:** The realization of requirements component as the third component of the neighborhood belonging sense stresses fulfillment of the real needs of community members. In fact, this component is optimized when the physical and social structure of the neighborhood is capable to satisfy the residents' elementary and secondary needs. The impact of this component on the neighborhood participation can also be explained as this that when community members clearly reach this conclusion, i.e., part of their neighborhood needs is accessible in the neighborhood, they will be more inclined to acquire them from their neighborhood. This provokes social communications and gradually strengthens them. Strengthening of social connections per se paves the way for the emergence and formation of participatory processes. So, the first logical step for inviting to the neighborhood participation is reviewing the actual needs of the neighborhood and founding designs on the basis of these needs or including it in the proposed designs. In this sense, when the community members reach the belief that partnership in the collective action will lead to the fulfillment of their actual needs, their sense of belonging to their neighborhood and their partnership will increase.

**Affective ties:** The affective ties are considered as the most emotional and psychological component among the four components of the neighborhood belonging sense. Affective ties lead to the connection of individual to the neighborhood community and its surroundings, and this connection and unity gives meaning to his/her actions. In fact, the emotional ties choice in the simplest possible form states that if a person emotionally loves the neighborhood in which he/she lives, the likelihood that he will have more preparation to participate in the local works will be increased. The neighborhood belonging sense, as stated earlier, includes four components of

membership, meeting the requirements, effectiveness and affective attachments. These variables also will be measured by using the Likert scale (from strongly disagree to strongly agree). The residents' productivity level in the neighborhood will be measured through three questions with five-item Likert scale answers (from never to always). These questions include the use of public and leisure spaces, neighborhood housing service, and shopping centers in the neighborhood. The citizens' knowledge level regarding their neighborhood will be measured with three questions that have five-item Likert scale (never to completely). These questions include the level of recognition of the geographical environment, historical past, and community institutions. The summary of each variable component is listed below (Table 3).

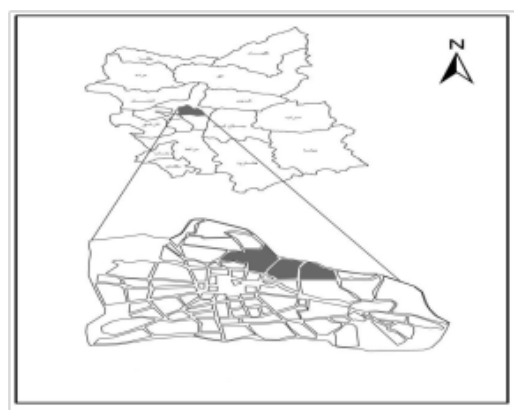
**Table 3** Research variables and the forming components of each, Source: Authors

Research variable/variable component	Variable component
The neighborhood belonging sense	Membership
	Effectiveness
	Fulfillment of needs
	Affective attachments
Preparation for participation	Preparation for collective action
	Preparation for voluntary action
	Preparation for institution-based action
Local productivity	Parks and leisure centers
	Geographical environment
Neighborhood knowledge	Historical past
	Knowing the local institutions

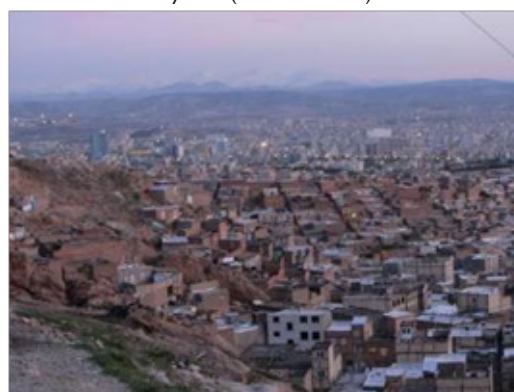
## Area of study (Ahmedabad Locality)

Tabriz is one of the megacities which is faced with the slum settling issue, and this is not only limited to the marginal settling areas but has also effected all of city, in such a way that its consequence is the emergence of abnormalities in the realm of citizenship. The area under study in this research is located in one of the most northern parts of the city that its major growth and formation was in the sixties, i.e., the period when the country was involved in the imposed war and therefore there was ineffective deterrent system at this point to prevent the marginalization (Figure 1–3). This district after the construction of the northern ring was practically placed within the metropolitan area and its problems and complexities involved the city more than before. The major problems in this area are as the following:

- Employment of the marginalized settlers in informal and false jobs,
- Existence of the unauthorized constructions,
- Inability of municipalities to provide adequate services in these areas,
- Environmental pollution,
- Adverse cultural, economic, social and political effects of these areas on the city as total
- Expansion of crime and deviances in these areas.



**Figure 2** Photo of the study area (Source:Author).



**Figure 3** The photo of the study area (Source:Author).

With the construction of the northern ring road (Pasdaran Highway), the northern marginalized areas of Tabriz are placed within the metropolitan area. These rural areas were formed in the sixties by its residents' migration who were mostly from villages around Tabriz. By construction of Martyr Rajaei Street which in fact connects the northern ring road to the downtown, this marginal settling area was practically occupied by more settlers who wanted access to the city center through this highway and this problem manifested itself at a larger measure. The sustainable infrastructure can enable the slum dwellers to shift from survival mode to aspirations for achieving a higher quality of life.<sup>1,35</sup> Indeed, the provision of basic infrastructures such as water, sanitation, roads, drainage and common facilities to the informal settlements under small-scale or upgrading programmers is estimated to cost three times the amount of extending bulk infrastructure to large formal housing developments.<sup>36,37</sup> The construction costs are often also reduced by building on cheap land in the city periphery, even if this increases costs for residents to commute between their residence and employment place, which often continues to be in the city centre (Figure 4). Among the measures that Tabriz municipality has conducted to achieve the sustainable development in this region was the widening of the streets and major arteries that by creating commercial uses in the wall of these passages empowered residents of these areas to reduce the problems to a large extent caused by their poverty that leads to various types of crimes and disorders. Another important accomplishment in this field can be the relationship between this area and the northern part of the belt (Pasdaran), i.e., with Aoun Ibn Ali's natural recreational. Given the fact that the mountain range in the northern part of Tabriz plain is considered as one of the leisure and hiking places for the city dwellers and has a lot of traffic, this region due to its proximity to



the entrance of this complex has a very high potential for providing services to tourists. Unfortunately, there has not yet been taken any practical actions in this sector in terms of design. By linking this area with the Aoun Ibn Ali's promenade, the residents in this district will economically benefit and also by increasing social interactions with other citizens most of the cultural problems in these marginal areas will be eliminated. High level of building occupation in this region is one of the problems that service provider organizations are faced with in providing infrastructural services. The narrow and tight avenues and steep slope of passageways with regard to the regions' topography and the construction of non-standard building blocks on this slope just makes on foot traffic possible in the secondary passages. Due to the limitations of land in this region and prevention of new constructions and also adjacency of these suburban areas to the organized urban districts, there is not any possibility of unchecked expansion for this area and with explanation of right principles and solutions which are presented in the upper-level documents (comprehensive and detailed plan...) and with respect to the consideration of enforcement for these projects, a clear perspective can be expected for the development of this area.

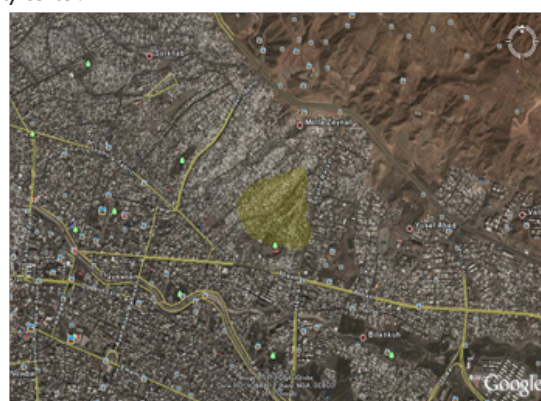


**Figure 4** The photo of the study area (Source:Author).

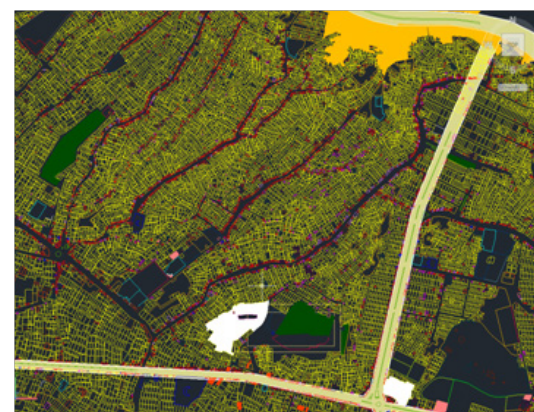
According to aerial photograph of the region (Figure 5), the need to anticipate the establishment of housing units on a hillside in the proposed landscape and designing local centers proportional to the field with the aim of achieving the sustainable development in this area, the proposed model for the future development with regard to the detailed and comprehensive design (Figure 6) is presented below. Moreover, it should be noted that "one of the unique characteristics of the gradual development plans is the lack of the necessary standards in a planned environment. Families achieved whatever they can afford: secure land tenure, water and transportation to revenue-producing services. Politicians abhor these programs because of they have an unofficial outlook towards dwellings (thickets)".<sup>38</sup> With regard to the necessity of using the residents' collaborative projects especially in the developing designs of the deprived and marginalized areas and the proposed designs for the future perspective, the area has the required flexibility- to apply residents' preferences- and also has considered the application of the detailed designs reformations in the development model. The proposed model for the development of regional housing in Ahmadabad locality was designed by an inspiration from Clarence Perry's neighborhood pattern. In the proposed plan for this area, the neighbor u-shaped units located on the slope and the designing of localities centers are formed in the heart of this shape. With regard to the steep slope of passages that does not permit bus entrance into the site, the driving traffic is directed to the margins and the footers' traffic is taken place inside the neighborhood unity that leads to the enhancement of social relations in the locality (Figure 7).



**Figure 5** Shahid Rajaee street and the connection of the northern belt with the city center.



**Figure 6** Aerial photo of Ahmadabad.



**Figure 7** The detailed design map of Ahmadabad district.

In order to measure the belonging sense to the place in the marginalized neighborhood of Ahmadabad in Tabriz, questionnaires were distributed among 100 residents, 50 women and 50 men. Regarding their age, they were mostly young and middle-aged individual who were housewives, tradesmen, laborers or unemployed. 58 of them were settled in this place for more than 10 years, but there were others who had settled in this neighborhood during the past 5 years and this shows the migration trend that continues today. 59 individuals were settled in their personal homes and 41 of them were living in a leased dwelling and due to their low income, the household expenditure in every month was about 5000 thousand Rials to ten million Rials (about 170\$ to 400\$) that shows their financial poverty and lack of their financial affluence (Figure 8).



**Figure 8** Patterns of Ahmadabad neighborhood units in the perspective design.

## Describing the variables of researching the neighborhood recognition

With regard to the neighborhood recognition, three research variables were studied that include familiarization with the locality geographical environment, familiarization with the locality history and familiarization with the locality institutions activities. The questionnaires evaluation results showed that 57% of the individuals know a lot about the geographical environment of the locality, and 24% have an average familiarity and 19% have a very high familiarity with the geographic environment of the locality and regarding the years of their residence in this neighborhood, those who have resided over 5 years in their neighborhoods has a high and very high recognition regarding the geographical environment of the neighborhood. Those who have an experience of over 7 years of residence in the neighborhood are more familiar with the neighborhood history

and also with the activities of the locality institutions. In general, according to the evaluation of the three posed indices in the realm of individuals' local recognition, it can be understood that familiarity with the geographical environment of the locality and its history based on the individuals' years of residence in the locality and type of their housing state, i.e., owner or tenant, the highest frequency can be seen in the individuals' responses who belong to the middle and high class. But regarding the familiarity with the local institutions' activity, the highest frequency belongs to the low or very low spectrum that shows the need to the local institutions' more effort in the realm of introducing their actions among the residents in this locality (Table 4) (Table 5).

After reviewing dimensions of the individuals' locality recognition, we will consider locality productivity. For this reason, we will review the following three indices: Locality public recreational spaces, their daily shopping from the locality and local institutional services. Due to the fact that majority of the built constructions were constructed during the war years and without permission, the recreational spaces in the neighborhood lack high quality recreational atmosphere and the majority of the residents are unsatisfied with this issue. Regarding the inclusion of this marginalized area in the context of the urban area after the construction of the northern ring, the majority of residents in the neighborhood are doing daily purchases in the locality and regarding daily needs the community in this area does not face any problems due to its proximity to the downtown areas (Table 6). According to most urban researchers, the public spaces such as neighborhood parks and/or local garden are the main components of a city which describe its attractive and unique places. Some researchers believe that, in urban habitats before Modernism, public space such as city squares and markets have been regarded as an area for communication and in fact included some places composed of lots of people's social actions and reactions, which led to such interactions. In addition to creating a sense of confidence in people, these places bring about a sense of attachment (Table 7).<sup>39,45-50</sup>

**Table 4** Distribution frequency of local recognition dimensions

Question	Very low	Low	Average	Much	Very much	Total
	Number	Number	Number	Number	Number	
Geographic environment of the locality	0	0	24	57	19	100
Familiarity with the locality history	12	24	28	30	6	100
Familiarity with local institutions' activity	41	29	15	10	5	100

**Table 5** Distribution of the locality recognition

Frequency	Very low	Low	Average	Much	Very much	Total
Number	53	53	67	97	30	300
Percentage	17.70%	17.70%	22%	57%	10	100

**Table 6**

	Very low	Low	Average	High	Very high	Total
Question	Number	Number	Number	Number		
Locality public recreational spaces	23	46	24	7	0	100
Doing daily shopping in the locality	5	15	18	45	17	100
Using locality institutional services	31	29	25	10	5	100

**Table 7** Frequency distribution of locality productivity

Frequency	Very low	Low	Average	High	Very high	Total
Number	59	90	67	62	22	300
Percentage	19.70%	30%	22%	20.70%	7.30%	100%



## Locality belonging

In the present study, four components of needs fulfillment, membership, effectiveness and emotional ties have been considered as the main variables in the realm of the neighborhood recognition. For each of these four components, three questions were designed. The behavioral and meaning dimensions effective on the spatial sense of localities were included in the form of questions in order to measure effectiveness rate of the environment on the individual

or individual on the environment and through which the rate of the individual's belonging and attachment to the environment will be clear (Table 8).<sup>51-65</sup>

Totaling these three items of each component related to this variable, the general state of each of the locality belonging dimensions will be obtained (Table 9). Now by adding up these twelve items related to this variable, the general state of locality belonging will be obtained (Table 10).<sup>66-72</sup>

**Table 8** Frequency distribution of dimensions of locality belonging

Axis	Question	Very low	Low	Average	High	Very high	Total
Needs fulfillment	Our locality is a good place for living	6	33	52	4	5	100
Needs fulfillment	Locality people think together and have consensus about issues of locality	11	20	54	8	7	100
Needs fulfillment	My basic needs are present in the locality and they are fulfilled	12	43	35	8	2	100
Membership	I know residents of our locality	4	8	12	54	22	100
Membership	When I am in the locality, I think I am at my home	5	2	58	24	11	100
Membership	I know a lot of the resident in my locality.	0	1	12	68	19	100
Effectiveness	How the residents in my neighborhood think about me, is important for me.	3	21	53	19	4	100
Effectiveness	I can be influential on the locality environment and conditions	7	23	41	12	17	100
Effectiveness	The residents in my locality can solve the problems.	1	4	24	61	10	100
Affective attachments	I like the affective attachments in this locality.	3	3	40	51	3	100
Affective attachments	It is a long time that I am living in this locality.	4	25	42	24	5	100
Affective attachments	The residents are interested in helping to their neighbors.	5	12	30	31	22	100

**Table 9** Frequency distribution of the locality belonging dimensions

Dimensions	Frequency	Very low	Low	Average	High	Very high	Total
Needs fulfillment	Number	29	96	141	20	14	300
	Percentage	9.70%	32%	47%	6.70%	4.60%	100%
Membership	Number	9	11	82	146	52	300
	Percentage	3%	3.70%	27.30%	48.60%	17.30%	100%
Effectiveness	Number	11	48	118	92	31	300
	Percentage	3.70%	16%	39.30%	30.70%	10.30%	100%
Affective attachments	Number	12	40	112	106	30	300
	Percentage	4%	13.30%	37.40%	35.30%	10%	100%

**Table 10**

Frequency	Very low	Low	Average	High	Very high	Total
Number	61	195	453	364	127	1200
Percentage	5%	16.25%	37.75%	30.33%	10.59%	100%

According to the obtained results from frequency distribution regarding needs fulfillment component, the highest percentage belongs to the average range with % 47 and the low range with 32 percent. With regard to the membership component, the highest frequency belongs to the average range with %39.9 and the high range with 30.7 percent and for the affective attachments, the highest frequency belongs to the average range with %37.4 and the high range with 35.3 percent. The results for four basic components affecting the sense of locality belonging shows that the component of “the needs fulfillment” has the highest frequency in the moderate range and low ranges, while

the other three variables, i.e., “membership”, “effectiveness” and “affective attachments” have the highest frequency in the average and high ranges, thus the highest attention in designing should be paid to the needs fulfillment. By adding up the three items related to this variable, the general state of locality cooperation will be obtained and the majority of the residents satisfied to cooperate and collaborate in order to deal with locality obstacles that this affair itself shows a potential factor in helping to improve the qualitative conditions of the neighborhood (Table 11-13).

**Table 11**

Question	Very low	Low	Average	High	Very high	Total
I am ready to spend my time voluntarily in order improve the living conditions of my locality.	14	18	37	21	10	100
I am ready to cooperate with the locality institutions such as locality home and locality centers.	2	3	43	38	14	100
I think in order to have a better locality we should collaborate with others and work collectively.	4	4	40	36	16	100

**Table 12**

Frequency	Very low	Low	Average	High	Very high	Total
Number	20	25	120	95	40	300
Percentage	6.70%	8.40%	40%	31.70%	13.30%	100%

**Table 13**

Independent variable	Statistical index	Needs fulfillment	Membership	Effectiveness	Emotional attachment
Correlation coefficient		0.23	0.52	0.31	0.56
Level of significance		0.041	0.033	0.039	0.028

## Research findings

Responses were classified in the form of a Likert scale from very low to very high. Due to the qualitative nature of the responses, numbers 1 to 5 were assigned to them and the ranked answers for each of the four components of needs fulfillment, membership, effectiveness, and emotional attachment were obtained. The correlation between each of the four independent components as well as the locality belonging sense as the dependent variable was analyzed through the Spearman rank correlation test, the results of which are as the following: The correlation coefficient between the dependent variable and the independent variable is a positive value that shows whenever there is a significant correlation; an increase in the dependent variable will lead to an increase in the independent variable. The four independent variables with their corresponding significance levels of 0.041, 0.033, 0.039, 0.028 that all of which are less than 0.05 have a significant relationship with the dependent variable, i.e., the locality belonging sense. The results show that for an increase in each of these variables, i.e., needs fulfillment, membership, effectiveness and emotional bonds; there will be an increase in the dependent of the research, i.e., spatial belonging sense.

## Conclusion

One of the most important elements of the urbane sustainability is the creation of more practical democracy (population cooperation) at a local and regional level that in its own right can lead to the emergence of other positive changes. By enhancing cooperation and using an individual's capabilities, their technical, social, political and environmental knowledge level will be improved and citizens who are endowed with this feeling that they play a role in their own environment, will create an emotional relationship with their environment and through abating their behavioral indifference, they will apply more surveillance on their environment, and this situation will reinforce a sense of personal and social security, protection and restoration of cultural and belief identity, and promotion of the idea of altruism and cooperation, protection of environment, maintenance of order and skeletal balance and their competition in reaching optimal

personal and collective aims and encourage deprived groups to try to attain their own wishes. The product of such a day is the creation of a more integrated environment where social justice will eventually prevail. The three components of form, function and meaning, are the major parameters of each phenomenon, space, and environment. When these concepts are systematized in an organized manner and have a systematic interaction with each other and with human beings as the audience of space, in a way that this interaction can influence the space beholder's mind and mingle with his mentality, and brings about a reaction or behavior in front of environment on his part, then the space element will promote to a place element. Due to induction of a specific and unique identity on the space and consequently on the place, the role of meaning, is very important. This importance has such a role that it can affect other components and partly reduce the influence of their present deficiency in the mind of the space user or provide the reasons for the increase of their influence on the individual's mind. In the current situation that our urban environments face with the lack of a place and belonging sense in the citizens to the urban areas, only considering the "physical component" to create a sense of place is not enough because these components play a role only in the formation of the initial levels of place sense and the "activity component" also has an intervening role and is the underlying component in achieving to intermediate levels of a sense of place. In contrast, paying more attention to "the meaning component" regarding its personal and social aspects and in the form of the present "meanings in a man's mind" includes functional, value-based, sign-based and symbolic meanings that promoted the emotional and empathic participation in place, acceptance of meaning and identification with it and in a way leads to the feeling of being inside the environment, can result in the formation of deep levels of belonging sense in a human being. In the marginal urban areas which physically are in bad conditions, in order to create a sense of belonging and attachment to place in the residents of these areas that leads to their participation, social activities and interactions, as well as the meaning and subjective perception of these interactions play a more decisive role than the body. However, physical reform despite the high costs as well as providing the necessary infrastructure in these residential contexts is necessary. Creating meaning-based

links with the place and improving the quality conducted activities in the framework of these marginalized regions will have a significant impact on increasing the sense of place. Many villages that physically are not in desirable conditions in comparison with many other urban areas that are physically in better conditions, the sense of place in terms of the same historical, familial, and psychological links and in general traditional living conditions is much more than districts of the city. With the rapid growth of the developing countries, the large cities are faced with the challenges of meeting basic needs such as water, sewage, utilities and public transport services for their citizens which should be planned in a way that will be sustainable in the long-term and to avoid the problems that the industry-stricken cities are facing in the developed countries. The marginalization is an undeniable element in all of the major cities in our country; in dealing with this phenomenon we should refrain from unilateral thinking and make serious efforts to find a scientific solution for this phenomenon and the related issues. In fact, this phenomenon (marginalized residents) should both be treated and prevented. Regarding immigrants, if the current trends continue, they will be the future marginalized residents. From among the solutions proposed to deal with the marginalized settlements such as degradation, destruction and renewal, improvement and empowerment methods, the best option for Tabriz, i.e., empowerment approach which was approved by the organization in 1987 under the title “global strategy of shelter is the basic requirement of nations”.

#### Suggestion:

- a. Social and cultural planning, both long-term and short term by the related authorities and policy maker to enhance marginal settling culture and attracting their participation in urban systems;
- b. Creating and establishing cultural and recreational foundations for the youth to spend their leisure times in these areas;
- c. Creating comprehensive technical training courses and providing employment loans to residents of these areas;
- d. Formation of social and public institutions and organizations in the marginalized areas; (NGO)
- e. Providing governmental and municipal aid to improve living standards by creating infrastructural installations, creating health centers, improving roads and transportation networks in the marginalized areas; and
- f. Creating employment and entrepreneurship for the marginal settlers particularly in the manufacturing sectors.

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## Conflicts of interest

The authors declare that there is no conflict of interest.

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