

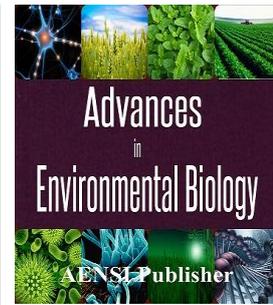


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### Evaluating how these Informal Settlements and the Marginalization of the Physical (Case Study: Khazar Neighborhood of Hamadan)

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#### ABSTRACT

Immigration has emerged as a disaster for the third world countries in the recent century. What makes immigration be regarded as a disasters the inability to attract immigrants by city, state failure in providing facilities to mass migration to the cities and the creation of informal settlement. Most of the marginalized are rural migrants aiming to achieve a better life, who are attracted to urban life which leads to uneven development and the formation of physical tissue with a rural character. The aim of this study was to investigate the influence of the rural immigration in the formation of the Kheyr district as one of the informal settlements in Hamadan from the physical aspect provides efficient solutions to reconstruct it. The research method is descriptive - analytical based on library and document stud fieldwork and the use of quantitative methods such as one-sample t-test and Pearson correlation in SPSS software. Research findings show that marginalization arose from the social and economic problems that have direct impact on the physical abnormalities in the towns, so this crisis cannot be eradicated at once but at least modification of crisis impossible. As there have beneath increasing immigration from rural areas continuing in different rates, on can say that the effect of immigration is predominantly marginal areas, the lack of consistency and homogeneity of built space sand spatial disturbing of neighborhood Kheyr and at macro level this leads to the disruption of balance and spatial order in Hamadan.

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#### INTRODUCTION

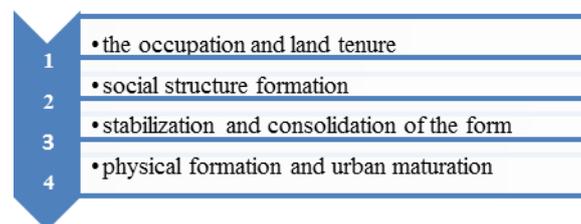
Studying the marginalized and slum areas and informal settlements known as the urban challenges, includes discussions of the topics at the forefront of social, economic and culture a problems of world, particularly in developing countries. This problem shows off in countries and cities where there is not any urban population optimal planning. Nevertheless, addressing the problem of informal settlements is not only originated from the necessity of faith and human values, but also compatible with social benefits and sustainability of settlements and national development [17]. On the other hand, rural migration, which was first used in 1892 by Graham, is considered to be among the most important social and economic issues in developing countries, including Iran. The emigrants who will move from rural to urban are a shave, in origin and destination, issues and problems including the incidence of multiple disorders caused by pressure on the limited resources of urban communities, unemployment and underemployment, lack of education and living spaces, environmental pollution, aging and feminization of the agricultural labor force, evacuated villages. In the past one hundred years, rural migration and its severe and widespread problems fueled urban and rural areas of Iran. Among the problems is marginalization as one of the major problems that the city has experienced while it seems to have shift the continuous urban planners` attention [14] and because low-income people living in rural areas and employed in traditional manufacturing activities being located on the sidelines of this section, have moved to the cities, the cities have been found to receive double-cultural basis in the way just like island surrounded by rich black belt of deprivation [16] Like many large cities of Iran, Hamadan experienced, from the 1969, crisis of informal settlements and rural migration of poor people . Hamadan has 5 quarters of informal settlement including Hesar, Kheyr, Dizaj, Charmsazi, Mazaghine and it can be said that these settlements are divided into two main types.

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Some of these settlements are usually formed around a village core and some lack rural core. Meanwhile, the settlements lacking rural core experience gradual development. Given that Khezr has no rural core and receives rural migration more than other informal settlements in Hamadan and on the other hand, because there is no pre-thought plan, this neighborhood has generally dense texture and a network of narrow alleys without open spaces. Another characteristic of this tissue is mainly lack of services within the context of the neighborhood which has caused it to become predominantly residential context. The most original feature texture with Khezr district compared with the city's main neighborhoods is the residential units with a generally low and erratic floor area. This has led the neighborhood to be examined and explored physically, and eventually re-covered. Minor objectives of this study are to investigate the variables related to migration, informal settlements and unplanned texture, explore the lack of quality and variety of applications in the non-standard housing and provide strategies to prevent disruption of spatial order in cities. The main objective of the study was to assess the impact of migration on formation of the neighborhood as one of the informal settlements in Hamadan from the physical aspect and provide efficient solutions to reconstruct it.

#### *Theoretical basis of research:*

Informal settlements is one of the prominent Figures of urban poverty formed within or nearby cities (especially big cities) with no formal planning, building permission with the accumulation of low-income people and low level aggregation of the quantity and quality of life, with titles such as marginalization, informal settlements, and erratic settlements. Given the shortcomings of the so-called marginalization for all forms of this phenomenon, the so-called informal settlements, with a broader sense, rather than marginalization, and slum is applied. Hence, the term 'informal settlement includes multiple forms of marginalization [8]. Reviewing the process of spontaneous settlement formation shows that the formation process varies according to various conditions such a land ownership and its legal status, economic structure, social and cultural rights of the residents of these areas, the role and function of settlements in the surrounding metropolitan area, informal markets and institutions responsible for the management of urban informal settlements. Also, the features of this phenomenon alter from one region to another in some cases. Especially in Latin America, Africa and Asia, there are differences in the amount, type and quality of informal settlements [1]. According to different formations of settlements, this procession is categorized into four stages: the occupation and land tenure, social structure formation, stabilization and consolidation of the form and physical formation and urban maturation.



**Fig. 1:** The different forms of the formation and evolution of marginalization.

If the process is defined within the rules indifferent conditions, this process can be gradual and spontaneous (spontaneous actions of individuals seeking shelter on public or private land), invasive (invasion and occupation or the spontaneous coordination with the organizations), mobilized and organized (by parties and organizations) and step-by- step (with the permission of the administrative authority) [18]. General features of marginalized urban regions are:

General, there are two approaches in dealing with spontaneous urban areas:

A - Destroying spontaneous areas: the most comprehensive government response against these areas in the past was to destroy them through bulldozer. Slum eradication prevailed in the 1950s and 1960s as a conscious policy to improve housing conditions. Normally, government used justifications for slum eradication such as slum upgrading in line with the beautification of the city (before the 1988 Olympics in Seoul), in order to remove the center of crime and criminals. This approach is influenced by the views of ecologists or vision of developing endogenous growth or academic ideologues in the West In urban ecologists' view, degradation and in exogenous development exponent's difference to or little concern about spontaneous urban areas is quite justified and accepted. People, like Daniel Lerner, who grad following the Western model of development for deprived nations as the only way to salvation and liberation from the yoke of poverty and ignorance are included in this group. They consider the formation of slums as the side effects of traditional societies in transition to modern urban and industrial communities. Naturally, such a significant historic transition cannot best option due to the low value of the slums. Western cities had experienced such phenomena as the ongoing developments in the slums belonging to blacks and Jews continued on a limited scale. There is no doubt that with the continued

exogenous development of the Third World there is the hope of solving this phenomenon (spontaneous formation) in this way. Sever solutions and experiences have been applied while the vast majority of cases have been unsuccessful. The aforementioned solutions can be visualized as the following:



Fig. 2: General features of marginalized urban regions [9].

Table 1: Experienced solutions in dealing with spontaneous areas [15]

experienced solutions
Unconditional destruction (most repeated)
Destruction and removing people to their previous living
Destroying after giving cheap land
Destruction after giving cheap land and building materials at a low price
Buying and demolishing
Destroying after giving cheap land and free building materials
Destroying after transferring to affordable housing prepared especially as the apartment
Shack reconstruction in coercion by people while accepting their right to the land
Controlling future expansion while ignoring
Absolute Dismissal

B - Empowering residents and improving the physical dimensions: Today, the prevailing views in their final analysis consider the spontaneous settlements as the answer to the question of housing for the urban low income people and the prevailing opinion is that in the process of completing the supply of housing and residential environments, households and communities living in settlements actually realize themselves and are re oriented in urbanization process and find their capabilities to become ordinary citizens. Therefore, it can be said that housing in these settlements constitutes a part of urbanization and urban life and is gradually built and completed along with priority variation, household preferences, income level increase and subjective and objective needs of families. The residential environment is of course asset of infrastructure services (water, electricity, etc.) and superstructure (access, schools, etc.) is effective in residents` image of the housing and thus the construction of housing and residential environment is an important part of the process of making and

transformation of spontaneous settlements formed at each growth stage. The view based on the empowerment and promotion of the spontaneous are as aims to explain the reaction of urban poor and low income people to housing and shelter and to solve the way of empowerment and organization of the settlement. Empowerment-based views essentially relying on rejecting pathological approach and believes that organization, support and orientation of the settlement are the solution of supplying housing for poor and low - income people.

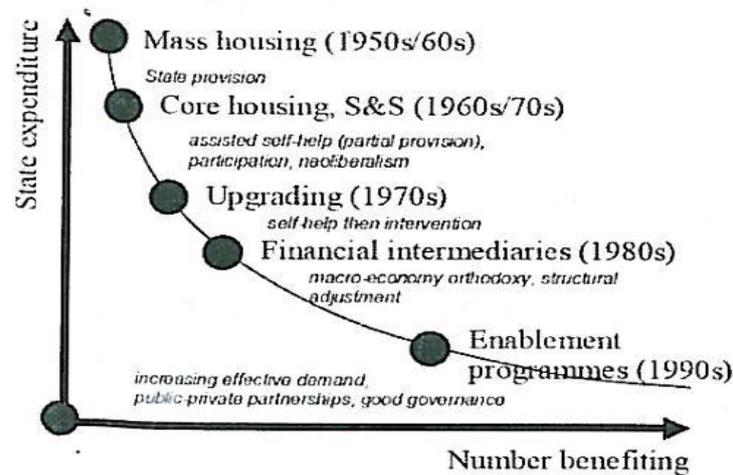


Fig. 3: Evolution of policies intervention with marginalized regions in the world [17]

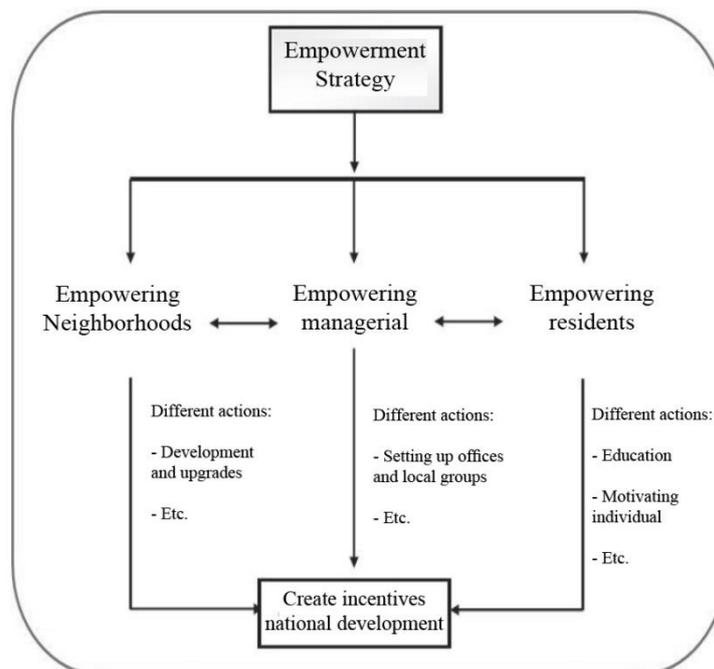


Fig. 4: Strategy Empowering urban fringes Neighborhoods

#### Methodology:

The research method is descriptive - analytical in the form of library- documents study such as books and scientific research articles, organizations and government agencies such as the Hamadan municipality, Hamadan Centre for Municipal Studies and Planning, Office of Statistics and Information of Hamadan, comprehensive design of Hamadan, province Statistical Yearbook, field work using quantitative method such as the one-sample t- test, Pearson correlation and SPSS software in order to achieve the research goal.

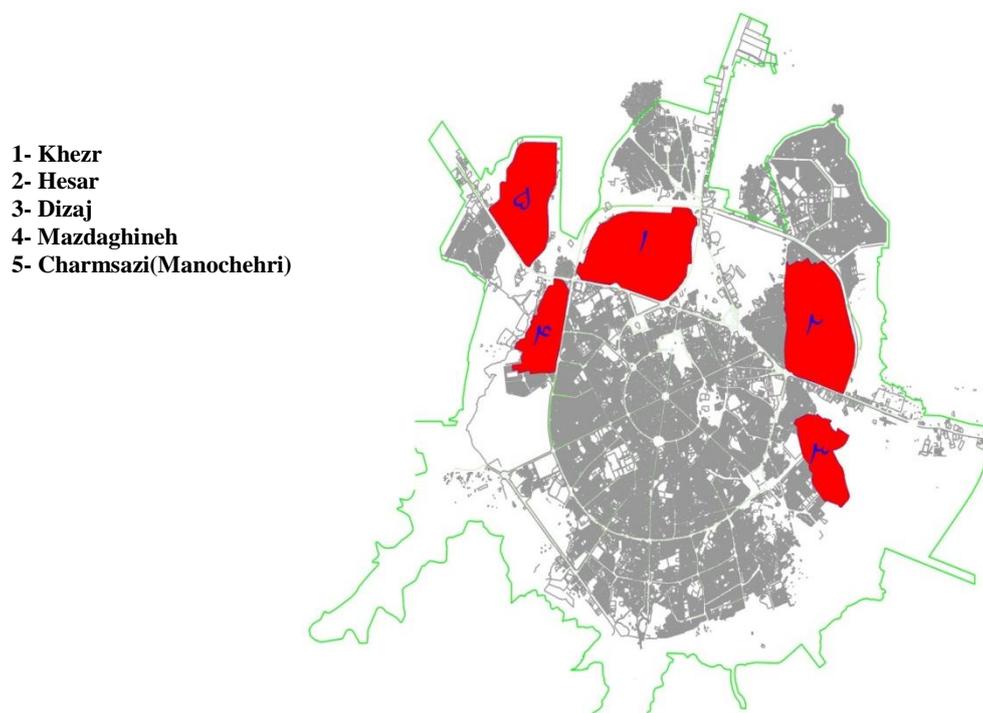
#### Research findings:

- *Geographical Situation:* Hamadan Province is the fourteenth in terms of population, and the twenty-third in terms of area in Iran. Based on the 2012 census, its population was over 1, 758, 268 people. The province is 19,

493 square kilometers neigh bored in the north with the provinces of Zanzan and Qazvin, province from the south with Lorestan, from the East to Markazi and from the West with Kurdistan and Kermanshah. The province is at 33 degrees, 59 minutes and 35 degrees 48 minutes north latitude from the equator and 47 degrees 34 minutes- 49 degrees and 36 minutes east of the meridian Greenwich with 9 cities, 25 districts, 27 cities, 73 villages and 1120 villages. Hamadan city is the center of Hamadan Province, one of the oldest cities in the world. Sharra and Markazi are 2 parts of Hamadan for which Hamadan is located in the central part considered as one of the metropolises. Weather and climate in terms of minimum and maximum cold and rain in seasons vary belonging to cold mountainous region [7].

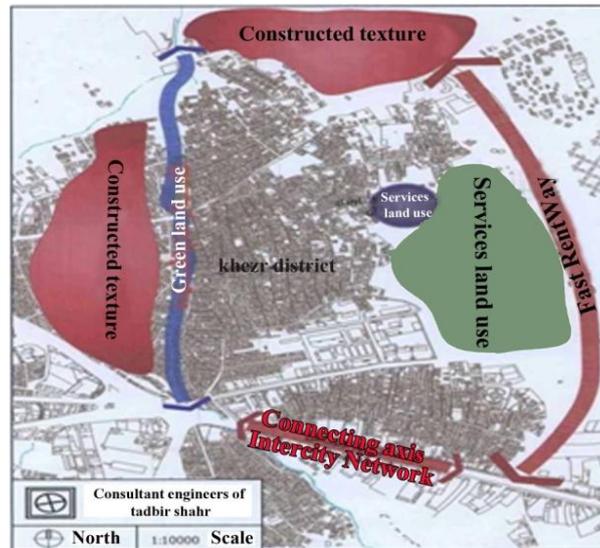
- *Physical evolution of Hamadan in the past:* Until the year 1932Hijri, like other cities, Hamadan experienced a growth without pre- thought out plan. It is among the first cities in the country which found a development plan by German engineer" Karl Frisch" in a radial plan prepared for the subsequent development. This plan was the basis of structure and form of the city. The review of plans of 1967 to present shows that the city developed in a radial form from 1967 to 1977, but then the management of urban planning and development faded, and the development distanced primarily from the form of old context and form (radial).

- *Migration to Hamadan; informal settlements:* Hamadan has experienced a positive rate of growth throughout its recent history, with the greatest rate being in 1976-1986; yet, Hamadan is a city where a lot of emigrants leave it and it seems that it loses some of its population in future. Migration from rural to Hamadan has had several socio-economic effects on different population of Hamadan. The effects may vary depending on the type of immigration and migration volume. Immigrants often living in Hamadan find it far better instead of living in rural areas mainly due to unemployment or underemployment in rural jobs. Higher in come and better educational opportunities for the children of immigrant create better satisfaction while improving the housing (compared to rural housing), electricity and water services, gas. Although the cost of living in the village is les, there is a more comfortable life in cities than that in a poor village. Villagers` migration to the city brings about some outcomes, one of which is urbanization development which affects social and economic situation of Hamadan. The outstanding trend is the increasing growth rate of Hamadan population compared with other cities and especially the creation of informal settlements on the fringes of the city of Hamadan. Hamadan informal settlements include Khezzr, Hesar and Dizaj (at urban area level), Mazdaghineh and Charmsazi (Manochehri) (at urban area level).



**Fig. 5:** Marginalized Neighborhoods and Empowering in Hamadan City

- *Khezzr district location:* Khezzr district is located in the eastern part of the city of Hamadan. The area is with no rural core required by the formation of migrants and urban simple workers. The neighborhood is directed south of Hamadan-Malayer, from East to East Beltway, north to the town of Shahid Madani, from the West to the covered channel, which enhanced neighborhood of Khezzr distinguishing the study area of neighborhoods.



**Fig 6:** The territory of Kheyr district in Hamadan.

- *Kheyr population:* Local population of Kheyr is about 31320 people in 7120 households dominated by the 4/4 people. Of the total population of 31320 people in neighborhood, 16161, 6/51%, are males and 15159, equivalent to 4/48 percent, are women. In other words, the sex ratio in the neighborhood is 6/106, which can indicate men are more than women.

**Table 2:** Demographic features and density.

variables	No. of people	No. of households	Dimension of households	Household density in housing unit	No of housing units
No.	31320	7120	4/4	1/14	5993

- *The situation of pure and impure surfaces of Kheyr compared with Hamadan:* Kheyr district with an area of 150 hectares and a population of 31320 people is located within the northeastern part of city of Hamadan. This neighborhood is the most densely populated poor neighborhood in the city of Hamadan. Land per capita net and gross surface area is 47.9 square meters compared with the average per capital of Hamadan, i.e. 156/3 SQM, has a significant shortcoming. Overall per capita in the neighborhood is 1.15 square meter, while the value for the corresponding uses in Hamadan is 10.3 square meters per person. Thus, deficiencies in access to services at the neighborhood level are clearly defined. In addition to the existing shortcomings in the area of services, the per capita of residential neighborhood and street network also suffers from shortcomings. Average per capita of residential neighborhood is 30% and 1 the average urban thoroughfares are about 50% less than that in urban areas.

**Table 3:** Situation of pure and impure surfaces of Kheyr compared with Hamadan (Sources: Consultant engineers of Tadbir Shahr: 2006; authors: 2013)

Description		Hamadan City		Kheyr Neighborhood	
		Area (m <sup>2</sup> )	capita area(SQM)	Area	capita area(SQM)
Pure surfaces	housing	14141060	30/5	639790	20/4
	services	8547070	18/41	169020	5/4
	thoroughfares	14091630	30/4	366167	11/7
	total	36779760	79/3	1174977	37/5
impure surfaces and graveyard		35740140	77	325695	10/4
total		72519900	156/3	1500672	47/9

## RESULTS AND DISCUSSIONS

- *prioritizing the components of physical indicators:* In this section, the average of each physical indicators and the sum of agreed and very agreed responses in each item were measured and the components were prioritized. According to the table below, drawing attention from around the mountains with an average score of 2.99 and drawing attention to the food stalls with score average of 2.81 the most important component prominent in public spaces in Kheyr. The appropriateness of the neighborhood with sidewalks with score average of 2.03 and wider walkways with an average score of 2.05 are lower than any other component of public space in the neighborhood.

**Table 4:** descriptive statistics of physical indicator components.

Physical indicator components of public spaces	Percentage of agreed and very agreed responses	Average	SD	Priority
Attention of mountain view from different points	39/2	2/99	1/25	1
food stalls	35/8	2/81	1/32	2
attention to historical identity of neighborhood	28/9	2/78	1/11	3
places for sitting on out of attention	24/2	2/64	1/20	4
seats for sitting on	28/1	2/58	1/27	5
signs of finding path	21/3	2/48	1/20	6
pond and fountain	16/9	2/07	1/32	7
wide sidewalks	12/9	2/05	1/15	8
suitable paving and sidewalks	14/3	2/03	1/23	9

- *The rate of physical indicator in KHEZR:* According to the table below, 9 questions have been used to determine the physical indicators. The minimum score is 9 and the maximum is 44 and the mean of index scores is around 22 in the neighborhood. Physical indicators also show the standard deviation is about 6, showing the diffusion of data related to the degree of physical parameters in the neighborhood of Hamadan.

**Table 5:** Descriptive statistics of physical indicator scores.

SD	average	Max of scores	Min of scores	No of questions	No of people
6/21	22/24	44	9	9	380

**Table 6:** Single sample t-test to compare the observed mean of physical indicator with expected mean.

Significance level	DOF	-value	Mean difference	Expected mean	Measured mean
0/001	379	14/93	0/70	3	2/49

Information of the above table shows the average physical indicator score observed in the neighborhood Khezr is 2.49, which it is much lower than the expected mean of 3. Given that the calculated value of it 14.93 with degrees of freedom 379 is the lower than 0/05 (0/001 = p, 379 = df, 14.93 = t), the difference between the mean observed and expected mean is significant (05/0 > P). So we can say with 95 percent confidence that the rate of the physical indicator the Khezr district is lower than medium.

- *the relationship between respondents` education level and public space indicators:* Given that the level of education was measured by distance level (For example, the number 5 was assigned to the fifth elementary school and the number 12 to diploma), to review its relationship with the people`s view about the index of public space, the Pearson correlation coefficient was used.

**Table 7:** Pearson correlation coefficient for relationship between education level and index of public spaces.

Variables	Education level	Social	Security	Access	Physical	functional	Environmental
Education Level	1						
Social	-0/01	1					
Security	0/12*	0/36**	1				
Access	-0/10	0/22**	0/14**	1			
Physical	-0/30**	0/38**	0/15**	0/32**	1		
Functional	-0/29**	0/24**	0/07	0/19**	0/48**	1	
Environmental	-0/18**	0/16**	0/12*	0/17**	0/20**	0/42**	1

\*p<0.05 & \*\*p<0.01

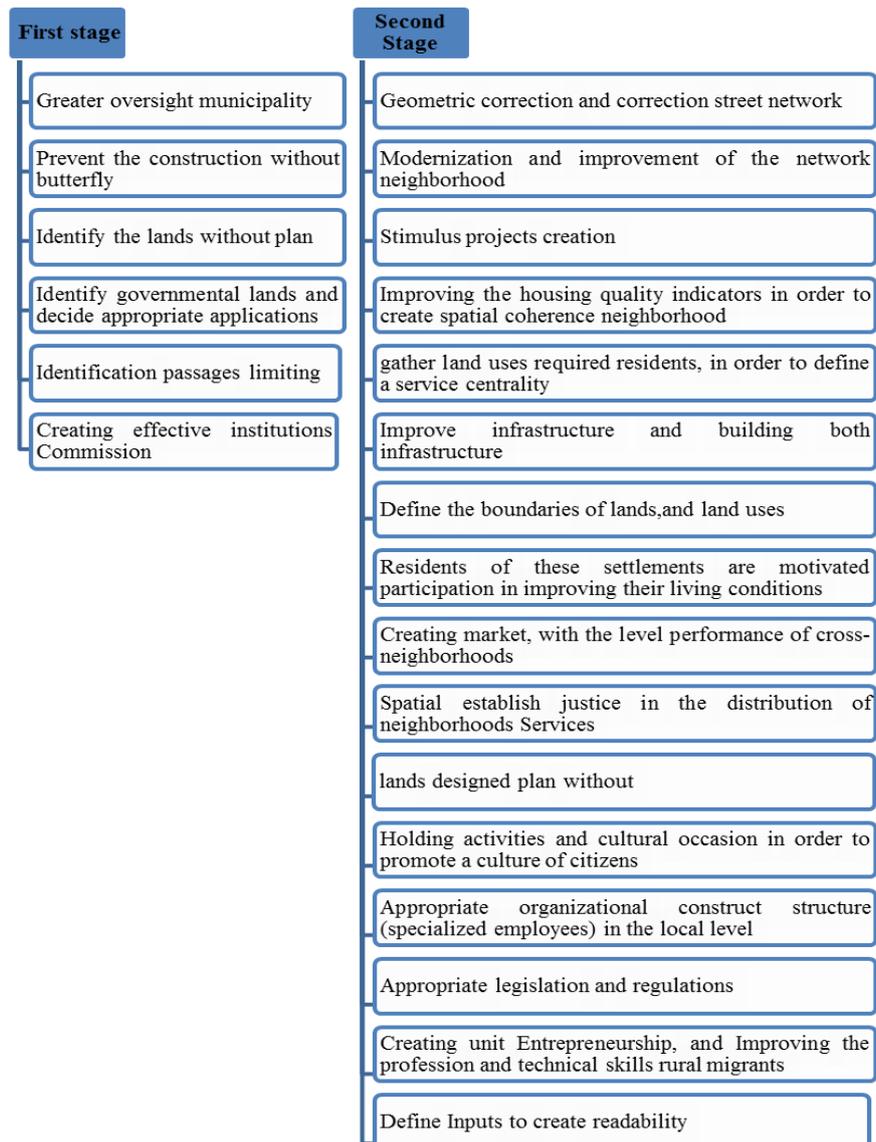
The information of the above table shows that there is a negative Pearson correlation coefficient between education level of respondents and their view about physical indicator as -0.30 showing. Given that the significance level of correlation is less than 0.05, it is a significant relation (P<0/01, n=380, r= -0/30) with 95% confidence, it can be said that the lower the educational level, the more positive the respondents` view about the physical index of Khezr significantly. Have been more positive, and vice versa.

### Conclusion:

The results of this study showed that Khezr neighborhood has many limitations and deficiencies, including public spaces, service, and so on. Large parts of the neighborhood are extremely low in terms of the quality of buildings and their services. The lack of clear hierarchy in the access network and the lack of consistent utilities are other problems of this neighborhood. This neighborhood suffers from lack of facilities and equipment related to the construction of infrastructure and lack of planning. The presence of the different subcultures is a serious obstacle in improving the overall condition of the marginalized. Examination of the social, economic and physical situation indicates a poor level in the neighborhoods and the removal of the bad situation should be run outside the regular program. There must be basic planning and effort to solve Khezr neighborhood problems, especially in the matter of housing, as the neighborhood is part of the fabric of Hamadan. Economic

situation of residents is very important in terms of building quality as they use low durable materials due to financial weakness and they have built their houses without using experienced workers. In relation to land and housing rent in the neighborhood, it can be stated that there are no rules and specific provisions in this regard and prices are varied. The internal arrangement of the predominant housing type do not follow architecture and engineering construction housing situation but they follow the traditional type. Low durable houses with bizarre form along with heterogeneous streets and alleys have created discontinuity in the neighborhood resulting in physical, cultural and social problems in the city like the ugly stain son the city map.

Regarding the existing challenges in this study and the objectives considered about the informal settlements, there are some strategies and approaches to reconstruct and upgrade the neighborhoods which are proposed below:



**Fig. 8:** Strategies and approaches to reconstruction and upgrade the Khezr neighborhood

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