The Examination of Housing Index and Status of Residence in Informal Settlements and Providing their Bookkeeping Strategies (Caste Study: Allahabad Region of Kerman, Iran)

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ABSTRACT: Like other countries, informal settlements in Iran are a growing phenomenon which causes cities to be faced with serious issues. Kerman has also been faced with informal settlements and Allahabad region is one of the informal settlements. The research method is descriptive-analysis and data collection technique is based on library researches and field studies. The results of field studies in Allahabad indicate that the region is physically faced with serious irregularities in construction, short-lived and second-hand materials, buildings without construction permit, low distance to the downtown streets, far distance of children’s training centres from the region. The region, also, is struggling with poor hygiene, lack of medical facilities and services, high statistics of addiction and unemployment, incomes below the poverty line and high illiteracy. The people are ready to participate in improvement programs for their residence environment, hence, the empowerment strategy is considered to achieve this goal. The aim of current study is to identify the physical status, situation and indexes of housing in the region in order to recognize the region’s potentials through exact examinations and SWAT technique and finally to provide solutions such as creating environments for enhancing individual skills and increasing to decrease social-physical damage and increase quality of life.

Keywords: Informal Settlements, Physical Status, Empowerment, Increase Quality Residency, Allahabad Region, Kerman

INTRODUCTION

Unorganized and irregular development of cities is one of the Third World problems about city and urbanization during contemporary period so that physical limits and environments grows in vertical and horizontal directions in terms of quality and quantity during a continuous process and if this program continues fast and disordered, it results in a disproportionate composition of urban spaces (Ebrahimzadeh, 2004). Thus, informal settlements are one of the reasons for creating this process and also one of the most important of its outcomes. Today, hundreds of millions of people throughout the world, especially in developing countries, live in the illegal and turbulent settlements with poor social-economic and environmental conditions. One hundred years ago, (England?) refers to slums existed in England and consider industrial revolution as the reason of rising them. In 1996, there are about 25% of the world populations living in places with lack of dignity of human life (Mohammadi, 2008).

Informal settlement history dates back to 1921 and its intensity were severe in 1960 and 1970s. The first community of slum dwellers in Tehran dates back to 1932, but totally, its expansion and growth was occurred after 1953 Iranian coup d'état, especially from 1976 onwards. In the former regime, along with Iran’s industrialization and loss of agriculture, moving of people were speeded toward cities, especially Tehran and large cities which most industrial activities were done. The rapid movement of rural population to urban areas which was associated with diseconomies of the refugees caused them to seek refuge non-standard cities and dwelling units, despite accommodation is one of the essential basic needs of human. This phenomenon is not limited to Tehran and most cities are faced with slum dwelling issue and spread of informal settling (Piran, 2004; Shokhouhi, 1988; Zahedani, Zahed, 1990).

The results obtained from the study of Allahabad region, as one of the slum areas in Kerman, indicating poor housing condition (dwelling units and residential environments). Regarding housing and its current environmental condition, some factors like suitable space, easy physical access, enough security, ownership security, structural stability, lighting, suitable ventilation and heating systems, acceptable basic infrastructures such as water-supply system, health and education, waste disposal, suitable environmental quality and appropriate hygiene activities are the sample ones effecting on the satisfaction level of an individual from residence in a region.

Low-income people would encounter with difficulty- from selecting the right place for dwelling to providing a ground, taking a construction permit, supply construction costs and its equipment- to housing. Growing housing problems in cities and the necessity for meeting them will require us to pay attention to its roots, strengthening some positive aspects, weakening negative
aspects of these settlements with emphasis on potential and actual facilities.

As a result, the purpose of the study is to seeking strategies for overall improvement of dwelling and residence status in Allahabad in partnership with people and increasing the welfare of the inhabitants, accessing to urban services and facilities, creating the sustainable, lively and dynamic regions. The research method is descriptive-analysis. Also, data collecting has been done by two techniques, namely field inferences through visualization and photography tools, and document-library studies using investigation of “Housing Foundation of Islamic Revolution” and “Housing and Urban Development Organization”, weak and strong points have been found and finally, suitable solutions have been offered through SWOT technique to improve living condition in Allahabad.

MATERIAL AND METHODS

Informal Settlement

Until now, informal settlement has been termed with various names in Iran, especially slum dwelling, abnormal housing, self-induced housing, self-starter housing and tent slums. Therefore, we deal with some of these concepts here:

Neighbourhood slums are the last option for survivors and their slashing efforts to gaining urban benefits, including schools, jobs, garbage collection, lighting of passages, social services fails to be achieved. These slums are the regions in which their population cannot take effectively participate in competition for public goods and services, thus they have no control over the way of distribution of goods and services (Haravi, 1997).

Generally, slum dwelling means that all people who live in an economic scope of a city but they are not absorbed into the urban economy. Although, the main root of slum dwelling should be sought in factors which cause rural people to migrate toward urban areas, all slum dwellers are not immigrants but some of them were the permanent residents of cities who were obliged to reside in non-standard dwelling units due to diseconomy, so they are assumed to be slum dwellers (Abedin Darkosh, 2001). Primarily, these communities were illegally (without legal ownership of a land which is not necessarily means free capture of a land) formed in least possible time and with any available materials and often in places where previously were uninhabitable, such as deep margins of some water channels and watercourses, natural hills and neighbourhood lands out of cities. Since, they usually establish communities which are not only illegal (Gilbert and Gagler, 1996), but also they are physically non-standard and different from normal urban tissues.

The concept of house and its suitable characteristics

Housing means a place for peace and habitation. So, the central role of housing is creating peace for its inhabitants and it covers human’s physical and mental peace (Iranloo, 2001). In addition to physical place, housing concept covers general residential environment, including all necessary services and facilities for living and employment, education and health plans of peoples. In fact, this description is something more than a mere physical shelter and includes all necessary services and facilities for human well-being, and they should have the rather long and safe right of ownership (Pour Mohammadi, 2000).

In the second conference of the Human Settlements (1996) which was held in Istanbul, suitable housing was defined as: “adequate easement, suitable space, easy physical access, enough security, ownership security, structural stability, lighting, suitable ventilation and heating systems, acceptable basic infrastructures such as water-supply system, health and education, waste disposal, suitable environmental quality and appropriate hygiene facilities, a right place and being available for basic job and facilities which all of them should be accessible for people based on their affording abilities (Eghtesade Maskan Bulletin, 1996).

Housing characteristics in neighbourhood regions

1-The surface of breakdown parts and floor area is very small.

2-Building area is higher than the normal level; as a result, the open residential unit space is small.

3-Most buildings have one floor and each of them have one unit on average.

4-Average number of rooms in housing units is too small.

5-Indexes of residential land, floor area, room per person, room per family per capita is very low.

6-Density indexes are very high, such as person per unit, person per room and family per room index.

7-Although relatively durable materials are used in construction, recycled materials, method of construction and lack of skills among constructors in unregulated settlements are short-lived.

8-The age of buildings is often less than 10 years. Although the buildings are newly built and the used materials are long-lived, the faces of them are rusty and beaten.

9-The buildings are mainly constructed during nights and the inhabitants of unregulated settlements are informed about the illegal construction activities.

10-The buildings are often lack of facade.

11-Housing construction processes are changing in these settlements. The situation is changed from complication operations by residents to purchase houses from local jerry-builders (Davoodpour, 2005).

Access to superstructure and infrastructure services and facilities in neighbourhood regions

1-In terms of access to service locations, it just covers preliminary local locations (mosque, retail stores, school and a small clinic).

2-There is no sport spaces (playgrounds for children, sport grounds), green spaces (park, garden), cultural spaces (cinema, academy, library). In other words, there is no space and location for spending leisure.

3-Due to lack of facilities for spending leisure, public places are used for spending time, children’s playing, and men’s meetings. Also, these passages are used for vendors to sell their products (Davoodpour, 2005).


RESULTS AND DISCUSSION

History of Allahabad

“Pedar” complex is located in Southwest of “Kerman” and along with “Jupar” beltway with an area about two hundreds hectares and population over 7160 people. This region is one of the neighbourhood complexes of Kerman in which there are many intense irregularities in its constructions and shed building is a prevailing phenomenon. The past area of this region has not been the present extent. This region had a population over 130 people in 1365 and its lands are divided into two parts of private and public. The native owners had separated their lands and sell them in the form of written promise or by manual which caused to begin construction in this region.

Most immigrants of Kerman (Bam, Jiroft) who have not had good financial condition have dwelled in this region. The residents have constructed their houses with buying or renting estates and without construction permit in state lands. They firstly constructed sheds in their lands and states grounds, and even some constructions were complicated within a few hours or during a night in order to hide it from police forces. They gradually developed this elementary shelter and captured the state lands completely. Although the constructions have now been limited in comparison with the past, the overnight constructions have been continued in this complex in Kerman. This complex had not basic facilities such as tap water, electricity, gas as well as restrooms and bathrooms in the past and it had been caused many difficulties for the residents. In some houses, there have been occurred respiratory problems due to lack of gas piping and using oil burning appliances. Also, all streets were dirt in the past.

After establishing rural municipality in 2008, Housing and Urban Development organization decided to implement Hadi plan. The organization surveyed the complex and provided plots of Hadi plan, then obliged the constructors to observe the determined principles.

The organization ordered the rural municipality to grant the right of using water, electricity and gas facilities to constructions which built before 2008 through giving construction permit, while those constructions which built in state lands illegally were firstly obliged to purchase the lands from the related organization, then they were granted construction permit to use the right of water, electricity and gas facilities.

Table 1. The major policies dealing with housing problems in informal settlements (reference: Informal settlements and slum dwelling myth)

<table>
<thead>
<tr>
<th>Approach</th>
<th>Prevalence and domination period</th>
<th>Main points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignoring</td>
<td>To 1960s</td>
<td>- The problem will be solved with economy development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- The problem is structural and it will not be solved with local planning.</td>
</tr>
<tr>
<td>Mandatory eviction and elimination</td>
<td>1960-1980 in some countries until now</td>
<td>- Informal settlements are festering tumour in body of a city which must be removed.</td>
</tr>
<tr>
<td>Self-help</td>
<td>from 1970 to 1980.</td>
<td>- Utilization of workforce, skill and the residents’ management ability to solve the problem</td>
</tr>
<tr>
<td>Public housing (social)</td>
<td>1950-1980</td>
<td>- Government and its resources are the key solutions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Targeted subsidies are another option.</td>
</tr>
<tr>
<td>Location-servicest</td>
<td>1970-1980</td>
<td>- Providing land and primary infrastructure is the solution.</td>
</tr>
<tr>
<td>Renewal</td>
<td>1980 until now</td>
<td>- Ensuring the right of residence and infrastructures using the current condition</td>
</tr>
<tr>
<td>Empowerment</td>
<td>1990 until now</td>
<td>- Establishing a political, administrative and environmental framework</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Using social internal capacities of a locale</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Economic and social development</td>
</tr>
</tbody>
</table>

Figure 1. The position of Kerman informal settlements (reference: Kerman Housing and Urban Development).

Figure 2. State and Private Lands (Allahabad)
Figure 3. Condition of electrical wiring, passages and buildings of the complex (Resource: author 2012)

Table 3. Employed and Unemployed (Housing Foundation of Islamic Revolution, 2013)

<table>
<thead>
<tr>
<th>Year</th>
<th>Six years and more</th>
<th>Literate population</th>
<th>Illiterate people</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Man</td>
<td>Woman</td>
</tr>
<tr>
<td>2006 census</td>
<td>3437</td>
<td>2013</td>
<td>1774</td>
</tr>
<tr>
<td>KhaneBehdasht (2011)</td>
<td>4867</td>
<td>Percent 79.3</td>
<td>1461</td>
</tr>
</tbody>
</table>

Table 4. Level of education (Kerman Housing and Urban Development, 2007-2011)

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Illiterate</th>
<th>Elementary</th>
<th>Guidance</th>
<th>High school</th>
<th>Diploma</th>
<th>Bachelor or higher degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allahabad</td>
<td>6</td>
<td>27</td>
<td>37</td>
<td>6</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>68</td>
<td>16</td>
<td>100</td>
<td>100</td>
<td>42</td>
</tr>
</tbody>
</table>

Housing characteristics in Allahabad

As can be seen in the above table, most householders of this region have low level of education. This issue (lack of education) itself causes people to be less skilled, and less skilled are also followed by less income, therefore the regions should be empowered in terms of education to enhance the individual’s skill level in order to do an effective step toward empowerment.

Table 5. The study of family characteristics (Kerman Housing and Urban Development 2007-2011)

<table>
<thead>
<tr>
<th>Families dimension</th>
<th>Population density of people per hectare</th>
<th>Number of families</th>
<th>Population of the region</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5</td>
<td>72</td>
<td>1591</td>
<td>7160</td>
</tr>
<tr>
<td>4.45</td>
<td>4810</td>
<td>21405</td>
<td>All informal complexes</td>
</tr>
</tbody>
</table>

Family population density per household

It is one of the important quantitative indexes for identifying housing. The smaller the index, the more favourable it would be.

Table 6 demonstrates that net average of family density per housing is 1.2 families per unit in Kerman informal settlements that is not yet achieved to the critical level, however, it seems the new generation of residents in informal settlements of Kerman will seek for constructing new housings that finally result in constructing more informal settlements in Kerman, as the average of family density grows to 1.5 families per unit.

Table 6. Family per housing unit (2007-2011)

<table>
<thead>
<tr>
<th>Net average of family density per housing unit</th>
<th>Total</th>
<th>More than one family</th>
<th>Net average of family density per housing unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.16</td>
<td>100</td>
<td>16</td>
<td>Allahabad</td>
</tr>
<tr>
<td>1.2</td>
<td>339</td>
<td>67</td>
<td>total</td>
</tr>
</tbody>
</table>

Table 7. The total number of residential blocks and family to residential blocks ratio (2007-2011)

<table>
<thead>
<tr>
<th>Number of families</th>
<th>Total number of residential blocks</th>
<th>Family to residential blocks ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1573</td>
<td>2201</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Average floor area

Generally, Kerman’s land use pattern is relatively higher than the other cities of the country. This issue dates back to the past, as the unit of measure of lands was Qasab (equals with 25 square meters) instead of square meter and this unit is still common.

The average surface per residential unit was 297 m² and 136 m² in sectors in 1996. Yet the statistics are far from the “City Comprehensive Plan” (232.5 m² per unit) (Housing and Urban Development of Kerman).


Table 8. The average surface and floor area of a unit (Housing and Urban Development of Kerman 2007-2011)

| Average surface of residential land/area | 296 | 136 |

Table 9. Examination of family density per residential unit (Housing and Urban Development of Kerman 2007-2011)

<table>
<thead>
<tr>
<th>Number of rooms per house</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Non-answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allahabad</td>
<td>19</td>
<td>42</td>
<td>18</td>
<td>19</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>22.5</td>
<td>38</td>
<td>19.8</td>
<td>14.4</td>
<td>4.1</td>
<td>0.6</td>
<td>0.3</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Average number of rooms per family

The results indicate that 80% of all residents of Kerman informal settlements living in houses with 3 rooms and less and other houses have more rooms. Of course, about 60% of respondents’ houses stated that their homes have 1 and 2 rooms and the numbers of families with 2 room homes are more than other families. Meanwhile, most of houses in Allahabad include 2 rooms.

Table 10. The used materials (Housing and Urban Development, 2013)

<table>
<thead>
<tr>
<th>Type of materials</th>
<th>No.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable (metal or concrete frame, and iron, brick or stone and iron)</td>
<td>2098</td>
<td>95.2</td>
</tr>
<tr>
<td>Semi-durable (cement block, brick and wood or/and stone and brick)</td>
<td>33</td>
<td>1.5</td>
</tr>
<tr>
<td>Weak (brick and wood, brick and mud or fully wood)</td>
<td>73</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>2204</td>
<td>100</td>
</tr>
</tbody>
</table>

Qualitative indexes of housing in Allahabad

Type of construction materials: The type of materials is different based on weather, social and economic condition. The field studies and the above tables demonstrate that more than 95% of residential houses have been constructed with durable materials (metal or concrete frame, and iron, brick or stone and iron) showing a relatively good condition in the sector.

Age of building: Allahabad region is not too old, and despite their abnormal and irregular appearance of buildings, the age of them is low. It seems that the age of buildings is 1 to 10 years, i.e. the constructions were implemented during 2003 to 2013.

Table 11. Quality and age of a building (Housing Foundation of Islamic Revolution, 2013)

<table>
<thead>
<tr>
<th>Quality of a building</th>
<th>No.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under construction</td>
<td>461</td>
<td>20.9</td>
</tr>
<tr>
<td>Newly-built</td>
<td>1137</td>
<td>51.6</td>
</tr>
<tr>
<td>Maintainable and reparable</td>
<td>558</td>
<td>25.3</td>
</tr>
<tr>
<td>Destructed</td>
<td>47</td>
<td>2.1</td>
</tr>
<tr>
<td>Total</td>
<td>2203</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 12. Age of a building (Housing Foundation of Islamic Revolution, 2013)

<table>
<thead>
<tr>
<th>Age of a building</th>
<th>No.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under construction</td>
<td>461</td>
<td>20.9</td>
</tr>
<tr>
<td>1 to ten years old</td>
<td>1146</td>
<td>52</td>
</tr>
<tr>
<td>10 to 30 years old</td>
<td>540</td>
<td>24.5</td>
</tr>
<tr>
<td>More than 30 years old</td>
<td>56</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>2203</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of floors

Kerman is one of the cities where has very low density. This phenomenon was available when comprehensive plan decided to be implemented in 1983. In City Comprehensive Plan, it is necessary to pay attention to city development and establishing different policies to enhance internal development and increase average density of a city, but there is obtained less practical achievements in this field and average population density of a city has been fixed. Of course, the above table demonstrates that more than 90% of buildings are 1 floor.

Table 13. Number of floors (Housing Foundation of Islamic Revolution, 2013)

<table>
<thead>
<tr>
<th>Number of floors</th>
<th>No.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 floor</td>
<td>2008</td>
<td>91.1</td>
</tr>
<tr>
<td>2 floors</td>
<td>189</td>
<td>8.6</td>
</tr>
<tr>
<td>3 floors</td>
<td>6</td>
<td>0.3</td>
</tr>
<tr>
<td>4 floor and more</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>2204</td>
<td>100</td>
</tr>
</tbody>
</table>

Basic services

Town Gas: The table indicates that about 80% of respondents use LPG for cooking that it may cause possible problems as the weather became colder and LPG may face with pressure drop. However, the sector was laid pipes and some families use town gas.

Table 14. Examination of gas piping status (Kerman Housing and Urban development, 2007-2011)

<table>
<thead>
<tr>
<th>The used fuel</th>
<th>Gas piping</th>
<th>LPG</th>
<th>Oil</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allahabad</td>
<td>1</td>
<td>98</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>226</td>
<td>60</td>
<td>2</td>
</tr>
</tbody>
</table>

Electricity: About 60% of Allahabad populations utilize permissible electricity and the other 40% use non-permissible electricity. About 10% use permissible electricity at the end of the sector and the rest have no electricity meter. This issue has caused that the residents easily use from high consumption electrical appliances and turn on all lamps during the day. The way they use from electricity is that they throw 2 wires on streets electrical posts and use interconnections, while this method may usually cause problems for families.

Rural municipality of Allahabad has implemented suitable actions for the residents by establishing power transforms and permissible electrification and guided the people toward using permissible electricity. The process has yet been continued.

Tap water: Formerly, the sector was not equipped with plumbing and the residents were forced to use water well, but there have been implemented actions to solve the problem. The table shows that the problem in Allahabad water has been solved to a certain extent. Of course, the irrigation project has been started in 2008.

Table 15. Piping of tap water in the sector (Kerman Housing and Urban Development, 2007-2011)

<table>
<thead>
<tr>
<th>Piping of tap water</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allahabad</td>
<td>61</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>163</td>
<td>176</td>
</tr>
</tbody>
</table>
Environmental pollution and vermin infestation are the problems which can be solved if the residents observe the mentioned points.


Table 16. Time of waste discharge (Kerman Housing and Urban Development, 2007-2011)

<table>
<thead>
<tr>
<th>Time of waste discharge</th>
<th>Daily</th>
<th>Once every two days</th>
<th>Once every few days</th>
<th>Once a week</th>
<th>More than ten days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allahabad</td>
<td>0</td>
<td>67</td>
<td>15</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>130</td>
<td>92</td>
<td>19</td>
<td>74</td>
</tr>
</tbody>
</table>

CONCLUSION

According to the conducted studies about the sector condition and the residents’ ideas about the current status, providing services for needs and priorities of residents, how they cooperate to solve the problems and amount of financial aid of residents have been examined to solve the related problems. The needs of residents that has been mentioned and discussed as follow:

Allahabad problems in terms of land use
1- Lack of educational use
2- Lack of sportive use
3- Lack of park and recreational space use
4- Lack of treatment and sanitary use
5- Lack of cultural use
6- Existing of annoying use (such as workshops producing building materials)
7- Inappropriate and limited distribution of public services in the sector (Kerman Housing and Urban Development)

The problems of Allahabad in terms of Social and Economic aspects
1- High population density
2- High family members
3- High level of unemployment, especially among youth
4- Low financial ability of the residents due to the employment condition and low income
5- Existing social crime and victimization in the field of addition and drug trafficking
6- Low participation of women in economic activities
7- Low social security
8- Lack of social organizations and formal local communities across the sector

9- Low participation of the people due to the financial status and low income of most residents (Kerman Housing and Urban Development).

Housing problems in Allahabad
1- Long life of most buildings
2- Small blocks of housing
3- High number of family members in housing unites
4- Low level of renewal in housing tissues
5- Construction a building without any plan layout and principles of engineering.
6- Construction by non-technical people and majority by family members
7- Using of low quality and cheap construction materials
8- Construction without foundation
9- Major parts of housing units are without title deed that is the main problem in housing renewal
10- Intense irregularity in parts and their inappropriate composition relative to each other and street network due to organic construction of housing units
11- High level of housing density in hectare
12- Irregularity in filled and empty spaces of neighborhood blocks of network accesses
13- Intense vulnerability of housing units to earthquake risks due to the construction method and kind of construction materials
14- The sector physical cleavage from city complex and its inconsistencies with urban neighborhood tissues.
15- Lack of ability to identify and predict the space due to weaknesses and deficiencies in the image-forming elements
16- Lack of consistency and connection of city morphology across the sector
17- Shortage, lack of equipping, and lack of suitable distribution of public spaces or performance of the sector or the region
18- Lack of proper connection of spaces to the sector’s main and important axis
19- Existing of free and insecure spaces in the sector
20- Inadequacy of surface water and wastewater collection system and its role in creating an unsuitable mental image

Allahabad natural and environmental problems
1- Lack of wastewater network
2- Intense weakness in surface water collection system
3- Existing vermin, especially mosquito and fly due to the lack of collection of home wastewater from streets, streams, and piling up in open spaces

Allahabad transportation problems
1- Abundance of narrow passages due to organic construction of housing units
2- Abundance of dirt passages and low quality asphalt in main passages
3- High depth of the local alleys and streets
4- Intense lack of main northern-southern networks connecting the sector to the other parts of the city and connecting with the city through a few main narrow axis
5- Lack of hierarchy in existed communication networks
6-Lack of bus lines across the sector
7-Lack of implementation or finishing of proposed access networks of approved comprehensive and detailed plans
8-Intense weaknesses of east-west connections across the sector
9-Lack of separation of sidewalks and streets in main and local routes (Kerman Housing and Urban Development)

Allahabad management and partnership problems
1-Failure to recognize the sector by urban management and relative executive organizations, providing limited and inefficient services and facilities for residents, such as low quality asphalt, few paved passages, irrigation with low pressure, low voltage power with a light lighting, etc.
2-Numerous decision making centers and the existence of uncertainties in accordance with various organizations and administrations in the
3- Construction development of the residential area.
4- Lack of attention of urban management and executive organizations to physical, economic and social condition, especially when they are calculating of toll collection, providing services and urban facilities.
5-People become pessimistic to urban managers and executive organizations, particularly municipality and general governor office due to frequent breaching about improving the condition of the sector
6- Shortage of non-governmental organizations and local communities across the sector (shortage of organized participation of the public)
7-Low level of the public participation due to poor financial condition of the public (Kerman Housing and Urban Development)

Regarding the assumptions and examinations, there are sets of weak and strengths points. We achieve our goal when we change the threat of negative factors into positive opportunities, so no matter is bad itself and underdevelopment and weakness may create an opportunity to make a good step toward success. In the current analysis, the strategies and macro goals have been assessed in empowerment, economic development groups and to improve local entities in the general form of SWAT technique.

The sector is encountered with the following weakness and strengths points:
1-Balanced sex ratio
2-High proportion of school age children
3-High active population
4-Low residence history (less than 15 years)
5-Cultural and ethnic assimilation
6-Cheap lands
7-Migration to a city due to shortage of rural facilities
8-High tenant
9- High satisfaction of living in the place
10-Inadequate housing
11-Poor hygiene condition
12- Shortage of medical facilities and services etc.
13-High propensity to leave the area if possible
14-Lack of interests among children to live in the sector
15-Traditional partnerships between the residents
16-High ratio of addicts
17-Being considered as a village
18-far distance of children’s training centers from the region
19-low distance to the main streets
20-low spatial attachment
21-lack of loan funds
22-High willingness to participate in the sector renewal and reform
23-High ratio of unemployment
24-High working population
25-Income below the poverty line
26-High illiteracy

Regarding to the above abilities and social-cultural and economic problem, the macro goals regarded for the sector based on empowerment view is:
1-Creating a sense of attachment to the region
2-Promoting the coefficient of social security
3-Enhancing the living quality and improving the condition of youth and women

These macro goals are divided into micro goals:
1-Increasing human capital
2-Preventing from the growth of social harms and crimes
3-Increasing the amount of social satisfaction
4-Enhancing the life skills
5-Increasing the physical-mental health
6-Improving the nutrition status

In line with the macro and micro goals, the following solutions can be implemented in terms of empowerment for Allahabad:
1-Holding technical and vocational periods courses (enhancing workforce skills)
2-Holding the training courses of communal life skills in family, theoretical and practical classes, training of tailoring and so on to women.
3-Holding literacy movement classes
4-Treatment of addicts
5-Building a conference space and hall of fames (to enhance the sense of cooperation and partnership through holding meetings and associations)

The macro goals are followed based on economic development:
1-Providing welfare
2-Improving living condition

These macro goals include the micro goals:
1-Utilizing from family members for producing
2-Establishing local workshops
3-Enhancing the family incomes
4-Enhancing the nutrition condition

The following programs and solutions can be implemented based on economic development in Allahabad:
1- Establishing local workshops (packing of butter, pistachios, cumm and etc.)
2- Promoting and developing of handicrafts
3- Promoting and developing domestic production activities, such as tailoring, carpet weaving and etc.
4- Establishing exhibition spaces, self-employed bazaars and galleries (selling domestic productions and etc.)

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