

Scrutinizing the role of tourism industry on reducing the housing unsustainability in informal settlements (Case study:Manoochehri neighborhood in Hamadan)

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Abstract

Today, tourism has become a highly successful and profitable industry in the world, especially in developed countries. Hamadan province in Iran has a lot of tourist attractions. According to statistics released by the Heritage, Handicrafts and Tourism Organization in the province, there are over 1831 historical and cultural recorded works in Hamedan province. Therefore, by investing in the tourism sector, the province can be turned into a tourist destination, helping to create jobs and increase people's income. This research is an applied one, conducted by field and observation methods. Thus, tourism can be considered as a rescue tool for sustainable urban development, especially in marginalized areas. In this research, the effect of tourism industry on decreasing housing unsustainability will be studied in one of Hamedan's marginal neighborhoods, Manoochehri neighborhood, emphasizing on sustainability components. Using a researcher-made questionnaire, the researcher analyzed the extent of each of the components to answer the research questions and, through the SWOT table, identified the strategy of intervention in the neighborhood to reduce the incidence of unsustainability and, in the end, considering the strategy and the results of the questionnaire, it has come up with the necessary strategies.

Keywords: *tourism industry, informal settlements, housing unsustainability, sustainable development.*

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Theoretical Literature

Sustainable development

Sustainability is a concept that focuses on the preservation of capital (human, natural, social, and economic) for intergenerational justice (Poor-Taheri et al., 2010: 13). According to Brent-land, sustainable development is an extension that addresses the current needs of the world without endangering the ability of the next generation to fulfill its needs, and that sustainable development is the bilateral interaction of humans and nature around the world (UNESCO, 1997: 13). In other words, sustainable development means the integration of economic, social and environmental goals to maximize the current welfare of the human being without compromising the ability of next generations to meet their needs (Mukomo, 1996: 13).

The theory of urban sustainable development

This theory is presented in support of environmental resources. The approach of this theory is to maintaining resources for the present and future through the optimal use of land and importing the least waste into non-renewable resources (Ziari, 2002: 28).

Sustainable housing

The type of housing that meets the current generation bio-needs based on the efficiency of natural energy sources will be sustainable. At the same time, it should create attractive and safe neighborhoods, while paying attention to ecological, cultural and economic issues (Dari, 2005). Sustainable housing means the concept of housing that is economically fit, socially feasible, environmentally friendly and technically possible (Chrles, 2007: 3).

Tourism industry

Tourism offers a range of activities, services and industries that provide travel facilities that include transportation, welfare, food and beverage facilities, retail stores, entertainment trade and other health services provided to individuals or groups and those who are away from home (Zahedi, 2006: 4). Tourism is a collection of phenomena

and relationships arising from the interaction of tourists, commercial suppliers, governments and host communities in the process of attracting and hosting tourists (Ansari, 2008:4).

Informal settlements (marginal neighborhoods)

Over the last decades, unofficial neighborhoods and informal settlements have been formed and expanded beyond the official development plan of the country's major cities, largely on the outskirts of major cities.

These automobile or peripheral neighborhoods are, more accurately, called informal settlements, and their main function is to provide land and construction patterns to the low-income migrant groups (Meshkini,2011:5).

Introduction

With the continuation of urban development, projections indicate an increase in environmental degradation and pollution in cities and urban areas. Following these developments and concerns, the prevalence of sustainable theory has grown stronger in recent years. Considering the city's role in the emergence of current unsustainability, the theory of sustainable urban development has gained a great importance for sustainable development. In the context of sustainable urban development, the housing sector plays a very important role and is one of the most important problems in the major cities on behalf of housing unsustainability in marginalized neighborhoods, which has been a great effort in the last decades to reduce unsustainability in such neighborhoods. Today, tourism is more than an industry and is known as a dynamic global and social phenomenon with its own complexities (Heidari-Chianeh, 2004: 26).

Many studies have shown that this industry, especially its urban branch, has a special place in the economies of countries and reduces social, economic and physical unsustainability. In this research, tourism has been used to promote and improve the living conditions of informal settlements and to create a suitable platform for sustainability indicators. One of the main domains of urban sustainable development is housing and living environment (Farhangi, 1995: 24), which has physical, social, economic and environmental dimensions. Given the widespread social, economic, and environmental impacts of housing on the urban environment, it can be seen that many of the goals of

sustainable urban development depend on sustainable housing development group. The Manoochehri neighborhood, as one of the marginal neighborhoods in the field of housing, faces many problems that cause unsustainability in various social, economic, physical and environmental dimensions. Since the city of Hamedan is a tourist city there are a lot of tourism attractions and capacities in this city. The researcher intends to examine how this trait can be used to reduce the housing unsustainability of marginalized communities and how this industry will help to sustain and improve living conditions in marginalized areas. Considering the impact of the tourism industry on the main indicators of sustainability (physical, economic, social, and environmental), we can provide areas for sustainable urban development.

The main objective of this research is to investigate the role of tourism industry in decreasing housing unsustainability in informal settlements and the other aims include examining the housing situation in the study area, investigating the extent of housing unsustainability in the studied area, and examining the role of tourism industry in reducing unsustainability of the housing.

Research Methodology

The applied research is descriptive-analytical, done by field and observational method. In this research, the researcher conducted a questionnaire to investigate the factors influencing the housing unsustainability in the study area and using quantitative software such as SPSS and SWOT table.

Research findings

Hamedan has been situated in western Iran with an area of 6285.8 hectares and according to the latest census in 2016, it has 554,406 inhabitants. This city is one of the tourist cities in Iran. The study area is Manoochehri neighborhood with an approximate area of 44 hectares and a population of 12490 people in northwest of Hamadan. In the immediate area of this neighborhood, the Army Blvd, Shahid Rajaei Blvd and Azadegan Blvd have a significant volume of internal and suburban traffic (Ahmadwand, 2017: 78).

Physical status of study area

In the Manoochehri neighborhood, 25 percent of buildings are one-floor, 37 percent two-floor, 18 percent three-floor, 4 percent four-floor,

and 16 percent are allocated to vacant land. According to the obtained data, two-floor buildings have the highest percentage in the area.

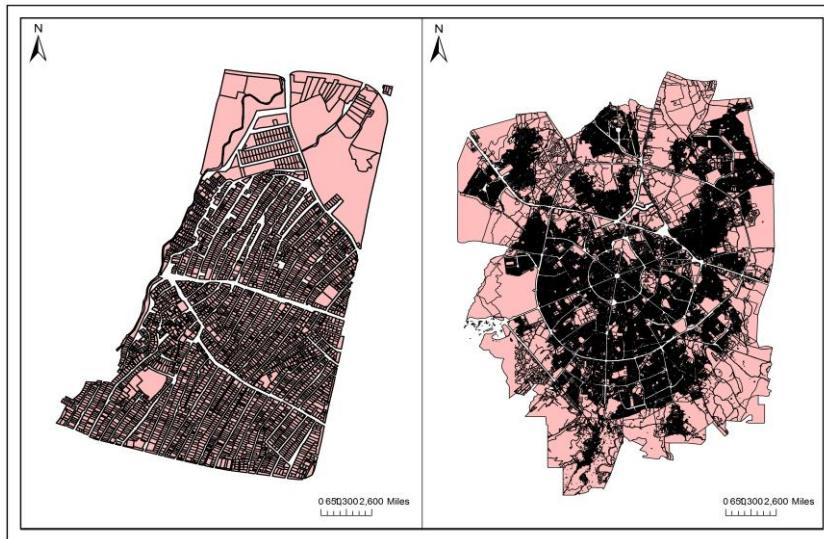


Figure 1: Map image introducing the studied area

Source: Technology Organization of Hamedan Municipal Information, 2017

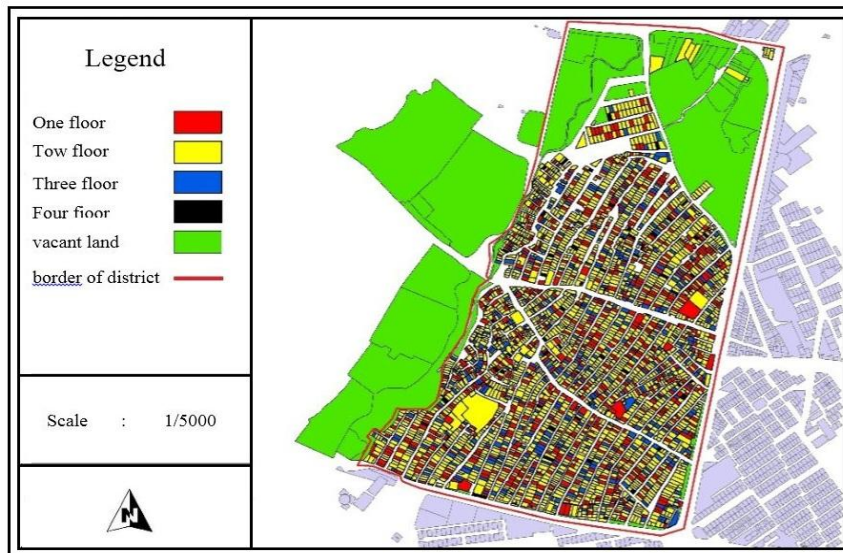


Figure 2: Map view of the number of classes in the study area Source: Research findings 2017

The age construction of 9% of the neighborhood buildings is between 0-10 years old, 24% of buildings between 10 -20 and 51% of

buildings over 20 years. Also, 16% of the space is occupied by vacant land.



Figure 3: The map of the operational map of the study area Source: Research findings 2017

70% of the study area was residential land-use, 6.5% commercial, 4.5% commercial-residential land-use, 25.2% educational, 0.25% medical treatment, 0.5% religious and 16% are devoted to empty land. Therefore, the dominant use of the neighborhood is residential property.

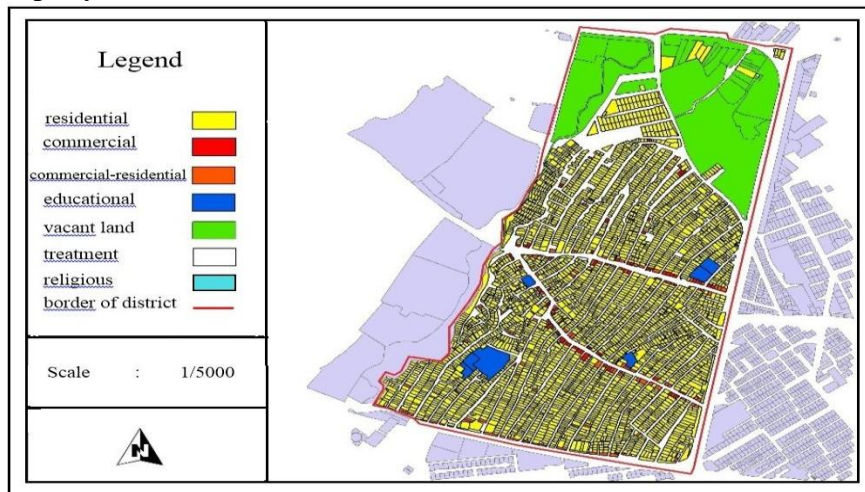


Figure 4: Map of the user area of the study
Source: Research findings 2017

Materials used in 20% of the sites studied are bricks, 38% cement, 16% stone, 10% lack of facade and 16% of the site is empty, so the physical appearance of the neighborhood is visually undesirable.

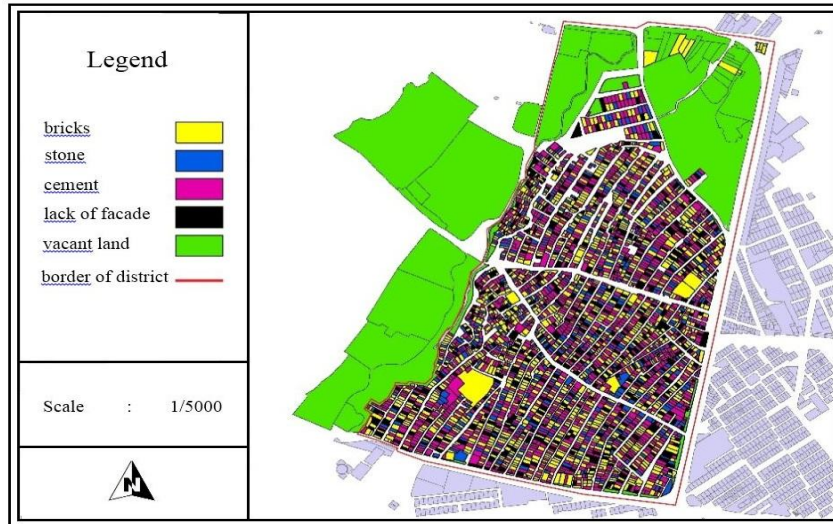


Figure 5: Map of the material of the material covered by the study area

Source: Research findings 2017

The sustainability status is studied through field studies as well as the extraction of information from the physical condition of the study area. In the following map, the sustainability of housing with four components (economic, social, physical, environmental) is shown in the study area.

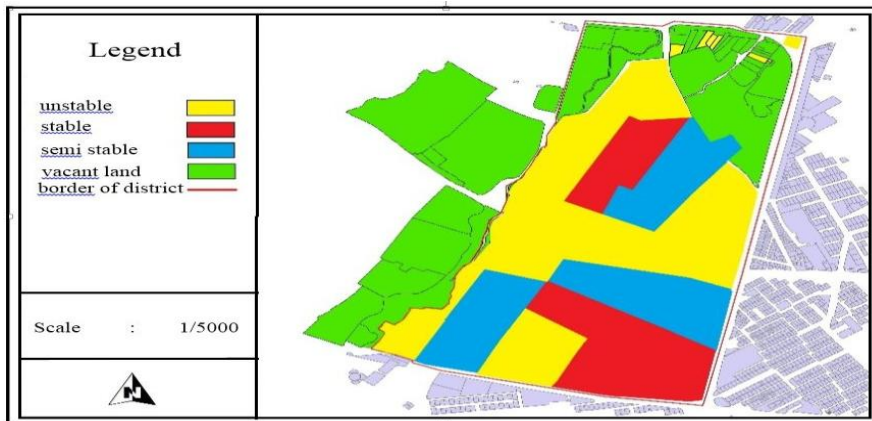


Figure 6: Map of the housing sustainability situation in Manoochehri neighborhood

Source: Research findings 2017

Analysis

In the beginning, before examining the results of the questionnaire, in this research, the researcher determined the strategy of intervention in the tissue by examining the internal and external factors affecting the research approach. The results show that, in the process of performing SWOT procedures, there is an offensive or maximal intervention in the area in question.

Table 1: Internal factors (strengths and weaknesses)

Strength	Score	Coefficients	Rate	Final Score
1 Topography and proper slope	4	0.08	4	0.32
2 The existence of a variety of services	2	0.04	3	0.12
3 Appropriate neighborhood access to incidental services	2	0.04	3	0.12
4 Low land and housing prices for investment	4	0.08	4	0.32
5 Low building density and low floor number	3	0.06	3	0.18
6 Readiness of residents to accept tourists	4	0.08	4	0.32
7 Accommodation of tourists in the residential context of the neighborhood	3	0.06	3	0.18
8 The suitability of urban facilities and facilities	2	0.04	3	0.12
Weakness				
1 Small scale housing and low durability of used materials	3	0.06	2	0.12
2 Low passageways	3	0.06	2	0.12
3 Lack of marginal parking space and high traffic volume in the neighborhood	3	0.06	2	0.12
4 Exhaustion of context and low durability of buildings	3	0.06	2	0.12
5 Lack of green space and neighborhood parks	2	0.04	1	0.04
6 Low income people and residents	4	0.08	2	0.16
7 Pollution due to flood waters and surface water flooding from the neighborhood	2	0.04	1	0.04
8 Low levels of social class housing in the neighborhood	3	0.06	2	0.12
9 Social disruption, social anomalies and its impact on social security	3	0.06	2	0.12
Total	50	1		2.64

Source: Research findings 2017

Table 2: Environmental factors (opportunities and threats)

Opportunities	Score	Weight coefficient	Rate	Final Score
1 The existence of higher education institutions and the museum of Natural History	3	0.12	3	0.36
2 Located next to the recreational and tourist resort of Heidareh	3	0.12	4	0.48
3 Appropriate access to tourist centers of the city	3	0.12	4	0.48
4 Placing in the entrance to the western part of the city	1	0.04	2	0.08
5 The existence of vacant land in the context of texture	3	0.12	3	0.36

6	The presence of suitable garden lands and placement on the beautiful Alvand	2	0.08	3	0.24
Threats					
1	Seasonality of tourism considering the city's climatic conditions	3	0.12	2	0.24
2	Traffic in junctions in Hamedan	2	0.08	1	0.08
3	The placement of marginal neighborhoods around the neighborhood	3	0.12	2	0.24
4	Abandoned lands, which are the location of insects and unhealthy waste	2	0.08	2	0.16
Total		25	1	2.72	

Source: Research findings 2017

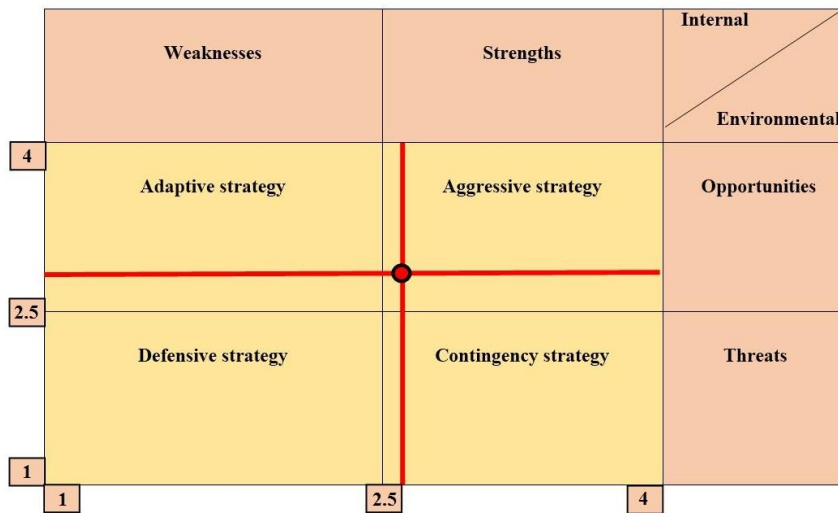


Figure 1: Determining the strategy

Source: Research findings 2017

Analysis of the status of tourism impact on the components of housing sustainability in Manoochehri, according to the research criteria:

Analyzing the subject of the research with SWOT method, authors studied the conditions of the unsustainability of the neighborhood through research approach. In this section, using Cochran's formula, 200 residents were interviewed by a researcher-made questionnaire and the degree of unsustainability of the four main components at the neighborhood level was examined and the impact of tourism was studied on these four components. Finally, it can be concluded that tourism has an impact on economic factors in reducing the housing unsustainability in the neighborhood, and tourism and its components

should be effective in improving the economic conditions and improving their income situation.

Table 3: Tourism effect on components

Tourism	Sum of squares	Degree of freedom	Average of squares	The amount of statistics	Significant level
Social	161.572	19	8.504	0.782	0.727
	1957.928	801	10.877		
	2119.500	199			
Economic	363.861	19	20.151	0.994	0.036
	3539.159	801	19.662		
	3903.020	199			
Environmental	105.140	19	5.534	0.553	0.934
	1801.180	801	10.007		
	1906.320	199			
Physical	564.153	19	29.692	0.670	0.845
	7979.442	801	44.330		
	8543.595	199			

Source: Research findings 2017

Conclusion

According to the results of the SWOT questionnaire and table, the main strategies for improving the conditions of unsustainability of the neighborhood with the attitude of using the tourism industry are as follows:

First strategy: utilizing topography and slope for standard construction and improving environmental conditions due to proper fluid flow.

Executive Policy:

1. Conducting the flow of water at the level of the study area by creating appropriate drainage in the main roads.
2. Development of leisure and recreation at the neighborhood level.
3. Strengthening urban facilities and equipment in damaged areas to improve the environmental components of the studied context.

Second strategy: Development of the studied neighborhood and improvement of its existing situation, taking advantage of low land prices and housing.

Executive Policy:

- 1- Encouraging public and private sector investors, taking into account the low price of real estate, and relying on the presence of tourists in the study area, to build welfare facilities and residential complexes in order to reach the desirable physical space and thereby achieve high economic cost for owner's capital.
- 2- Strengthening the business edge of the neighborhood in the main roads for easy access to the services needed for residents and tourists,

and ultimately creating dynamism and vitality, and strengthening the four main components of housing sustainability within the study area.

3. Strengthening the neighborhood landscape due to the low density of buildings and the low number of floors, through the creation of indicators such as buildings and green edges etc.

4. Use of garden lands with the approach of crop tourism.

Third strategy: attracting more tourists considering the readiness of city tourists.

Executive Policy:

1. Providing promotional fields to improve the better relations between residents and tourists through the creation of tourist sites within the studied area.

2. Participation of residents in the promotion and improvement of physical conditions of the place and provision of parking in the housings.

Fourth strategy: Achieve a desirable image, especially using social dimensions, due to the existence of higher education centers and the Museum of Natural History in the vicinity of the neighborhood.

Executive Policy:

1. Social participation of residents in changing the buildings view, building a school and the educational environment needed to strengthen the social dimension of the neighborhood.

2. Strengthening the cultural dimensions of the context by creating spaces for the social interaction of residents and tourists.

Fifth Strategy: To benefit from appropriate access to tourism centers, relying on the location of the study area, along with recreational and tourist destinations.

Executive Policy:

1. Extension of some passages, especially in the central section of the site.

2. Teaching local tourism guides from residents.

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