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Original Article

Effects of Tourism on Sustainable Rural Livelihoods
(Case Study: Saravan, Rasht County, Iran)

Reyhaneh Parvaneh Safa [1] - Majid Yasouri [*2] - Mehdi Hesam [3]

1- MSc. in Geography and Rural Planning, University of Guilan, Rasht, Iran.
2- Full Prof. in Geography and Rural Planning, University of Guilan, Rasht, Iran.
3- Assistant Prof. in Geography and Rural Planning, University of Guilan, Rasht, Iran.

Abstract

Purpose- Over the past decades, the improvement of sustainable rural livelihoods has received much attention and has been one of the main goals of sustainable rural development. One of the main approaches to improve rural livelihoods is the development of rural tourism. This has been considered by policymakers as a strategy to reduce rural poverty, especially in developing countries. Therefore, the present study is to investigate the impact of tourism on sustainable livelihoods.

Research limitations/implications- This is a descriptive-analytical study in which the documentary study method and field survey (questionnaire-observation-interview) were used in the case study of Saravan. The statistical population is 4233 Saravan rural households. In this framework, 360 household questionnaires have been completed based on the Cochran formula as a research sample.

Finding- The results have indicated that tourism in Saravan has not been able to play an effective role in the sustainable livelihoods of the local people (in institutional, economic, and human developments) and covers only some households. It can be concluded that tourism has had a greater impact on other aspects such as social and environmental issues. At the same time, with proper planning, people's livelihoods and abilities can be improved by promoting tourism and sustainable livelihoods.

Keywords: Sustainable tourism, Sustainable livelihood, Rural tourism, Saravan.

*Corresponding Author:
Yasouri, Majid, Ph.D.
Address: Department of Geography, Faculty of Literature & Humanities, University of Guilan, Rasht, Iran.
Tel: +98911 840 9218
E-mail: yasouri@guilan.ac.ir

1. Introduction

Today, it has become clear that in order to achieve development, it is necessary to pay attention to the villages as the basic sector. Given that the majority of the world's poor population lives in rural areas mainly in developing countries (Jumapour & Ahmadi, 2011) sustainable rural development decisions should include all levels of activity and location. Some of the solutions are the quality of life in local communities, including the economic, social, and environmental capital quality that leads members of local communities to produce and rebuild good lives. In sustainable development, the paths must be chosen in such a way as to create equal opportunities not only for the present generation, but also for the next generation, and this must be accompanied by the strengthening of economic, social, and natural resources and human capital. Sustainability requires that decisions and activities lead to investment in the capacities of the local community in order to strengthen that or, in special circumstances, not reduce the minimum natural, social, human or economic capital (Eftekhari & Badri, 2012). One of the strategies with positive consequences in most countries of the world in recent decades is the development and expansion of tourism in rural areas. Tourism is an industry that has long been considered by human societies and developed according to different social, economic and historical requirements due to the expansion of communication and a significant increase in the number of tourists and foreign exchange income and employment. Tourism in the current world is a clean industry and the third dynamic, thriving and developing economic feature after the oil and automotive industries (Ghaffari, 2007). The industry has economic, social, and cultural effects on the environment. The main advantages of the tourism industry in the economy are including employment and appropriate foreign exchange income, diversification of economic activities, improving the living standards of the people, improving the existing infrastructure and facilities. Economic effects of tourism include women's employment, youth employment, tourism employment growth, general employment growth, increased employment in the service sector, attracting surplus labor in the agricultural

sector, increasing people's income, economic welfare, increasing land prices in tourist areas, local attractions such as handicrafts and their rising prices. Rural tourism has a wide scope and plays a key role in the diversification and economic growth as well as the creation of job opportunities in close connection with other economic sectors. The main purposes of the rural visitors are to see social and cultural customs, pilgrimage to tombs and religious centers, rural economic activity, the texture of the village architecture, natural landscapes, mountains and bumps and mountaineering, the tranquility of nature and mental and physical treatment and many other attractions (Ghasemi, 2009); Therefore, tourism can be an important factor in improving the livelihood of villagers and increase their income levels along with other activities including agriculture and animal husbandry, etc. This can have significant economic, socio-cultural, environmental, and physical-spatial effects on the host society (Mohammadi et al., 2017). One of the approaches in the framework of sustainable rural development is diversification of economic activities. It is generally believed that diversity is the foundation of stability, and as the system becomes more diverse, stability and dynamism are maintained over time and in different places not only against internal stresses but also against external stresses (Ghasemi, 2011). Hence, diversification in the economic activities of the rural areas based on the capabilities and opportunities, and capacities can strengthen the economic development of the villages. Therefore, special attention is paid to strengthening entrepreneurship and creating a suitable environment for its development as one of the main tools for the progress and development of countries, especially developing countries; because an activity with an entrepreneurial approach leads to sustainable economic, social, and environmental development including job creation, innovation in activities, competitiveness, environmental protection, etc. Entrepreneurship in rural areas is formed in different areas and has different forms. One of the most important areas in most rural areas is entrepreneurship in the field of tourism. An important reason for paying attention to entrepreneurship in the rural tourism sector is that as the demand for various tourism processes in rural areas increases, so does the

need for diversification of tourism services and products. Therefore, the formation of demand for rural tourism in its various forms indicates the creation of potential entrepreneurial opportunities in rural areas. This can become a stage of entrepreneurial action (Sojasi Gheidari et al., 2016). Therefore, the development of non-agricultural sectors and diversification of activities in rural areas is the main solution for rural development in many communities and improves the living conditions of rural areas. This research is done with a sustainable livelihood approach. Livelihood is a complex system that includes environmental, economic, social, and institutional dimensions (Lan et al., 2021). According to Chambers and Conway, sustainable livelihoods are the capabilities, assets (warehouses, resources, and access to resources), and activities (jobs) necessary to earn a living. Livelihood is mentioned as sustainable is it can strengthen or maintain the capabilities and assets, be economically effective, be ecologically safe, and ensure that livelihood activities do not destroy the ecosystems' natural resources and are socially equitable and provide sustainable livelihood opportunities; it should also be sustained for the next generation and to create net benefits for the livelihoods of others at the local or national level and in the short or long term (Chambers & Conway, 1992).

Recognizing the issues and problems of the village and providing logical solutions for them is one of the basic measures to achieve the goals of sustainable rural development. Given that tourism plays an important role in rural development and increases employment and income, attention to this sector is today necessary for the purposes. One of the provinces, where has been the destination of many visitors in recent years, is Guilan province, among which rural areas are of interest to many tourists. One of these rural areas is the Saravan district, a place with the predominant activity of many traditional agricultural villagers. The region alone cannot provide employment and income and as a result, it is not enough for the rural community. Thus, searching for new ways and diversification of activities to strengthen livelihood is one of the necessities that tourism is considered as one of the appropriate solutions to create employment and increase the income of the villagers. Tourism in Saravan rural district has played an important role

as a platform for economic activity and the livelihood of a large part of the population. Saravan village with its beautiful natural landscape and temperate climate has unique landscapes and effects. The view of paddy fields, forests, heights, and green slopes is a small part of the indescribable and attractive beauty of Saravan. Due to its location in the vicinity of the main road welcomes many tourists to the area every day, which boosts tourism businesses and can increase travelers' homes. So, it can improve the livelihood of the villagers. Given the tourism activities, it is required to examine the effects of tourism upon livelihood to provide the ground for sustainable rural development to strengthen its positive effects in this area and other rural areas, and also to prevent the negative effects. This is necessary to devise plans to improve this program. Therefore, the main research question is what effects tourism can have on the sustainable livelihood dimensions of the study area?

2. Research Theoretical Literature
Rural communities can rarely be economically viable without a diversified economic structure. Tourism and recreation are increasingly becoming an important part of this structure. This indirectly considers the attention to sustainability in terms of tourism opportunities, the coordination of these opportunities, and their ability to attract the visitors and keep them satisfied and coming in the future. Accordingly, rural tourism helps the program protect cultural heritage and natural environment by creating employment, increasing income levels, diversifying economic activities, increasing the level of social awareness and establishing broad social relations between the host and guest communities, and by preventing involuntary migration and optimization using useful land use management for sustainable rural development (Roknaddin Eftekhari & Ghaderi, 2002; Rezvani, 2008). The development of rural tourism as an opportunity provides economic stimulation and reduces rural community dependence on agriculture (Gavrilă-Paven, 2015). Thus, sustainable rural development should consider tourism as a link in the policy-making that regulates the public and private sectors for rural development. Today, sustainable tourism in many countries is a symbol of cultural, natural, human identity as one of the important economic sectors. Therefore, sustainability in tourism

requires systematic attention to the technical, cultural, political, economic, historical, and environmental dimensions in moving towards the use of tourist attractions by the needs of today and the preservation of these resources for the future. Tourism can revive the economy of local communities by participating in job creation and income generation, and can also contribute to strengthening local culture and changing the preservation of the environment or the reconstruction of the natural and man-made environment (Karimi & Mahboubfar, 2012). In this view, the concept of sustainable livelihood

emerged as an efficient approach derived from the context and broad theory of rural development (Jumapour & Ahmadi, 2011). Therefore, it is necessary to pay attention to the rural development literature to better understand the approach to sustainable living. Since the 1950s, the concept of development has historically grown from four important schools of thought, namely modernization, dependency theory, alternative development, and sustainable development (Welch, 1984, and Clancy, 1999, cited in Baghiani, 2014). The table below shows the developments of the four theoretical schools.

Table 1. Evolution of theories related to development, rural development, and tourism development

Period	Development	Rural development	Tourism development
1950-1960	Modernization	Population and technology model	Advocative approach
1960-1970	Intimacy theory	Political economy land changes	Conservative approach
1980	Replacement development	Agriculture development	Consistency approach
After 1990	Sustainable development	Sustainable livelihood	Science oriented approach

In the 1950s and 1960s, development is interpreted as a planned change in construction, production, and employment in the agricultural, industrial, and service sectors (Azkia & Imani, 2008). In the late 1960s, the poor temporarily had access to the benefits of rapid growth, which was the Green Revolution. The Green Revolution was introduced in the 1960s to combat famine, hunger, and poverty in rural areas of developing countries (Kalantari & Qomi, 2008). In the early 1970s, changes in development-related concepts were introduced, and the eradication of poverty and hunger and the satisfaction of basic needs instead of relying solely on economic growth became an important issue. Therefore, different definitions and perceptions of development were presented (Azkia & Imani, 2008). The third stage of rural development was the theory of agricultural development, which prevailed in the 1970s with an emphasis on small-scale agriculture. In a way, this theory has been prevalent for nearly 20 years (Ellis, 2000). This view, along with the basic needs approach, was criticized in the 1980s for failing to reduce rural poverty and increase income inequality, despite a slight improvement in farmers' welfare levels. Therefore, the need for a holistic and integrated view of rural development was necessary. The concept of sustainable livelihood emerged to moderate and ultimately eradicate rural poverty (Abdullahzadeh & Salehi, 2016). In the case of the tourism

program, the four-axis framework clearly describes the evolution of the industry. The first axis (advocacy) considers the industry as flawless so that the economic cooperation of that is widely supported. This trend became known after World War II and became part of the modernization paradigm. At the beginning of the 1960s, this axis was gradually replaced by the second axis "caution". This considers the negative prospects of tourism and criticizes seasonal employment and lack of specialization, destruction of the natural environment, and division in the structure of the host society. The caution axis is directly related to the theory of dependence. Over time, debates between advocacy and caution led to a third axis (adjustment) in the early 1980s. It seeks to develop alternatives to mass tourism in response to growing concerns about the negative effects. Specifically, adjustment follows the pattern of the alternative development paradigm. It is the fourth (knowledge-based) axis that emerged in the early 1990s and can be compared to the sustainable development paradigm. Unlike the advocacy and warning of axes, which focus on the effects of tourism, and the adjustment axis, which focuses on forms of development, the fourth axis emphasizes the holistic thinking of tourism as a system including the structures and functions (Jafari, 1990; Baghiani, 2014). Based on what has been mentioned, the shape of a diagrammatic framework shows the relationship

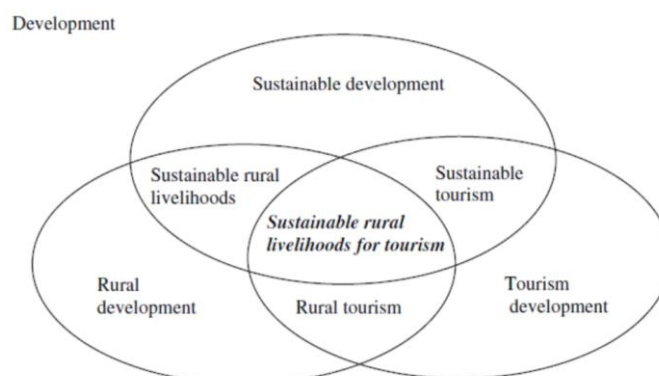between sustainable livelihood and tourism   development.

Figure 1. Diagrammatic framework of the relationship between sustainable livelihoods and tourism development
(Source: Shen et al., 2008)

One of the main approaches to the improvement of sustainable rural livelihood is to pay attention to tourism development (Bameri et al., 2019). Many researchers have emphasized tourism as a key solution to rural development and poverty reduction in these areas (Gao & Wu, 2017). Tourism-oriented sustainable livelihood framework is one of the new analytical approaches in the field of rural development, which in recent years has attracted much attention in the study of rural development and poverty reduction (Azami & Hashemi Amin, 2017). The industry increases the overall sustainability of livelihoods by creating a variety of livelihoods (Su et al., 2019). The sustainable living approach begins with the idea of how people live in different places. In a simple definition, livelihood refers to the capabilities, resources, and activities needed to make a living (Chambers & Conway, 2010). The most important feature of this definition is the direct attention to the relationship between resources and the choices that individuals can make in practice for alternative income-generating activities. For example, lack of education indicates low levels of human capital. Therefore, people without education or with low levels of education are deprived of the activities that qualify and require a certain level of education. Another important feature of this definition is the degree to which individuals and households have access to various resources, opportunities, and services. Access to resources is determined by social laws and norms. This is also affected by social relationships. Access also refers to the ability to participate and use social and public services (such as education, health, roads, and drinking water) provided by the government. A livelihood system consists of assets (natural, physical, human, financial, and social), activities, and access to these assets (through institutions and social relationships) that together make up the life of the individual or family (Ellis, 2000). Sustainable livelihood thinking was introduced in the 1980s as a new approach to rural development to reduce and eradicate rural poverty. This approach emphasizes a comprehensive and coherent way of thinking about poverty reduction and rural development and quickly gained great popularity among researchers and developers (Abdullahzadeh & Salehi, 2016). In this regard, Bameri et al., (2019) in the article about sustainable livelihoods of traditional villages through tourism development (Case study: Nahuk village, Saravan city) concluded that there is a linear and significant relationship between tourism development and sustainable livelihoods. The highest impact of tourism in the study area was related to the institutional factor and the lowest impact was related to physical-environmental factors. Findings of Beshkar et al., (2019) in the article entitled Support of local communities for tourism development and its relationship with the sustainable livelihood of border villages of Chabahar city showed that tourism development has a significant relationship with economic sustainability. Mohammadi et al., (2017) in the article about the effects of tourism on the sustainable livelihood of rural households, from the perspective of the host community in Oraman section of Sarvabad city, concluded that

tourism has a positive effect on humans, social, physical, natural and financial dimensions of villagers. The results also showed that all aspects of sustainable livelihood (human, social, natural, physical, financial) have a significant impact on the sustainable livelihoods of villagers. Abdullahzadeh and Salehi (2015) in an article entitled "The effect of tourism on sustainable rural livelihood in Golestan province" concluded that the five livelihoods in the studied villages were below average and in poor condition. The results of Jumapour and Goodarzi (2015) with the title of tourism supporting the poor, a strategy for balanced and sustainable development of rural communities (Case study: Vali-e-Asr village near Persepolis) also showed that although tourism has been able to improve cultural and environmental capabilities. For example, strengthening language skills and raising awareness of villagers has a positive effect, but overall tourism has not been able to reduce the poverty of villagers. Ghadiri Masoom et al. (2014) in an article entitled leveling of subsistence capital in mountain tourism on villages of Taleghan city revealed that the situation of the studied villages in subsistence capital is not suitable. Despite their human and natural attractions, these villages have not been able to find a suitable position in terms of capital. The study of Jomehpour and Kiomars in 2012 entitled "Study of the effects of tourism on assets and livelihood activities of people in the context of sustainable tourism livelihood (Case study: Ziarat village) demonstrated that tourism in Ziarat village has not been able to play an effective role in sustainable livelihood and that the positive effects of tourism have not been effective except in some indicators.

Pasanchay and Schott (2021) in a study examining the capacity of rural tourism resorts to achieve sustainable livelihood stated that rural resorts have a high capacity to achieve sustainable livelihoods, which, of course, require proper planning and management. Azami and Shanazi (2020) in an article examined the livelihood effects of wetlands on sustainable livelihoods in Zarivar wetland in Iran. According to their

conclusions, the wetland has had a great impact on the lives of the people of the region in five dimensions of livelihood capital including financial, natural, human, physical, and social. Su et al. (2018) in a study of livelihood sustainability in China's rural tourism destinations concluded that tourism as a complementary activity has increased income and livelihood sustainability in rural communities in the study area. Wu & Pierce (2014) explored the effects of tourism on sustainable livelihoods in Lhasa and Tibet and indicated that there were different and conflicting views among the host community. From this participation, more local people and more attention to their opinions are necessary to make the most of the positive effects of tourism. Shen, et al., (2008) also investigated the relationship between sustainable livelihoods and tourism. According to the larger and broader approach to sustainable tourism, the use of the sustainable tourism livelihood approach was suggested. According to the issues raised in the research background, the present study has a comprehensive look at the various dimensions of the impact of tourism on sustainable rural livelihood.

3. Research Methodology
3.1 Geographical Scope of the Research
The present study was conducted in Saravan village in Rasht city, Iran. Saravan village has 7 villages. The holy shrine of Imamzadeh Hashem, the Saravan Caravanserai known as the Shah Abbasi Caravanserai, five hundred years old, the Saravan Forest Park, the Museum of Cultural Heritage, and Natural Landscapes, welcomes many tourists to this area every day. It seems that due to the unemployment problem (unemployment rate in Saravan rural district is 15.1% compared to Guilan province which is 12.7%), land per capita (land per capita in Saravan rural district is 0.09 compared to Rasht city which is 0.16, and the employment of about 37% of agricultural workers and a large number of job seekers show that the need to create non-agricultural job opportunities is inevitable.
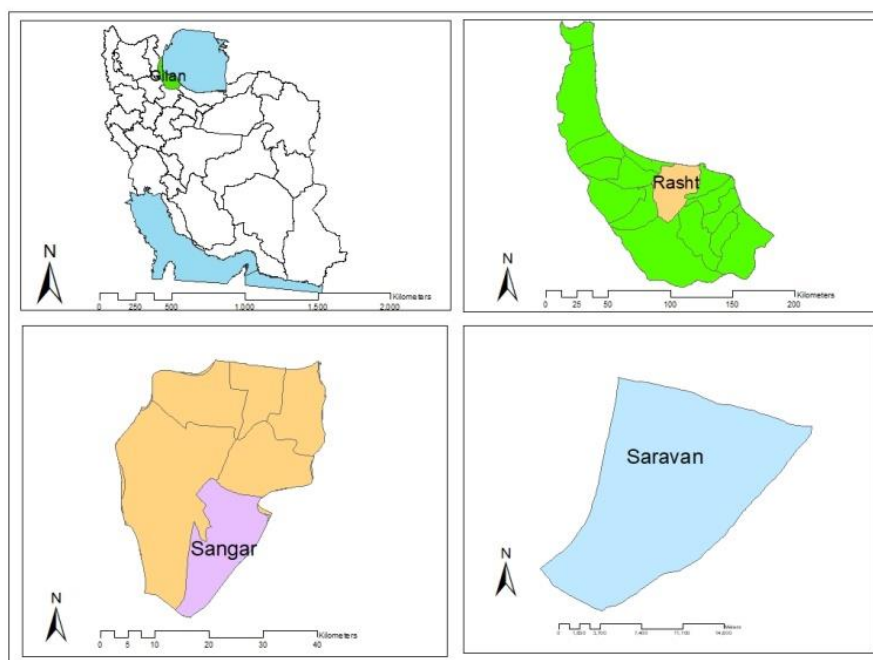
Figure 2. General location of Saravan village in Guilan province

3.2. Methodology

The present study is applied research in terms of purpose and descriptive-analytical in terms of nature. Data collection tools in this study include two methods of library and field survey. The statistical population in this study is the rural areas of Saravan rural district in Rasht city and the level of household analysis is the statistical population based on the general population and housing census of 95 in Saravan rural district with 4228 households. The number of research samples was estimated at 360 households using the Cochran sampling method. The validity of the questionnaire was confirmed by 8 professors of the Department of Geography, University of Guilan.

Table 2. indicators and items of the research
(Jomepour & Kiyumars, 2012; Abdullahzadeh & Salehi, 2015; Sojasi Gheidari et al., 2015; Jomepour, 2011; Rezvani, 2008; Hiedari Sarban & Maleki, 2015)

Indicator	
Economic capital	Satisfaction with household income, interest in investing in tourism, supply, and sale of handicrafts in the village
Institutional capital	The level of activity in the tourism market, the individual's share in the benefits of tourism development, the level of support of customary laws for tourism activities, the support of individual initiatives in the field of tourism, the level of participation in tourism management, and administration, the level of participation in the tourism decision-making process
Human development	Promotion of personal education, the amount of education for the active workforces in the tourism sector, tourism and promotion of household education and the advances in skills, the prevalence of tourism, and the desire to study about that
Economic development	Tourism and increasing job diversity in the family, increasing the price of local products, improving the situation of ambient lighting, the impact of tourism on job creation, improving the condition of roads, rural tourism and improving the quality of rural housing, improving the situation of rural telecommunications, improving the drinking water situation, improving household income, increasing the price of local products consumed by tourism, increasing the price of services due to tourism development, increasing the price of land due to tourism development, access to health education services, improving educational services
Social development	Access to daily information with the development of tourism, the number of recreational facilities with the arrival of visitors, increasing the value of local traditions and customs with the development of tourism, the negative impact of tourism on people's norms and values, reducing local security, tourism expansion, and

Indicator	
	rural conflict, increasing the status of women in the household, changing attitudes towards women, promoting social relations, social solidarity of local people, strengthening trust in local people, expanding tourism and migration of people to the countryside
Environmental development	Increasing the attractiveness of village landscapes with tourism, tourist visits and damage to the surrounding environment, damage to agricultural lands, damage to surrounding gardens, increasing the volume of garbage in the village, the impact of visitors on environmental protection, introduction of village attractions, tourism activities and declining quality of water resources
Institutional development	Participation in decision-making and development of tourism, the level of cooperation with tourism-related groups, the need to develop tourism activities in the village, the need to form a cooperative or non-governmental organization for tourism, change in social status with the development of tourism

This study was conducted in a similar area of the statistical population of the case study. In the survey, 40 questionnaires were filled and the reliability of the research questionnaire was 0.93 according to Cronbach's alpha in SPSS software. The questionnaire was designed based on the Likert scale (very low, low, medium, high, and very high). After collecting data (360 questionnaires were collected, the share of each village is based on Table 3). Rural descriptive household information and their classification have been analyzed using inferential statistical methods in SPSS software.

Table 3. Sample villages and the number of selected questionnaires

Village name	number of Households	number of questionnaires
Emamzade hasehm	740	60
Jokoolbandan	26	7
Saravan	1837	154
Ghazian	993	83
Kacha	104	10
Golsark	437	36
Mooshanka	96	10
District	4233	360

4. Research Findings

According to the results, 260 respondents, or 72.2% of them are men and 100 individuals or 27.8% of them are women. Also, the average age of the respondents is 37.84 years old; the minimum and maximum age of the respondents is 16 and 67 years old, respectively.

Also, the highest percentage of respondents is in the age group of 26 to 35 years, which is equal to 41.1% of the total sample size. Among the sample, 130 people, or in other words, 36.1% have a diploma with the highest frequency, 7 people or 1.9% have a master's degree or higher, with the lowest frequency in the study sample. Regarding jobs of the respondents, 98 people have freelance jobs (occupations such as road transport, day laborer, salesman, tailor, etc.), which includes 27.2% of them, as well as 236 people, or in other words, 65% of the sample did not have a secondary job. Regarding tourism-related jobs, 39 people (10.8%) had tourism-related jobs as their main occupations such as selling souvenirs and local products, dining and restaurants, renting houses to tourists, etc. Regarding the secondary jobs of people, 40 people (11.1%) have side activities in the tourism sector. In this study, the main dimensions and elements of the research are including economic capital, institutional capital, human development, economic development, social development, environmental development, and institutional development based on the items of these elements. In economic capital, based on the obtained results, the highest average is obtained in the item of the interest in investing in the tourism sector with a rate of 3.17 and the lowest average is for the item of satisfaction with household living income (1.92). The average of the variable or dimension of economic capital was 2.38 with a standard deviation of 0.81 and a coefficient of variation of 34%. The lowest

coefficient of change in the items belongs to the supply and sale of handicrafts in the village,

which indicates greater homogeneity in responding to the item.

Table 4. items of economic capital

No	Items	Descriptive		
		Mean	SD	Change (%)
1	Satisfaction of family livelihood	1.92	0.86	45
2	Interest in investment in tourism	3.17	1.4	44
3	Sales of handicrafts in the village	2.04	0.85	42
	Economic capital	2.38	0.81	34

In institutional capital, the highest average was obtained in terms of activity in the tourism market and the level of support of customary laws for tourism activity with a rate of 2.04, and the lowest average was obtained in terms of participation in tourism management and administration with a rate of 1.15. The mean of the variable institutional capital dimension was 1.69 with a standard deviation of 0.63 and a coefficient of variation of 37%. The lowest coefficient of change in the items belongs to the level of participation in the management and administration of tourism with a rate of 34%, which indicates greater homogeneity in responding to the item. Institutional tourism in terms of interviews with local people and field results is less than normal and somehow lacking in usefulness is necessary by looking at the items of institutional capital. This shows that the role and activity of respondents in the tourism market

such as selling local products, renting houses can play a significant role in the sustainability of rural livelihoods. According to researchers in the region, people do not have a significant share in the benefits of tourism and have little participation and management in the decision-making process of tourism. The item of tourism management and administration and also individual initiatives in the field of tourism are not sufficiently supported. In fact, given that the actors in the tourism market, including renting houses and selling local products, are working and to some extent, customary laws support tourism activities, but it has a small share of tourism development benefits, and their initiatives are not supported. The decision-making in the management of tourism affairs is derived from top to bottom, and local activists working in the field of tourism are not involved.

Table 5. institutional capital items

No	Items	Descriptive		
		Mean	SD	Change (%)
1	Activity in tourism market	2.04	1.25	61
2	Share of people in tourism income	1.95	0.83	42
3	Legal support of tourism activity	2.04	0.91	45
4	Support of personal innovation	1.53	0.65	42
5	Participation in tourism management	1.15	0.39	34
6	Participation in tourism decision making	1.43	0.88	62
	Institutional capital	1.69	0.63	37

In human development, based on the obtained results, the highest average is the prevalence of tourism in the villages of the region and the desire to study in this field with a rate of 2.34 and the lowest average is the level of education for the active workforces in the tourism sector with 1.24. The mean of the human development variable or dimension was 1.82 with a standard deviation of 0.68 with a coefficient of variation of 37%. Also,

in this regard, the lowest coefficient of change in the stated items belongs to the amount of training for the active force in the tourism sector with a rate of 41%, which indicates greater homogeneity and homogeneity in responding to the item.

Table 6. human development items

No	Items	Descriptive		
		Mean	**SD**	**Change (%)**
1	Advance in personal education	1.83	0.88	48
2	Education for active work forces	1.24	0.51	41
3	Family education advance	1.54	0.83	54
4	Skill development	2.19	1.2	55
5	Interest in education in tourism	2.34	1.27	54
	Human development	1.82	0.68	37

The highest average obtained in economic development was obtained by the increase in the price of land due to tourism development by 3.85 and the lowest average was obtained by tourism and improving household income by 1.74. The average of the variable or dimension of economic development was 2.35 with a standard deviation of 0.52 and a coefficient of variation of 23%. Also, the lowest coefficient of change in the items belongs to the land price increase due to tourism development with a rate of 24%, which indicates greater homogeneity in responding to the item.

Table 7. economic development items

No	Items	Descriptive		
		Mean	**SD**	**Change (%)**
1	Increase in diversity of jobs	2.1	1.09	52
2	Increase in price of local products	2.69	1.08	40
3	Improvement in lightening	2.39	1.03	45
4	Tourism effects in job creation	1.89	1.17	62
5	Improvement of local roads	2.27	1.03	45
6	Improvement of rural houses	2.6	1.01	39
7	Improvement in rural tele-communication	2.33	1.05	45
8	Improvement in rural drinking water	2.36	1.17	50
9	Improvement in family income	1.74	1.2	69
10	Increase in price of local products	2.16	0.7	32
11	Increase in price of services	2.27	0.71	31
12	Increase in land price	3.85	0.91	24
13	Access to health education	2.39	0.73	31
14	Mm in education services	1.83	0.71	39
	Economic development	2.35	0.54	23

The highest average obtained in social development is the item of tourism and reduction of security in the villages of the region due to the inverse of this item (tourism and local security) with a rate of 4.31 and the lowest average is for the item of recreational facilities with tourist arrival with a rate of 1.78. The mean of the social development variable or dimension was 3.32 with a standard deviation of 0.44 and a coefficient of variation of 13%. The lowest coefficient of change in the stated items belongs to tourism and local security (20%). This indicates greater homogeneity in responding to this item.

Table 8. social development items

No	Items	Descriptive		
		Mean	**SD**	**Change (%)**
1	Access to daily information	3.25	0.85	26
2	Increase in recreation facilities	1.78	0.62	35
3	Increase in values of local customs	3.32	0.77	23
4	Effects on rural norms and traditions	3.99	1.02	25
5	Effects on local security	4.31	0.85	20
6	Increase in conflicts in village	3.98	1.08	27

No	Items	Descriptive		
		Mean	**SD**	**Change (%)**
7	Increase in women place in village	3.08	1.04	34
8	Effects on views against women	3.13	1.06	34
9	Effects on promotion of social relations	3.46	0.87	25
10	Unity among rural people	3.33	0.83	24
11	Promotion of trust among local people	3.14	0.92	29
12	Immigration towards the villages	3.04	0.92	30
	Social development	3.32	0.44	13

In the development of the environment, based on the obtained results, the highest average was obtained as the effect of tourists on environmental protection by the respondents with a rate of 3.94, and the lowest average was obtained for tourism activities and the decline in quality of water resources with 2.85. The mean of the variable or dimension of environmental development was 3.35 with a standard deviation of 0.66 and a coefficient of variation of 19%. The lowest coefficient of change in the items also belongs to the effect of tourists on the preservation of the rural environment with a rate of 20%, which indicates greater homogeneity and homogeneity in responding to the item.

Table 9. environmental development items

No	Items	Descriptive		
		Mean	**SD**	**Change (%)**
1	Increase in aesthetic views of rural landscape	2.91	1.03	35
2	Damage to environment	3.2	1.24	39
3	Damage to farms	3.73	1.22	33
4	Damage to orchards	3.7	1.2	33
5	Increase in garbage in environment	3.12	1.28	41
6	Environmental conservation by local people	3.94	0.79	20
7	Introducing attractions to visitors	3.69	0.83	22
8	Decline in quality of natural resources	2.85	0.94	33
	Environmental development	3.39	0.66	19

Based on the results obtained in institutional development, the highest average was obtained for the need to form a cooperative or non-governmental organization for tourism development with a rate of 4.58 and the lowest average was obtained for participation in decision-making and tourism development with a rate of 1.86. The mean of the variable or dimension of institutional development was 3.09 with a standard deviation of 0.62 and a coefficient of variation of 20%. The lowest coefficient of change in the items belongs to the need to form a cooperative or non-governmental organization for tourism development (12 %). This indicates greater homogeneity in responding to this item.

Table 10. institutional development items

No	Items	Descriptive		
		Mean	**SD**	**Change (%)**
1	Participation in tourism decision making	1.86	1.01	54
2	Cooperation with tourism related groups	1.84	1.11	60
3	Need for development of tourism activites	4.19	0.82	20
4	Necessity for establishing NGOs	4.58	0.57	12
5	Changes in social position	2.96	0.78	26
	Institutional development	3.09	0.62	20

The results of measuring the livelihood development of villagers and its dimensions in the study sample using a single-sample t-test are presented in Table 11. The results of the test at the

intermediate level indicate that the situation of livelihood development based on the development of tourism in social, environmental and institutional dimensions is in a favorable situation and for human, economic and livelihood development dimensions it is in an unfavorable situation. The highest average is related to livelihood sustainability after environmental development with 3.39 and the lowest average is related to human development dimension at 1.83. Given the average dimensions and spectral nature of the data, it can be inferred that each of the means is higher than the average or normal (3+), so tourism has a positive role and effect on that dimension. With these interpretations, tourism has the greatest impact on the dimensions of social development, environmental development, and institutional development in the Saravan district.

Hence, the t-statistic for livelihood development was -8.82 at a significance level of p≥0.01, so it can be inferred that livelihood development based on tourism development in Saravan rural district is at an undesirable level and lower than normal condition. The rate of t-statistic for the dimensions of human development (t-statistic: -32.7), economic development (t-statistic: -22.27) is lower than normal and for the dimensions of social development (t-statistic: 13.44), environmental development (statistics t: 11.2) and institutional development (t: 2.63) were higher than normal at a significance level of p≥0.01. According to the results, the situation of livelihood development based on tourism development in Saravan rural district is at an unfavorable level and is lower than the average normal level.

Table 11. Assessing the status of livelihood development and its dimensions based on t-test

№	Dimension	Mean	SD	SD error	Test level = 3					Status
					Mean difference	T-statistic	p- Sig level	Confidence level 95%		
								Lower	Higher	
1	Human development	1.83	0.67	0.03	-1.17	-32.7	0.000	-1.24	-1.1	Unsuitable
2	Economic development	2.35	0.54	0.02	-0.65	-22.57	0.000	-0.71	-0.59	Unsuitable
3	Social development	3.32	0.44	0.02	0.32	13.44	0.000	0.27	0.36	Suitable
4	Environmental development	3.39	0.66	0.03	0.39	11.2	0.000	0.32	0.46	Suitable
5	Institutional development	3.09	0.62	0.03	0.09	2.63	0.009	0.02	0.15	Suitable
	Livelihood development	2.79	0.44	0.02	-0.21	-8.82	0.000	-0.25	-0.16	Unsuitable

State 12 shows the average rankings of each dimension of livelihood sustainability. According to the results obtained from the table, the social development variable with an average of 4.14 has

the highest average and the best rank in terms of the role of tourism in livelihood sustainability and human development with an average of 1.25 has the lowest average and rank.

Table 12. Mean livelihood sustainability ratings in the study sample

No	Stability	Mean rank	Rank
1	Human	1.25	5
2	Economic	2	4
3	Social	4.14	1
4	Environment	4.12	2
5	Institutional	3.49	3

Table 13 shows the results of the Friedman test on the role of tourism on livelihood sustainability in the Saravan district. Based on the obtained results, the rate of chi-square is twice equal to 989.75 and the degree of freedom is 4, with the significance level of the test at P <0.01. This can be said with a 99% confidence level that the situation and

position of sustainable livelihood development in Saravan rural district are different. Accordingly, the highest impact in this regard belongs to the social development index and the lowest impact is related to the human development index.

Table 13. Results of Friedman test on livelihood sustainability in Saravan District

Quantity	Chi-Square	Degree of freedom	p- sig level
360	989.754	4	0.000

The most effective role tourism can play in the sustainability of livelihood development is occurred in a social and environmental dimension, in which the impact of tourism is considered in promoting social relations, strengthening unity, solidarity, trust, promoting the status of women, and access to everyday information. Most people pay attention to preserving the environment and introducing the attractions of the village to tourists. In the institutional context, the impact of the sale of local products, rent, as well as optimal and efficient management, and the participation of local people can play a significant role in sustaining the livelihood of villagers. Economically, it has had an impact on rising land prices, local products, the quality of rural housing, and so on. Tourism has not had much effect on increasing the level of education of villagers, improving the skills related to tourism and the level of education about tourism. Most of the effects of tourism and activities in this field are more influenced by environmental conditions. Accordingly, the highest impact belongs to the social development index and the lowest impact is related to the human development index. Multivariate stepwise regression was used to identify the relationship between sociological characteristics of the study sample such as their education and age and the impact of tourism on the livelihood of rural households in Saravan rural district in general. The assumptions of performing regression tests are initially conducted to evaluate the validity of the results. Since there is no autocorrelation among the errors, so, Durbin-Watson index can be used. According to the obtained result, there is no correlation between the errors and the above test. Based on the obtained assumptions, the variables have been used to investigate the relationship between demographic characteristics (education, age) and the impact of tourism on the livelihood of local people in general. Table 14 summarizes the stepwise regression model regarding the relationship between demographic characteristics (education, age) and the impact of tourism on the livelihood of villagers in general in the study area. Therefore, based on the findings of the above test, R or the correlation coefficient of research variables is equal to 0.110. The above number indicates the existence of a weak correlation between the research variables and indicates that the independent variables have a relationship or effect on the dependent variable (rural livelihood). The coefficient of determination (R Square) obtained in the model is equal to 0.012, the above number also indicates that the independent variable has predictive power and can determine and predict the relationship between education and age and the impact of tourism on rural livelihood.

Table 14. Summary of the linear regression model regarding the level of education and age and the effect of tourism on the livelihood of villagers

Model	Correlation coefficient (R)	R Square	Modified Correlation coefficient	SD
1	0.11	0.012	0.009	0.44

According to Table 15, the analysis of variance of the regression model can be seen. Statistical F is equal to 4.321 and this means that the independent variables of the research are correlated with the dependent variable. The findings show that there is a significant relationship between demographic characteristics (education, age) and the impact of tourism on the livelihood of the local community in the Saravan rural district. It should also be noted that the higher the sum of the regression squares compared with the sum of the error squares, the better fitted is the model.

Table 15. Analysis of variance of the regression model in research variables

Model		Sum of square errors	Degree of freedom	Mean of square errors	F statistic	p- sig level
1	Regression	0.834	1	0.834	4.321	0.038
	Residuals	68.535	355			
	Sum	69.369	356			

Based on the results presented in Table 16, it was found that there is a significant relationship between the level of education from the set of demographic characteristics (independent variables) in the study sample and the impact of tourism on the livelihood of villagers in Saravan rural district. Hence, the beta coefficient of 0.110 was obtained at a significance level of p≥0.05. Therefore, it can be said with 95% confidence that there is a significant relationship between the level of education of the studied sample and the impact of tourism on the livelihood of villagers in general. Given the positive beta coefficient, it can also be inferred that the higher the level of education in the sample, the more the impact of tourism on the livelihood of villagers in their view.

Table 16. Standard coefficients of independent variables on rural livelihood in the regression model

Model	Non-standard coefficient		Beta standardized coefficients	T statistic	Sig level
	b	SD error			
Constant value	2.667	0.064		41.54	0.000
Education	0.033	0.016	0.11	2.08	0.038

Table 17 also indicates the age variable in the regression coefficient test that has no significance. According to the obtained results, the age variable has a 50% certainty in the effect of tourism on the livelihood of the villagers, which is not significant at the 95% test level.

Table 17. Remote variables in the regression model

Variable	beta	T statistic	Partial correlation	Stability	Sig level
Age	0.042	0.678	0.036	0.718	0.498

5. Discussion and Conclusion

Rural tourism can contribute to economic diversification and sustainable development, and by creating employment and income, it can develop underdeveloped areas and bring many benefits to the local people. This study with the approach of sustainable livelihood has studied tourism in the villages of Saravan rural district and specifically seeks to answer the question of how much tourism in these villages has been able to create a sustainable rural livelihood. The relevant literature emphasizes the direct and positive relationship between tourism and poverty reduction and income increase. This means that the stronger the rural tourism, the more income is generated among the villagers. This leads to improved livelihoods and reduced poverty in the village. This in turn makes the villagers' perception of rural tourism more positive. Due to the importance of this issue in the present study, the effects of rural tourism on sustainable livelihood in Saravan village of Rasht city have been investigated. According to the findings of the present study, in terms of desirability, social and natural dimensions are in a favorable situation, the economic dimension is somewhat desirable, and human and institutional dimensions are in an unfavorable situation. Social dimensions (including promoting social relations, unity, and solidarity, trust between people, developing customs, promoting the status of women, and increasing local security) and natural dimensions (including environmental protection, recognition of attractions, and attractive attractions) are more desirable in the district. From an economic point of view (interest in investing in tourism and improving housing) there is to some extent a desirable condition. From a human (education, skills and education) and institutional point of view (lack of participation, support for individual initiatives and sharing in the benefits of tourism, etc.) there is an unfavorable situation.

Accordingly, the highest impact of tourism in this regard belongs to the social development index and the lowest impact is related to the human development index. There is no significant relationship between age from the set of demographic characteristics (independent variable) in the study sample and the impact of tourism on the livelihood of villagers in Saravan rural district; while there is a significant relationship in the case study between the level of education from the set of demographic characteristics (independent variable) and the impact of tourism on the livelihood of villagers in Saravan district. One of the findings of the present study is that tourism has not been able to play an effective role in the sustainable livelihood of villagers and the positive effects of tourism have not been effective except in some indicators, which is consistent with the research of Jumapour and Kiomars (2012). Another finding is that tourism has played a small role in contributing to sustainable livelihoods and is consistent with the research of Jomehpour and Ahmadi (2011). Also, one of the other findings of this study is the positive effect of tourism on the environmental situation, which does not confirm the findings of Abdullah Zadeh et al. (2015) that suggested tourism has a negative consequence on environmental conditions and the outcome of tourism is appropriate in other situations. Given the current situation in the village, there is practically no better option than village tourism to improve the living conditions of the local community. Although the current situation in the village requires serious measures to make tourism a viable option for rural development, this requires reforms in the public sector and more support for tourism planning. According to the local community livelihood assets, by planning and implementing appropriate policies following the human, social, economic, natural, and institutional structures of the village and by making proper use of the existing tourism capacities, especially the capital of attractions, tourism development can be considered as a complementary activity in diversifying livelihood activities to achieve sustainable rural livelihoods in the frameworks of sustainable development.

Given the issues mentioned and according to the sublime aspect of tourism, namely eco-tourism, it can achieve a sustainable livelihood of the village by developing the local economy and environmental protection and improving social conditions. Thus, the following topics are suggested for future research: Participation of local communities and its impact on sustainable livelihood, the impact of multi-purpose tourism cooperatives on sustainable rural livelihoods.

The following strategies are presented to maximize the effects of tourism on rural sustainable livelihood in the study area.

• Since the landfill and waste treatment in Saravan is one of the serious problems in the region and causes serious damage to the health of the people and the environment, it is incumbent upon the policymakers to take action for the issue.

• Diversification and improvement of the experience of visitors of the heritage, lively local culture including local plays (bride, Nowruz reading, deer, etc.), local poetry, food (kebab, sour, sour, pomegranate, sirgoliyeh), and various festivals (Jokol Festival) can encourage visitors to stay longer and better understand the local culture.

• Providing local people with facilities for converting rural houses into eco-lodges.

• Establishment of daily and weekly markets for rural handicrafts and other rural products, agriculture, as well as stalls for cultural goods on the days and seasons of tourist arrival.

• Due to the low institutional capital and lack of participation of people in tourism decisions, it is suggested to establish a non-governmental or cooperative center with the participation of Cultural Heritage and Tourism Organization to identify qualified people active in tourism activities and issue business cards to rent the houses. If people are interested in working in the tourism sector and rent a house or part of their house, they must be able to receive an activity card in this field.

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Original Article

بررسی تأثیر گردشگری بر معیشت پایدار روستایی
(مطالعه موردی: دهستان سراوان شهرستان رشت)

ریحانه پروانه صفا¹ – مجید یاسوری²* – مهدی حسام³

۱- کارشناس ارشد جغرافیا و برنامه ریزی روستایی، دانشگاه گیلان، رشت، ایران

۲- استاد جغرافیا و برنامه ریزی روستایی، دانشگاه گیلان، رشت، ایران

۳- استادیار جغرافیا و برنامه ریزی روستایی، دانشگاه گیلان، رشت، ایران

چکیده مبسوط

۱. مقدمه

یکی از راهبردهایی که در دهه‌های اخیر، در اغلب کشورهای جهان موردتوجه بوده و نتایج مثبتی داشته است، توسعه و گسترش گردشگری در نواحی روستایی است. گردشگری در روستاها حوزه وسیع و گسترده‌ای دارد و نقشی اساسی در تنوع‌بخشی و رشد اقتصادی و همچنین آفرینش فرصت‌های شغلی در ارتباط تنگاتنگ با سایر بخش‌های اقتصادی ایفا می‌کند. بنابراین توسعه بخش‌های غیرکشاورزی و تنوع‌بخشی به فعالیت‌ها در روستاها راه‌حل اساسی توسعه روستایی در بسیاری از جوامع است و باعث بهبود وضعیت معیشت روستایی می‌شود که این تحقیق با رویکرد معیشت پایدار روستایی انجام می‌گیرد. شناخت مسائل و مشکلات روستا و ارائه راهکارهای منطقی برای آن‌ها از اقدامات اساسی در راستای نیل به اهداف توسعه پایدار روستایی است. یکی از استان‌هایی که در سال‌های اخیر مقصد بسیاری از گردشگران بوده استان گیلان می‌باشد که در این میان مناطق روستایی آن مورد توجه بسیاری از گردشگران بوده یکی از این مناطق روستایی دهستان سراوان است که فعالیت غالب بسیاری از روستاییان کشاورزی سنتی است که به‌تنهایی قادر به تأمین اشتغال و درآمد کافی برای جامعه روستایی نیست و درنتیجه جستجوی راه‌های جدید و متنوع سازی فعالیت‌ها برای تقویت معیشت یکی از ضرورت‌هاست که گردشگری به‌عنوان یکی از راه‌حل‌های مناسب برای ایجاد اشتغال و افزایش درآمد روستاییان مطرح می‌گردد.

۲. مبانی نظری تحقیق

اجتماعات روستایی به‌ندرت می‌توانند بدون ساختار اقتصادی متنوع به لحاظ اقتصادی، پایدار باشند. گردشگری و تفریحات بیش‌ازپیش در حال تبدیل‌شدن به بخش مهمی از این ساختار است. این امر به‌طور غیرمستقیم توجه به پایداری ازنظر فرصت‌های گردشگری، هماهنگ‌سازی این فرصت‌ها و قابلیت آن‌ها در جذب و تداوم گردشگران را مدنظر قرار می‌دهد. توسعه گردشگری روستایی به‌عنوان یک فرصت، تحریک اقتصادی و کاهش وابستگی جامعه روستایی به کشاورزی را فراهم می‌نماید. یکی از رهیافت‌های اصلی برای بهبود معیشت پایدار روستایی توجه به توسعهٔ گردشگری است. به‌طوری‌که بسیاری از محققان از گردشگری به‌عنوان رویکرد کلیدی برای توسعه روستایی و کاهش فقر در این نواحی تأکید نموده‌اند. چارچوب معیشت پایدار گردشگری محور یکی از رویکردهای تحلیلی جدید در زمینه توسعه روستایی است که در سال‌های اخیر برای بررسی توسعه روستایی و کاهش فقر، مورد توجه بسیار قرار گرفته است. گردشگری با ایجاد تنوع معیشتی سبب افزایش پایداری کلی معیشت می‌گردد. رویکرد معیشت پایدار با این ایده آغاز می‌شود که مردم در مکان‌های مختلف چگونه زندگی می‌کنند. یک نظام معیشت، از دارایی‌ها (طبیعی، فیزیکی، انسانی، مالی و اجتماعی)، فعالیت‌ها و دسترسی به این دارایی‌ها (از طریق نهادها و روابط اجتماعی) تشکیل می‌شود که مجموعه آن‌ها زندگی فرد یا خانوار را می‌سازد.

*. نویسندهٔ مسئول:

دکتر مجید یاسوری

آدرس: گروه جغرافیا، دانشکده ادبیات و علوم انسانی، دانشگاه گیلان، رشت، ایران.

پست الکترونیکی: Email: yasouri@guilan.ac.ir

۳. روش تحقیق

تحقیق حاضر ازلحاظ هدف جز تحقیقات کاربردی و ازلحاظ ماهیت توصیفی تحلیلی می‌باشد. روش‌ها ابزار گردآوری اطلاعات در این تحقیق مشتمل بر دو شیوه کتابخانه‌ای و میدانی می‌باشد.جامعه آمـاری در ایـن پـژوهش منـاطق روستایی دهستان سراوان در شهرستان رشت می‌باشد و سطح تحلیل خـانوار است که حجم جامعه آماری بر اساس سرشماری عمومی نفوس و مسکن ۹۵ در دهستان سراوان جمعاً ۴۲۲۸ خانوار می‌باشد تعداد نمونه‌های پـژوهش بـا استفاده از روش نمونه‌گیری کوکران ۳۶۰ خانوار برآورد گردید.

۴. یافته‌های تحقیق

نتایج آزمون T تک نمونه‌ای در سطح متوسط بیانگر این اسـت کـه وضـعیت توسعه معیشتی بر اساس توسعه گردشگری در ابعاد اجتماعی، محیط‌زیستی و نهادی در وضعیت مطلوب و برای ابعاد انسانی، اقتصادی و توسعه معیشتی در وضعیت نامطلوب قرار دارد. بیشترین میانگین مربوط به پایداری معیشـتی را بعد توسعه محیط‌زیستی با ۳/۳۹ و کمترین میانگین مربوط بـه بعد توسـعه انسانی به مقدار ۱/۸۳ می‌باشد. با ایـن تفاسـیر گردشگری بـر ابعـاد توسعه اجتماعی، توسعه محیط‌زیستی و توسعه نهـادی در دهسـتان سـراوان دارای بیشترین اثرگذاری می‌باشد. با توجـه بـه نتـایج بهدسـت‌آمده متغیـر توسعه اجتماعی با دارا بودن میانگین ۴/۱۴ بیشـترین میـانگین و بهتـرین رتبـه را از لحاظ نقش گردشگری در پایداری معیشتی به دست آورده و توسعه انسانی با دارا بودن میانگین ۱/۲۵ کمترین میانگین و رتبه را بـه خـود اختصـاص داده است. بیشترین تأثیر و نقش گردشگری بر پایـداری توسـعه معیشـتی را بعـد اجتماعی و زیست‌محیطی ایفا می‌کند که در این زمینه تـأثیر گردشـگری در ارتقاء روابط اجتماعی، تحکیم اتحاد، همبستگی، اعتماد، ارتقاء جایگـاه زنان و دسترسی به اطلاعات روزمره و ازنظر زیست‌محیطی؛ توجه بیشـتر مـردم بـه حفظ محیط‌زیست و شناساندن جاذبه‌های روستا به گردشگران می‌باشـد. در زمینه نهادی میزان تأثیر فروش محصولات محلی، اجاره خانه و این قبیل موارد و همچنین مدیریت بهینه و کارآمد و مشارکت مردم محلی می‌توانـد نقـش شگرفی در پایداری معیشت روستاییان داشته باشد. ازنظر اقتصادی در افزایش قیمت زمین، محصولات محلی، کیفیت مساکن روستایی و از این قبیل تـأثیر داشته است

۵. بحث و نتیجه‌گیری

بر اساس یافته‌های پژوهش حاضر، ازنظر مطلوبیت ابعاد اجتماعی و طبیعی در وضعیت مطلوب قرار دارند. بعد اقتصادی تـا حـدودی مطلـوب اسـت و ابعـاد انسانی و نهادی در وضعیت نامطلوب قرار دارند. درواقـع ازنظر اجتماعی (ارتقای روابط اجتماعی، اتحاد و همبستگی، اعتماد بین مردم، توسـعه آداب و سـنن، ارتقـاء جایگـاه زنـان و افـزایش امنیـت محلـی) و ازنظـر طبیعـی (حفاظـت محیط‌زیست، شناسانده شدن جاذبه‌ها و جـذابیت چشـم‌اندازها) در منطقـه مطلوبیت بیشتری وجود داشته، ازنظر اقتصادی (علاقه برای سرمایه‌گذاری در حیطه گردشگری و بهبود وضعیت مساکن) تا حدودی مطلوب و ازنظر انسانی (تحصیلات، مهارت و آموزش) و نهادی (کمبود مشارکت، حمایت از ابتکـارات فردی و سهیم شدن در منافع گردشگری و…) وضعیت نامطلوب است. بر ایـن اساس بیشترین میزان اثرگذاری گردشگری در این خصوص به شاخص توسعه اجتماعی تعلق دارد و کمترین میزان اثرگـذاری مربـوط بـه شـاخص توسـعه انسانی است. بین سن از مجموعـه ویژگـی‌هـای جمعیـت شـناختی (متغیـر مستقل) در نمونه موردمطالعـه و میـزان اثرگـذاری گردشـگری بـر معیشـت روستاییان در دهستان سراوان هیچ‌گونه رابطه و ارتباط معناداری وجود نـدارد درحالی‌که بین میزان تحصیلات از مجموعه ویژگی‌هـای جمعیـت شـناختی (متغیر مستقل) در نمونه موردمطالعه و میزان اثرگذاری گردشگری بر معیشت روستاییان در دهستان سراوان رابطه و ارتباط معناداری وجود دارد. از یافته‌های تحقیق حاضر به این صورت بوده که گردشگری در حال حاضر نتوانسته نقش مؤثری در معیشت پایدار روستاییان ایجاد کند و آثار مثبت گردشگری جز در بعضی از شاخص‌ها مؤثر نبوده است

کلیدواژه‌ها: گردشگری پایدار، معیشت پایدار، گردشگری روستایی، دهستان سراوان.

Original Article

Evaluating the Economic and Social Effects of Tourism on Tourist Attractive Villages of Izeh and Baghmalek Counties

Reza Talebifard [1]- Saeed Maleki [2]- Afsane Alibakhshi [3]- Nabiollah Hosseini Shahpariyan *[4]

1- PhD Candidate in Geography and Urban Planning, University of Tabriz, Tabriz, Iran
2- Full Prof. in Geography and Urban Planning, Shahid Chamran University of Ahvaz, Ahvaz, Iran
3- MSc in Geography and Urban Planning, Shahid Chamran University of Ahvaz, Ahvaz, Iran
4- Ph.D. Candidate in Geography and Rural Planning, University of Tabriz, Tabriz, Iran

Abstract

Purpose- The villages of Izeh and baghmalek cities are considered as tourist destinations in Khouzestan province due to their valuable natural, cultural and historical attractions. Therefore, in the present study, the economic and social effects of tourism on the tourist attractive villages of Izeh and Baghmalek were studied.

Design/methodology/approach- The present study is conducted with applied purposes using a descriptive-analytical method. The library and field methods were used for data collection. The statistical population of the study included 20 rural experts and managers and 242 rural heads of households who were selected by simple random sampling. Villages that had the potential for tourism were selected. In order to use the indicators, based on the theoretical foundations of previous researches and studies, the indicators were screened and operationalized. Based on the nature of the research, 10 indicators with a higher degree of reproducibility were selected. SPSS tests and Prometheus technique were used to analyze the data.

Findings- Assessing the effects of tourism on the studied villages showed that tourism has the most positive effects on indicators of improving facilities and services, booming local products market and household income growth and employment, respectively, and the most negative effects on cultural interactions and population dynamics, land price, and changes in lifestyle and security. Moreover, the results of Prometheus technique showed that the percentage of changes in tourism effects was 80% in Imamzadeh Abdolah, above 69% in Shivand, 59.14 in Mal agha, 27.26% in Robat Hazrat Soleiman, 17.69% in Abolabbas, 16.12% in Susan village, 10.75% in Pian, 10.63% in Sadat Hosseini village and 8.46% in Kamal village.

Originality/value- The community living in Izeh and Baghmalek cities have been facing many problems for many years. In such a way that the mentioned cities were deprived of the minimum facilities and welfare services. These problems are more pronounced in rural communities. Therefore, considering that the villages of the two cities, have natural potentials for tourism, handicrafts, local and indigenous products, etc., it is possible to develop tourism and take advantage of these capacities to improve facilities and services, income, quality of life, etc., in these villages.

Keywords- Rural Tourism, Economic and Social Effects, Prometheus Technique, Izeh and Baghmalek Counties

*. Corresponding Author:
Hosseini Shahpariyan, Nabiollah, Ph.D. Candidate
Address: Department of Geography & Rural Planning, Faculty of Planning and Environmental Sciences, University of Tabriz, Tabriz, Iran.
Tel: +98937 888 3961
E-mail: nabi.hosseini12@gmail.com

1. Introduction

Today, tourism is one of the most promising activities, which is known as the gateway to development. Tourism was one of the most developed industries in the second half of the twentieth century and was often used as a key to economic growth, both in developed and developing countries. Many countries now derive their economic and social benefits from tourism and use tourism revenues to develop regional infrastructure. (Zarabi & Eslami Parikhani, 2011). Hence, in the present era, tourism industry is introduced as one of the pillars of sustainable development and as an invisible export, is one of the most lucrative and valuable industries and has a significant contribution in reducing poverty and improving living standards and positive cultural interactions (Asghari & Jafari, 2018). In other words, the tourism industry is a source of income and job creation at the local level. This industry can be an approach to economic development and especially when the profit of activities of other economic sectors is declining, is an alternative and a strategy for development (Heidari Sarban, 2017). Rural tourism is one of the types of tourism that associate with many other patterns of tourism (Jalali, 2016). Rural tourism and tourist economy are becoming the main pillars of economic development. Many development planners and policy makers also mention tourism industry as the main part of sustainable development, and in this regard, rural tourism with principled planning and identifying the advantages and limitations, can play an effective role in rural development and consequently national development and diversification of the national economy (Asghari & Jafari, 2018). Sustainable rural tourism seeks to meet the development requirements of the local community, improve the supply chain of local products, encourage local industries and professions, develop in accordance with environmental and social capacities, observe intergenerational justice, increase the stability of tourism revenues and the satisfaction of the host community (Bahrami, 2016). So, rural tourism with the aim of sustainable development of local communities in rural areas, as a tool for economic development (poverty reduction, development of small business centers, income distribution, etc.)

and social development (entrepreneurship, migration prevention, communication with various cultures, local identity etc.) is one of the most important modern occupations in rural areas (Asghari & Jafari, 2018). In addition to these positive economic and social effects, tourism has created some negative consequences for these villages. Tourism can have negative social effects such as creating a theatrical effect, commodification of culture, displacement and migration, dependence, crime, addiction, change in the social values of the host community, and change of language (Motiei Langroudi & Nosrati, 2011). The cities of Izeh and Baghmalek, with their numerous villages and tourism capabilities in the water sector (waterfalls, huge dams, rivers), pristine and lush rural nature and cultural attractions, have a high potential for attracting tourists and developing tourism. Due to the existence of tourist attractions and suitable geographical location, these two cities host many tourists from all parts of the country in spring and summer. Therefore, the present study seeks to assess the economic and social effects of tourism in the tourist villages of these cities.

2. Research Theoretical Literature

Attention to rural tourism clearly goes back to 1950s and in the 1960s its economic aspect was addressed by local communities. During the following decades, rural tourism was used as a tool for the development of rural communities, and in the meantime, experts have tried to increase the role of tourism in the economic and social revitalization of villages by providing different models and methods (Rezaei et al., 2012). Therefore, new policies were needed to help improve the socio-economic condition of rural communities. Weakening traditional economic activities in rural areas such as agriculture, mining and forestry during the last three decades has made it increasingly necessary to seek and apply new strategies to strengthen the economic base and diversify productive activities in rural areas (Jalalian et al., 2015). In the current situation, it is necessary to pay attention to the development and diversification of economic activities in rural communities such as rural industries, complementary industries and processing agricultural products and rural tourism (Sharifzadeh & Moradnejad, 2002).

2.1. The effects of rural tourism

There are various types of the effects of rural tourism which can generally be divided to economic, social, and environmental effects (Byrd, 2009). The achievements of the tourism industry are usually very complex and vary from region to region (Asghari & Jafari, 2018). Therefore, the positive and negative effects and consequences that tourism development has on the economic, social, and cultural dimensions of the visited areas are also different. Despite these conditions, identifying the consequences and effects on tourist areas is very necessary (Ebrahimnia Samakoush, 2013). As mentioned above, in this study, the economic and socio-cultural effects of rural tourism are considered.

Economic effects- Many researches have been conducted and emphasized on the contribution of tourism to economic growth. The results of practical and planning recommendations on the use of tourism development have also been presented as a tool for economic stimulation (Park & Stokowski, 2009). Thus, tourism can provide hopes to reduce poverty in rural areas and be a factor to prevent migration from rural to urban areas and increasing the rural population (Faraji Sabokbaret al., 2012) and help reduce the income gap between cities and villages, which is one of the goals of rural tourism (Motiei Langroudi & Kateb Azgami, 2017). In general, the tourism industry is useful for the rural community and provides the basis for diversification in various fields of production including agriculture, and creates many opportunities for work and employment. Other economic effects of tourism include increasing land price, construction of residential and tourist centers, creating weekly markets for the sale of agricultural products, and increasing income (Ebrahimnia Samakoush, 2013).

Socio-cultural effects- Socio-cultural effects of tourism are changes which occur in the lifestyles of people of tourists' community and these changes mostly occur due to direct contact of the residents of that region and the tourists and the cultural effects are the changes that occur in art, customs, housing architecture, and the behavior of people living in the host community (Amini & Zeidi, 2015). These changes are long-term and will occur as a result of the growth and development of tourism**.** Since the results of tourism activities cause changes in daily life and culture of host community, the term "socio-cultural effects" is used to determine changes in the daily experiences of values, lifestyle, artistic and intellectual products of the host community (Roknadin Eftekhari et al., 2016). Reduction of security, rapture of rural culture, participation, traditions and customs, reduction of migration, etc. are other social effects of rural tourism (Nouri, 2012). Some views on the effects of tourism are listed in Table 4. According to these views, tourism is effective in economic and socio-cultural dimensions. In terms of economic dimension, tourism creates new jobs and provides job opportunities, increases the welfare of residents, reduces economic problems, increase GDP, creates sources of income and so on. In terms of socio-cultural dimensions, tourism has effects such as creating empathy, achieving peace, and developing local communities (see Table 1).

Table 1. The views of some foreign theorists on the effects of tourism development
(Source: Asghari & Jafari, 2018, Soltani Moghadas & Taleshi, 2020)

Theorist	Views related to tourism	The desired criterion
Mathison & val (1982)	Tourism has incredible effects on the economy of tourist areas, helping to create new jobs for people living in tourist regions and boosting other businesses in the area.	Economic effects on the region
Brown (2000)	Tourism leads to the creation of international empathy, understanding and recognition and the realization of world peace.	Socio-cultural
Sharpley (2002)	Tourism has been mentioned as an efficient catalyzer for socio-cultural reconstruction and development of the undeveloped areas.	Economic
Robert R. Hirene (2003)	Protecting ecological values and welfare of local communities	Economic, social and environmental
Kim (2005)	With the help of the government, tourism plays a stimulating role in eliminating economic problems in rural society.	Economic and social
Dos (2009)	Tourism has numerous economic effects, including: foreign exchange earnings, increasing GDP, creating an income source for	Economics

Theorist	Views related to tourism	The desired criterion
	government and nation, and an employment source as well as improving social services	
Res Corith (2009)	He emphasizes the importance of rural tourism development for the development of local communities, protection of forests and beaches and other national and cultural resources.	Economic, social and environmental
theorist	Views related with tourism	Desired criterion
Park et al., (2012)	Cultural factors lead to tourism growth in rural areas.	Socio-cultural
Kim & Jamal (2015)	Tourism may lead to create small local businesses and improve rural economic development.	economic
Martinez, Martin & Fernandez	Rural tourism can boost job expansion and it can also provide seasonal job opportunities and absorb labor in rural areas.	Economic

2.2. Rural tourism development perspectives

Based on different perspectives, rural tourism has been proposed as a philosophy for rural development, which has three important perspectives. The first approach is as a strategy for rural development that reflects the characteristics of the rural environment. In this view, it is believed that rural tourism may not be the solution to all the problems of rural areas, but it is one of the methods that can have important economic effects and prevent the evacuation of villages. In the second perspective, tourism is known as a tool and policy to reconstruct the rural economy. This means that reconstruction involves various socio-economic processes that can make a qualitative change in the status quo. In fact, tourism can attract additional labor in various sectors of the economy and attract investment. In the third view, some have considered tourism as a policy and tool for sustainable rural development and protection of national resources. In this view, the balance between the final growth of tourism and the needs of protection and conservation of natural resources is emphasized (Roknadin Eftekhari & Qaderi, 2002).

The conceptual model of the research was drawn based on the economic and socio-cultural effects of rural tourism and factors effecting it (see Figure 1).
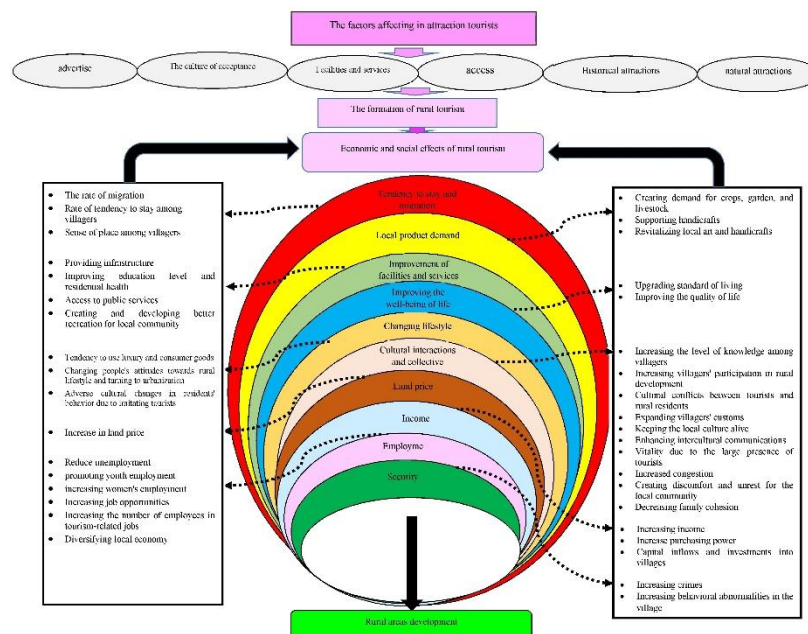

Figure 1. The conceptual model of the research

2.3. Theoretical background of the research

The effects of rural tourism have been a fertile ground for research among a range of social scientists who have often either endorsed or challenged the role of tourism as a medicine to solve all rural economic and social ills (Motiei

Langroudi & Kateb Azgami, 2017). In the field of tourism and rural tourism in recent decades, numerous studies have been conducted in the form of books, articles and research projects in Iran and the world. Due to the increasing

development of rural tourism and its place in the national and global economy, in the 21ˢᵗ century, the research process in this field is progressing. The summary of the researches conducted in the field is described in Table 2.

Table 2. Research Background

Author	Year	Title	Results
Kim	2005	The role of tourism as a driver to solve the economic problems of rural community of Korea	The results indicated that the government and market play an important role in participation in rural development planning in this country
De La Torre	2012	Rural tourism as a choice to develop rural areas and employment in Spain	This research studies the model for forecasting the demand of rural tourists in the short and medium term and based on that, model of employment of rural tourism is extracted from this research
Gavrilă-Paven	2015	Tourism opportunities in traditional villages of Romania	Stating the potential tourism opportunities of small villages in Alba county in Romania, he considers tourism as a factor for economic development of villages and an alternative for agricultural dependency in rural communities which makes rural environment attractive to young people.
Biddulph	2015	The effects of mass tourism in rural areas of Cambodia	Studying three rural areas of Cambodia, it was found out that, the main reason of poor villagers' migration in the past, was skill acquisition and employment in other places. Currently, these rural families make a living through tourism development in these villages.
Shin et al.	2017	Evaluating the effect of tourism on the economy of the rural local community of Korea	The results of the research showed that, tourism effects the rural households' economic growth and tourism management can boost the local economic improvement.
Ibănescu et al.	2018	The effect of tourism on sustainable developmentin rural areas of Romania	The social, economic, demographic and infrastructure effects of tourism were examined in this study and the results indicated that, there is difference between rural areas in case of mentioned indicators, the effects of tourism are more observable in villages that are more tourist-friendly.
Lopes et al.	2019	Evaluating the rural awareness about the effects of tourism in northeast of Portugal	In this study, the residents' awareness of economic, socio-cultural, and environmental effects of tourism was examined and the results showed that, the residents are aware of the positive effects of tourism and have less negative perception of it.
Anabestani et al.	2012	The economic, social, physical and environmental effects of tourism development on rural settlements from tourists and villagers' perspectives (case study: Dasht-e-Arjan Fars	Findings of the study showed that the most changes were in the environmental variable with a coefficient of 0.78. Tourism development has provided positive changes in economic, social, physical, and environmental dimensions in the villages of the region.
Yaqubi	2019	Tourism effects on rural development from the perspectives of Torqabeh rural residents in Binaloud city	The results of the study showed that, average economic effects of tourism were 41% and average social effects of tourism was 30%. The positive economic effects of tourism can be summarized in three factors: job and income development, government support, and rural economic diversification, and the positive social effects of tourism in three factors: development of social infrastructure, development of cooperation, and development of health and education infrastructure. Also in the negative effects, two influential factors were business and brokerage and the development of social anomalies.

Author	Year	Title	Results
Abdul karimi	2020	Qualitative study of the role of tourism on rural development of Davaran in Rafsanjan city	In general, data analysis and coding led to the creation of categories such as: talents, contexts, tourism funds, tourism boom path, local participation, improving quality of life and increasing public welfare, reducing migration or reverse migration, cultural change, creating markets supply of products, complement to the agricultural sector, comprehensive development of the village, increase of investment in the village, increase of the income of the villagers, increase of the price of goods and lands in the village and destruction of the environment.
Soltani Moqadas & Taleshi	2020	The role of tourism in rural stability of Gelan in Amol city	The results of the study showed that, the economic effects of tourism were more prominent than the social and environmental dimensions and was able to transform the rural economy. The sustainability of the rural population is evident, which has a special place in economic sustainability. Unlike other dimensions, the environmental effects of tourism have been contradictory, and in order to institutionalize environmental sustainability, the necessary mechanisms to prevent the destruction of the rural environment and its protection must be operationalized.

Studying background of the research showed that rural tourism has positive and negative effects on the host community in terms of economic, socio-cultural, physical and environmental aspects. But the positive effects of tourism are more significant, and researchers believe that if managers make decisions to take advantage of potential opportunities and provide facilities to attract tourists, rural tourism is a very valuable way to reduce poverty, reduce migration, increase participation, increase services, numerous opportunities for work and employment, selling agricultural products, and so on. The present research has tried to study the tourism target villages of two neighboring cities. Due to the road location of these two cities and being in the transit route from Ahvaz to Isfahan and suitable weather conditions, natural, human and historical attractions, many tourists visit the rural areas of these two cities. Therefore, considering the various perspectives and potentials, the organizations in charge of tourism do not take the necessary advantage of tourism to strengthen rural development and are practically inattentive to the effects of tourism. Hence, the results of the present study can indicate the benefits of tourism in rural areas and be an attempt to attract the attention of the relevant organizations of the two cities and expand tourism in rural areas by making applicable decisions.

Therefore, the present study can be innovative in terms of paying attention to the tourism target villages of Izeh and Baghmalek cities, which are deprived of the least facilities, determining the factors affecting the development of tourism and providing effective solutions. Moreover, the implementation of indicators (using the indicators that have been most common in the articles) and the use of different techniques such as Prometheus can be a distinguishing feature between the present study and previous studies.

3. Research Methodology
3.1 Geographical Scope of the Research
The cities of Izeh and baghmalek are located in an oval plain in northeast of Khouzestan Province. These cities are between Chahar mahal and Bakhtiari, Kohgiloyeh and Boyer Ahmad provinces and the city of Masjed Soleiman. The geographical distance between the two cities is 44 km. Due to their mountainous and semi-mountainous locations and proximity to the Zagros Mountains, these two cities have an independent and cooler climate than other cities in the province. These two cities have a temperate and cold climate in winter and an almost cool and mountainous climate in summer (Ali Bakhshi, 2014). Due to these features and the benefit of natural (dams, waterfalls, and gardens), historical, cultural and other attractions, a large number of people of Khouzestan, Isfahan, Chahar mahal and Bakhteiari and other provinces visit these areas in the spring and summer. Figure 2 shows the geographical location of the villages under study.
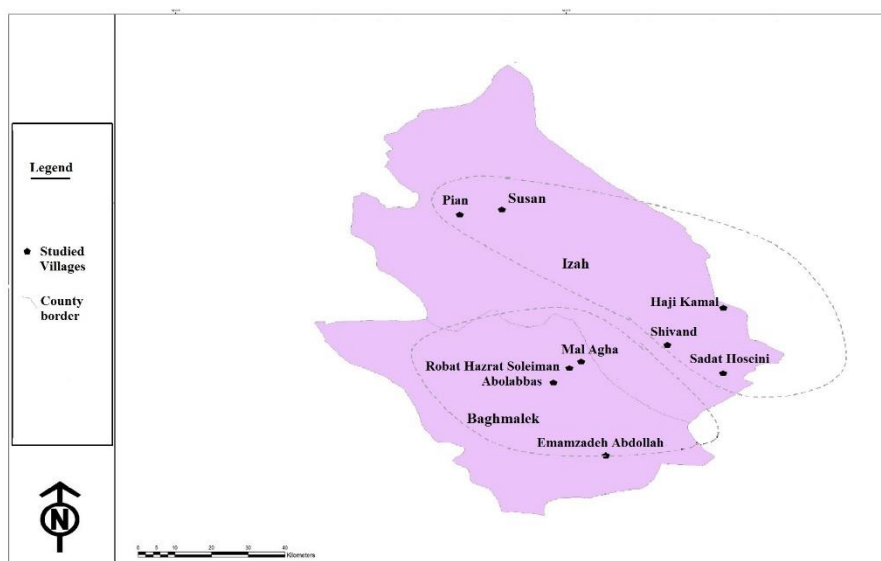
Figure 2. The geographical scope of study

3.2 Methodology

The present theoretical study is conducted with applied purposes using the descriptive –analytical method. Data were collected using library and field (questionnaire) methods. The statistical population of this study, which was conducted in spring and summer of 2019 were all heads of rural households, councils and rural municipalities in the rural areas of Izeh and Baghmalek cities. It is worth mentioning that, according to the research purpose, villages from both cities were selected for study that had tourism potentials. Nine villages were selected from the villages targeted by tourists (see Table 3). Then, based on the number of households, the sample size with an error of 5% was estimated at 242 people. Moreover, twenty people were selected to receive the opinions of experts and rural managers (members of Municipalities and Islamic councils).

Table 3. Population, households, and sample size of villages under study
(Source: National Portal of Statistics, 2016)

City	Village	Population	Households	Sample size	Villages' features
Izeh	Shivand	141	40	18	Waterfall to a height of 90 meters, short distance from Karoun 3 dam, passenger dinghy and boating, pristine nature, pomegranates, peaches, grapes, figs, walnuts orchards, medicinal plants, handicrafts (carpet weaving, felt weaving)
	Sadat Hoseini	413	100	39	Short distance from Karoun 3 dam, pristine nature, snow-capped mountains, springs and waterfalls, orchards (pomegranates, walnuts, grapes, figs, arch bridge, religious facilities and shrines, handicrafts (carpet weaving, felt weaving), medicinal plants
	Susan	539	120	45	Vast plains with attractive nature, water island, large agricultural fields, historical monuments, handicrafts (carpet weaving, felt weaving)
	Pian	178	63	20	Green and vast plains, historical monuments
	Haji Kamal	385	91	32	various gardens, cool climate, snow-capped mountains, springs and waterfalls, abundant forests, handicrafts (carpet weaving, felt weaving)
Baghmalek	Mal Agha	130	40	18	Very cool climate, pristine nature, significantly tall mountains, waterfalls, cold springs, gardens, paddy fields
	Robat	137	42	18	Historical and religious places, cold climate, places

City	Village	Population	Households	Sample size	Villages' features
	Hazrat Soleiman				covered with forests and trees, paddy fields, and fruit trees
	Abolabbas (Balvas)	310	90	32	Seasonal farms, rivers, snow-capped mountains, gardens, pristine and lush nature, historical monuments
	Emamzadeh Abdollah	198	60	20	Shrines, cold climate, huge mountainous area, scenic area with pristine nature, forested places, springs originating from mountains, significantly tall mountains
Total	-	2431	646	242	-

Dimensions, indicators, and indices were operated in accordance with the research approach using initial screening method and the degree of repeatability. Then the validity of the questions (questionnaire) was confirmed by experts. Table 4 shows the screening and the degree of repeatability of the indicators. Finally, SPSS, FAHP and Prometheus statistical software were used to analyze the data.

Table 4. Operationalization of research indicators

Author	Economic					Social				
	Land price	Income	Employment	Local products	Changing lifestyle	Improve the well-being of life	Improve facilities and services	Motivation to stay and migrate	Cultural interaction	Security
Anabestani et al. (2012)	∗	∗	∗		∗					∗
Asghari & Jafari (2018)	∗	∗	∗	∗	∗	∗	∗	∗	∗	∗
Ebrahimnia Samakoush (2013)	∗	∗	∗	∗	∗	∗	∗	∗	∗	∗
Moti'ei Langroudi & Rezaieh Azadi (2013)	∗	∗	∗	∗						
Jalali (2016)	∗	∗	∗	∗	∗	∗	∗	∗	∗	∗
Nouri (2012)	∗	∗	∗	∗	∗	∗	∗	∗	∗	∗
Jalalian et al. (2015)	∗	∗	∗	∗	∗	∗	∗	∗	∗	∗
Riahi et al. (2015)		∗	∗			∗	∗	∗	∗	∗
Heidari Sarban (2017)					∗	∗	∗	∗	∗	∗
Bahrami (2016)	∗	∗	∗	∗	∗	∗	∗	∗	∗	∗
Kim (2005)		∗	∗	∗			∗	∗		∗
shin et al. (2017)		∗	∗	∗	∗	∗	∗	∗		
Type of indicator	Negative	Positive	Positive	Positive	Positive/ Negative	Positive	Positive	Positive	Positive/ Negative	Negative

4. Research Findings

The general features of the respondents indicate that, in terms of gender, 91% of heads of the households were male and 9% were female. In terms of age, most of the respondents were between 35 to 45 years old. In terms of education, the highest frequency was related to primary education which includes about 48.2%. Then, six

indicators were used to measure the factors affecting tourism demand in the studied villages. The results of the opinions of rural experts and managers show that the studied villages are in a good position in terms of these indicators. But natural attractions and a culture of acceptance are more favorable than other indicators (see Table 5)

Table 5. The current status of the studied villages to demand and attract tourists

Rural development status	Mean	Median
Having natural attractions (pristine nature, favorable weather, springs,etc.)	4.23	A lot
Having historical monuments	3.03	Average
Areas with facilities and services	2.26	Average
Access to transportation	2.93	Average
The culture of acceptance for tourists by rural community	3.60	A lot
Facilities for advertising tourist attractions	2.71	Average

Table 6 lists the average economic and social indicators resulting from the effects of tourism based on the opinions of local residents and rural experts and managers. The results show that, from the perspective of statistical population, tourism has positive effects on the following: the price of rural lands, the provision of infrastructure, improvement of the level of education and health of housing, improving access to public services, creating and developing facilities, better recreation for the rural community, a sense of belonging to the place, increasing the level of public knowledge of the people, increasing the

participation of the villagers in rural affairs, diversifying the local economy, creating demand for crops, garden products and livestock, expanding village customs, keeping alive local culture, strengthening intercultural connections and vitality due to the large presence of tourists.

Tourism also has negative effects such as the tendency to use luxury and consumer goods, changes in people's attitudes towards rural life and urbanization, causing discomfort and unrest for the rural community, unfavorable cultural changes in the behavior of residents to simulate tourists and so on

Table 6. Evaluating the tourism effects on rural areas from the local residents, and rural experts and managers' perspectives

Dimension	Indicator	Item	Mean	Total
Economic	Land price	Increase in land price	2.98	2.98
	Income	Increasing income	3.66	3.10
		Increase purchasing power	3.45	
		Capital inflows and investments into villages	2.19	
	Employment	Reduce unemployment	2.71	2.89
		promoting youth employment	2.72	
		increasing women's employment	2.72	
		Increasing job opportunities	3.65	
		Increasing the number of employees in tourism-related jobs	2.63	
		Diversifying local economy	3.78	
	Local product demand	Creating demand for crops, garden, and livestock	4.14	3.29
		Supporting handicrafts	2.87	
		Revitalizing local art and handicrafts	2.38	
Social	Changing lifestyle	Tendency to use luxury and consumer goods	2.98	2.87
		Changing people's attitudes towards rural lifestyle and turning to urbanization	3.19	
		Adverse cultural changes in residents' behavior due to imitating tourists	2.45	
	Improving the	Upgrading standard of living	2.85	2.86

Dimension	Indicator	Item	Mean	Total
	well-being of life	Improving the quality of life	2.86	
	Improvement of facilities and services	Providing infrastructure	4.17	3.55
		Improving education level and residential health	3.14	
		Access to public services	3.26	
		Creating and developing better recreation for local community	3.65	
	Tendency to stay and migration	The rate of migration	2.25	3.02
		Rate of tendency to stay among villagers	2.61	
		Sense of place among villagers	4.20	
	Cultural interactions and collective dynamics	Increasing the level of knowledge among villagers	3.54	3.01
		Increasing villagers' participation in rural development	3.34	
		Cultural conflicts between tourists and rural residents	2.17	
		Expanding villagers' customs	3.41	
		Keeping the local culture alive	3.29	
		Enhancing intercultural communications	3.04	
		Vitality due to the large presence of tourists	3.23	
		Increased congestion	2.54	
		Creating discomfort and unrest for the local community	2.95	
		Decreasing family cohesion	2.61	
	Security	Increasing crimes	2.35	2.54
		Increasing behavioral abnormalities in the village	2.72	

The results of univariate regression test showed that, tourism has been effective on improving facilities and services with 39%, local product demand with 32%, income with 17%, tendency to stay and migration with 14%, cultural interaction with 11%, land price and employment with 10%, and changing lifestyle and security of residents of studied villages with almost 10% (see Table 7). According to the obtained results it can be mentioned that, in addition to positive effects, tourism has had negative effects on target villages such as: increase in land price, security reduction, lifestyle changes (tendency to use luxury goods, adverse cultural changes, change in villagers' attitudes towards urbanization and cultural interactions and demographic dynamics (increased congestion, creating discomfort and unrest and reduction of family cohesion).

Table 7. Analysis of tourism effects on target villages of Izeh and Baghmalek

Variable	None standard coefficient		Standard coefficient	T
	B	Standard error	BETA	
Width	1.18	0.161	-	7.38
Land price	0.037	0.017	0.100	2.261
Income	0.075	0.022	0.179	3.480
Employment	0.039	0.019	0.100	2.042
Demand for Local product	0.191	0.036	0.320	5.339
Lifestyle changes	0.025	0.025	0.049	1.020
Improving welfare	0.023	0.022	0.034	0.470
Improvement of facility and services	0.128	0.021	0.393	6.211
Tendency to stay and migrate	0.047	0.015	0.146	3.112
Cultural interactions and demographic dynamic	2.243	0.032	0.110	2.243
Security	0.006	0.014	0.020	0.422

In this part, the Prometheus technique was used for ranking tourism effects on rural areas. Prometheus technique is applied to evaluate and prioritize discrete options and choose the best option according to several criteria (measured with different skills). Prometheus techniques also work well in cases where decision-making criteria are in conflict with each other and decision-makers consider the basic information in the decision-making table to be insufficient

(Karimzadeh et al., 2019). The rainbow shape of the Prometheus technique shows the status of the indicators used in the research by villages. According to Figure 3, the more the indicators are towards +1, the better they are, and the more they are towards -1, the worse they are. For example, in Emamzadeh Abdollah village, tourism has been able to have a significant impact on indicators of income, employment, sales of local products, improvement of facilities and services, migration, lifestyle, security and land prices. But this trend is reversed in negative indicators. The status of indicators of cultural interactions and well-being of life in this village is towards -1, which indicates that tourism has not been able to improve the well-being of life and positive cultural changes. Shivand village, despite being one of tourist hubs of Khouzestan province, and thanks to tourism has been able to improve the areas of income, employment, security, cultural change, prosperity of livestock and garden products market, facilities and services, etc., has not been able to contribute to the survival and stability of its population. The reasons for this could be the lack of access and communication facilities and the siege of Karoun-3 Dam. The status of the other villages is also evident in the figure 3.
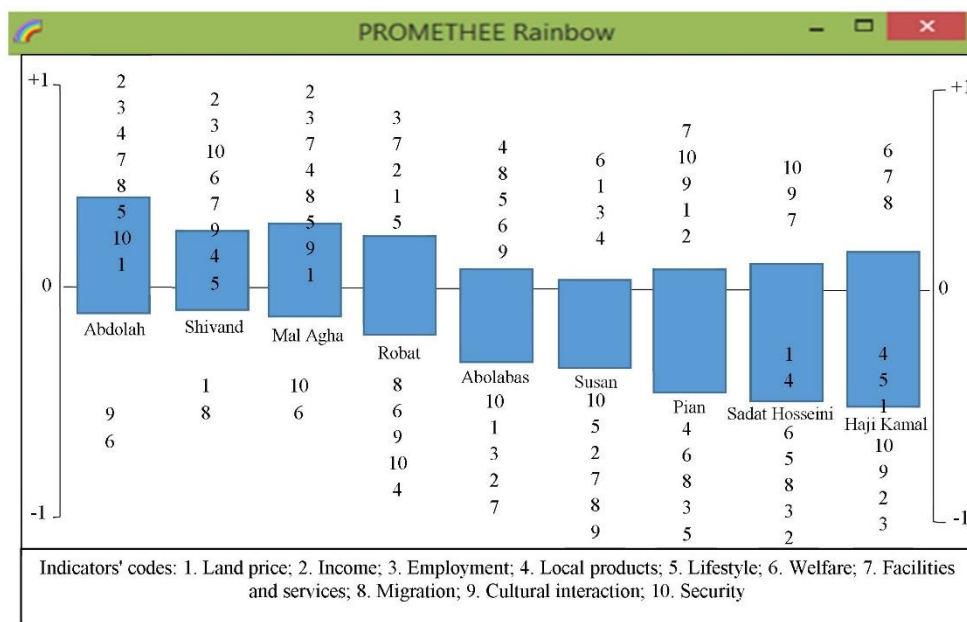
Figure 3. The research indicators status by each village

Three output analysis (positive ranking, negative ranking, and net ranking) were done to rate rural areas based on (economic and social effects of tourism). When a criterion has the most positive values and the lowest negative values, it is placed higher than other options and represents more priority, and vice versa. As can be seen in Table 8, the village of Emamzadeh Abdollah due to its religious role and natural and human attractions was in the first place with a net flow rate of 0.743, a negative flow rate of 0.130 and a net flow rate of 0.613, the Shivand village was in second place due to the existence of various natural attractions (gardens, waterfalls, rivers, Karoun-3 Dam and temperate climate) and Mal Agha village was in third place due to natural attractions with a net value of 0.065. Despite the favorable natural and human conditions, the villages of Sadat Hosseini and Haji Kamal could not provide grounds for attracting tourists and took the last place compared to other villages.

Table 8. Ranking tourist villages of Izeh and Baghmalek based on tourism effects

Village	Phi+	Phi-	Net Phi
Shivand	0.676	0.191	0.485
Sadat Hoseini	0.307	0.692	-0.385
Susan	0.402	0.597	-0.195
Pian	0.310	0.690	-0.380
Haji Kamal	0.261	0.738	-0.477
Mal Agha	0.643	0.220	0.423
Robat Hazrat Soleiman	0.49	0.425	0.065
Abolabbas (Balvas)	0.421	0.571	-0.150
Imamzadeh Abdollah	0.743	0.130	0.613

After determining the ranking status of villages, based on the amount of input and output, the percentage of changes in each village was obtained due to the effects of tourism. According to Table 9, the comparison between villages shows that the percentage of changes due to tourism effects in the studied villages was as follows: Emamzadeh Abdollah village 80%, Shivand village above 69%, Mal Agha village 59.14%, Robat Hazrat Soleiman 27.26%, Abolabbas village 17.69%, Susan 16.12%, Pian village 10.75%, Sadat Hoseini village 10.63 and Haji Kamal village 8.46%.

Table 9. Ranking tourist villages of Izeh and Baghmalek based on tourism effects

Village	Total input and output values	Percentage of effects
Shivand	2.883	69.02
Sadat Hoseini	0.44	10.63
Susan	0.673	16.12
Pian	0.449	10.75
Haji Kamal	0.353	8.46
Mal Agha	2.470	59.14
Robat Hazrat oleiman	1.139	27.26
Abolabbas (Balvas)	0.739	17.69
Imamzadeh Abdollah	4.178	80

5. Discussion and conclusion

Basically, the effects of rural tourism have already been used by developed countries from which they have achieved tremendous results. Today, it is obviously clear that tourism is a platform for job creation, poverty reduction and effective promotion of socio-cultural development of communities. Meanwhile, the geographical location of some villages has made it possible to experience other activities in addition to the main functions in order to improve socioeconomic status of the residents of these areas. The studied villages of Izeh and Baghmalek cities, due to favorable weather conditions and natural landscapes such as Karoun-3 Dam for swimming and boating, other landscapes such as oak mountains, springs and long waterfalls, orchards, local and indigenous, cultural works of art, handicrafts, various local souvenirs, as well as historical and archeological monuments, have provided suitable conditions for development of tourism. The high potentials of these areas have caused it to receive a large number of domestic and non-provincial tourists annually, especially in spring and summer, and have been significantly beneficial to the people of the region. At first, the results of the research showed that natural attractions, the villagers' culture of acceptance, historical monuments and access of the villages are suitable to attract tourists. The views of experts, rural managers, and local residents were used to evaluate the tourism effects on social and economic indicators. The results showed that rural tourism has positive effects such as improving facilities and services, demand for local products, income, incentive to stay and migrate, etc. and negative effects on cultural interactions and demographic dynamics, land prices, security and change of lifestyle.

In another part of the research, the Prometheus technique was used to rank the effects of tourism on rural areas. The technique showed that the status of social and economic indicators are not similar in the villages and in some villages the tourism effects are greater than in other villages. For ranking rural areas based on (economic and social effects of tourism), three output analysis (positive ranking, negative ranking, and net ranking) have been performed, which show that Imamzadeh Abdollah village was in the first place, Shivand was in second place and the third place belonged to Mal Agha. The villages of Sadat Hoseini and Haji Kamal, despite the favorable natural and human conditions, could not provide the grounds for attracting tourists and were in the last places compared to other villages. Therefore, the comparison between villages shows that the percentage of changes due to tourism effects in the studied villages was as follows: Imamzadeh Abdollah village 80%, Shivand village above 69%, Mal Agha village 59.14%, Robat Hazrat Soleiman 27.26%, Abolabbas village 17.69%, Susan 16.12%, Pian village 10.75%, Sadat Hoseini village 10.63 and Haji Kamal village 8.46%.

The results of this study are consistent with previous studies such as Kim (2005), Gavrilă-Paven (2015), Shin et al. (2017), Anabestani, Saeidi and Darvishi (2012), Riahi et al (2016) and Asghari and Jafari (2018).

According to the results of the study, the following suggestions are provided:

- Providing more facilities and services (Hotels, inns, ecotourism resorts, etc.) in the target villages of tourism due to the fact that Izeh and Baghmalek are located on the way between other cities. This will lead to increased customer retention in tourism industry;
- Enhancing infrastructure (transportation, roads, mobile network and coverage, internet, etc.) in the target villages of tourism especially Mal Agha, Shivand, Susan, and Sadat Hoseini villages that are mostly tourist destinations;
- Using appropriate advertising about the tourist attractions of the mentioned villages such as Shivand waterfall, Mal Agha's forest and so on which can lead to attract more tourists;
- Holding festivals and rituals of harvesting agricultural products, especially pomegranates, walnuts, and grapes in Shivand, Mal Agha, Sadat Hoseini and Hazrat Soleiman;
- Increasing the awareness of rural residents so as not to be influenced by the negative behaviors of tourists.

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Original Article

ارزیابی اثرات اقتصادی و اجتماعی گردشگری بر روستاهای گردشگرپذیر شهرستان‌های ایذه و باغملک

رضا طالبی فرد۱- سعید ملکی۲- افسانه علی‌بخشی۳- نبی الله حسینی شه‌پریان۴*

۱-دانشجوی دکترای جغرافیا و برنامه ریزی شهری، دانشگاه تبریز، تبریز، ایران

۲-استاد جغرافیا و برنامه‌ریزی شهری، دانشگاه شهید چمران اهواز، اهواز، ایران

۳-کارشناس ارشد جغرافیا و برنامه‌ریزی شهری، دانشگاه شهید چمران اهواز، اهواز، ایران

۴-دانشجوی دکترای جغرافیا و برنامه‌ریزی روستایی، دانشگاه تبریز، تبریز، ایران

چکیده مبسوط

۱- مقدمه

گردشگری روستایی یکی از انواع گردشگری است که با بسیاری از الگوهای دیگر گردشگری پیوند دارد. گردشگری روستایی و اقتصاد گردشگری در حال تبدیل‌شدن به یکی از ارکان اصلی توسعه اقتصادی هست. بسیاری از برنامه‌ریزان و سیاست‌گذاران توسعه نیز از صنعت گردشگری به‌عنوان رکن اصلی توسعه پایدار یاد می‌کنند و در همین ارتباط گردشگری روستایی نیز با برنامه‌ریزی اصولی و شناسایی مزیت‌ها و محدودیت‌ها، می‌تواند نقش مؤثری در توسعه روستایی و درنتیجه توسعه ملی و تنوع‌بخشی به اقتصاد ملی داشته باشد. گردشگری پایدار روستایی در پی تأمین نیازهای توسعه اجتماع محلی، بهبود زنجیره عرضه تولیدات محلی، تشویق صنایع و حرفه‌های محلی، توسعه متناسب با ظرفیت‌های محیطی و اجتماعی، رعایت عدالت بین نسلی، افزایش ثبات درآمدهای گردشگری و رضایت جامعه میزبان و میهمان است. در کنار این آثار مثبت اقتصادی و اجتماعی گردشگری، بعضی از پیامدهای منفی نیز برای این روستاها ایجاد کرده است. گردشگری می‌تواند آثار منفی اجتماعی مانند ایجاد اثر نمایشی، کالایی شدن فرهنگ، جابه‌جایی و مهاجرت، وابستگی، جرم و جنایت، اعتیاد، تغییر در ارزش‌های اجتماعی جامعه‌ی میزبان و تغییر زبان را در پی داشته باشد.

۲. مبانی نظری تحقیق

از گردشگری روستایی به‌عنوان ابزاری برای توسعه جوامع روستایی استفاده گردید و در این میان صاحب‌نظران تلاش نموده‌اند تا با ارائه الگوها و روش‌های مختلف، نقش گردشگری را در تجدید حیات اقتصادی و اجتماعی روستاها افزایش دهند. بنابراین اتخاذ سیاست‌های جدید برای کمک به بهبود اقتصادی – اجتماعی جوامع روستایی نیاز بود. تضعیف فعالیت‌های سنتی اقتصادی در

مناطق روستایی همچون کشاورزی، معدن و جنگل طی سه دهه اخیر، جستجو و به‌کارگیری راهکارهای تازه برای تقویت پایه‌های اقتصادی و تنوع‌بخشی به فعالیت‌های تولیدی در مناطق روستایی را بیش‌ازپیش ضروری نموده است. در شرایط کنونی توجه به توسعه و تنوع‌بخشی فعالیت‌های اقتصادی در جوامع روستایی نظیر صنایع روستایی، صنایع تکمیلی و فرآوری محصولات کشاورزی و گردشگری روستایی ضروری است. انواع مختلفی از تأثیرات گردشگری روستایی وجود دارد که به‌طورکلی می‌توان آن‌ها را به پیامدها و تأثیرات اقتصادی، اجتماعی و زیست‌محیطی تقسیم کرد. به‌هرحال ازآنجاکه معمولاً دستاوردهای صنعت گردشگری بسیار پیچیده است، و در مناطق گوناگون متفاوت است، بنابراین اثراتی را که بر جای می‌گذارد، در مناطق و نواحی مورد بازدید متفاوت است. ازاین‌رو شناسایی پیامدها و تأثیرات بجای مانده در مناطق توریستی بسیار ضروری است.

۳. روش‌شناسی تحقیق

پژوهش حاضر ازنظر ماهیت، نظری – کاربردی و ازلحاظ روش مطالعه، توصیفی – تحلیلی است. روش گردآوری اطلاعات کتابخانه‌ای و میدانی (پرسشنامه) بوده است. جامعه آماری این پژوهش که در فصل بهار و تابستان، سال ۱۳۹۸ انجام‌گرفته است، تمامی سرپرست خانوارهای روستایی و شوراها و دهیاری‌ها در سطح مناطق روستایی شهرستان‌های ایذه و باغملک بودند. سپس بر اساس تعداد خانوار، حجم نمونه با خطای ۵ درصد، ۲۴۲ نفر برآورد شد. همچنین جهت دریافت نظرات متخصصان و مدیران روستایی (دهیاری و شوراهای اسلامی)، تعداد ۲۰ نفر انتخاب شدند. ابعاد، نماگرها و شاخص‌ها، متناسب با رویکرد پژوهش به روش غربالگری اولیه و درجه تکرارپذیری عملیاتی شدند. سپس روایی سؤالات (پرسشنامه) توسط متخصصان و کارشناسان مورد

*. نویسندهٔ مسئول:

نبی الله حسینی شه‌پریان

آدرس: گروه جغرافیا و برنامه‌ریزی روستایی، دانشکده برنامه‌ریزی و علوم محیطی، دانشگاه تبریز، تبریز، ایران.

پست الکترونیکی: Email: nabi.hosseini12@gmail.com

روستای پیان با ۱۰/۷۵، روستای سادات حسینی با ۱۰/۶۳ و روستای حاجی کمال با ۸/۴۶ درصد تغییرات ناشی از اثرات گردشگری داشته‌اند.

۵. بحث و نتیجه‌گیری

موقعیت جغرافیایی بعضی از روستاها، این امکان را فراهم کرده است تا در کنار کارکردهای اصلی، فعالیت‌های دیگری را هم تجربه نمایند تا از این رهیافت بتوانند موجب بهبود وضعیت اقتصادی و اجتماعی جمعیت این منطقه شوند. روستاهای موردمطالعه در شهرستان‌های ایذه و باغملک، به دلیل شرایط آب و هوایی مساعد و چشم‌اندازهای طبیعی مانند سد کارون ۳ جهت شنا و قایق‌سواری، چشم‌اندازهای دیگر مانند رشته‌کوه‌های پوشیده از بلوط، چشمه‌ها و آبشارهای طویل، باغات میوه، آثار هنری و فرهنگی بومی و محلی، صنایع‌دستی، سوغات‌های متنوع محلی، همچنین آثار تاریخی و باستانی، شرایط مناسبی را برای توسعه گردشگری فراهم آورده است. پتانسیل‌های بالای این مناطق موجب شده که سالانه بخصوص در فصول بهار و تابستان، پذیرای تعداد زیادی از گردشگران داخل استانی و غیر استانی باشد و مزایای زیادی را برای مردم منطقه به همراه داشته باشد. براساس آمار و اطلاعات گردآوری شده گردشگری بر توسعه اقتصادی و اجتماعی روستاهای مورد مطالعه اثرات مثبت و منفی به دنبال داشته است. که اثرات مثبت آن به مراتب بیشتر از اثرات منفی آن است.

کلیدواژه‌ها: گردشگری روستایی، اثرات اقتصادی و اجتماعی، تکنیک پرومته، شهرستان ایذه و باغملک.

تشکر و قدردانی

تأیید قرار گرفت. درنهایت به‌منظور تجزیه‌وتحلیل داده‌ها از نرم‌افزار آماری SPSS، FAHP و تکنیک پرومته بهره برده شد.

۴. یافته‌های تحقیق

میانگین شاخص‌ها و گویه‌های اقتصادی و اجتماعی حاصل از اثرات گردشگری بر اساس نظرات ساکنان محلی و متخصصان و مدیران روستایی گویای آن است که از دیدگاه جامعه آماری، گردشگری بر قیمت زمین‌های روستائیان، فراهم آوردن تأسیسات زیربنایی، بهبود سطح آموزش و بهداشت محل سکونت، بهبود وضعیت دسترسی به خدمات عمومی، ایجاد و توسعه امکانات تفریحی بهتر برای جامعه محلی، حس تعلق‌خاطر مردم به محل سکونت، افزایش سطح دانش عمومی مردم، افزایش میزان مشارکت مردم روستا در امور روستا، تنوع بخشیدن به اقتصاد محلی، ایجاد تقاضا برای محصولات زراعی، باغی و دامی و غیره تأثیر مثبت و تأثیرات منفی همچون، گرایش به استفاده از کالاها و وسایل مصرفی تجملاتی، تغییر در نگرش مردم نسبت به شیوه زندگی روستایی و روی آوردن به شهرنشینی و غیره را به دنبال داشته است.

در ادامه نتایج آزمون رگرسیون تک متغیره نشان داده که گردشگری به میزان ۳۹ درصد در بهبود امکانات و خدمات، ۳۲ درصد در تقاضا محصولات محلی، ۱۷ درصد بر درآمد، ۱۴ درصد در انگیزه ماندگاری و مهاجرت، ۱۱ درصد در تعاملات فرهنگی، ۱۰ درصد بر قیمت زمین و اشتغال و حدود ۱۰ درصد بر تغییر شیوه زندگی، بهبود رفاه زندگی و امنیت ساکنان روستاهای موردمطالعه اثرگذار بوده است. مقایسه روستاها نشان می‌دهد که درصد تغییرات اثرات گردشگری در روستای امامزاده عبدالله ۸۰ درصد بوده، در روستای شیوند بالای ۶۹ درصد، روستای مال‌آقا با ۵۹/۱۴ درصد، روستای رباط حضرت سلیمان با ۲۷/۲۶ درصد، روستای ابوالعباس با ۱۷/۶۹ درصد، سوسن با ۱۶/۱۲ درصد،

Original Article

Explaining the Model of Post-Disaster Temporary Accommodation Strategy (Case Study: Sarpol-e Zahab, Kermanshah)

Elnaz Asgari Namin [1]- Ali Javan Forouzandeh [2*]- Maziyar Asefi [3]- Kazem Shakeri [4]

1- Ph.D. Candidate in Architecture, Ardabil Branch, Islamic Azad University, Ardabil, Iran.
2- Assistant Prof. in Architecture, Ardabil Branch, Islamic Azad University, Ardabil, Iran.
3- Full Prof. in Architecture and Urbanism, Tabriz Islamic Art University, Tabriz, Iran.
4- Associate Prof. in Civil Engineering, University of Mohaghegh Ardabili, Ardabil, Iran.

Abstract

Purpose- The study aims to identify the main problems of temporary accommodation strategies and to discuss some principles and guidelines in order to assist decision-makers for choosing the most suitable strategy and reach better temporary accommodation solutions.

Design/methodology/approach-The present research is of applied type and has been done by descriptive- analytical method. Documentary and library methods have been used to collect information. In this study, the main focus is on providing qualitative components of post-disaster accommodation in the form of a strategic model as a platform for decision makers in crisis situations.

Findings- This research presents a comprehensive strategy in temporary accommodation planning for decision makers by separating the two organizational and technical parts into three main parts (strategic, programmed and project level). To make the necessary decisions based on the personalization of the effective factors in each situation.

Research limitations/implications- At the time of the disaster, due to emergency, it is impossible to address all the parameters affecting the planning of temporary accommodation. In addition, each affected area has its own individual circumstances, which lead to the choice of its own strategy. It is essential to address the pre-disaster planning process and to have a model that can cover human error and consider the correspondence between the former and the new.

Practical implications- By applying a systematic strategy of temporary accommodation, in each area according to local data, while determining the stages of necessary activities in the time pre- disaster, disaster and post- disaster, can reduce the risks of crisis and increase resilience in the affected communities.

Originality/value- This article initiated an innovative systematic strategy of temporary accommodation which, be considered a series of actions as processes for fulfilling certain needs rather than as objects only such as tents or buildings.

Keywords- Post disaster temporary accommodation, Temporary housing, displaced people, Resilience, Strategy.

Corresponding Author:
Javan Forouzandeh, Ali, Ph.D.
Address: Department of Architecture, Faculty of Technical, Ardabil Branch, Islamic Azad University, Ardabil, Iran.
Tel: +98911 313 7292
E-mail: alijavanforouzande@gmail.com

1. Introduction

Over the last decade, 200 million people have been affected by natural disasters and hazards, 98% of whom lived in developing countries where climate change causes extreme temperatures, increased flooding, intense heat waves, and droughts (Aquilino, 2011). Those who lost their homes to natural disasters needed somewhere to live while their houses were rebuilt or needed to find alternative accommodations (Collins et al. 2010; Davis, 1982). The years between living in emergency accommodations and permanent houses present a time gap that needs to be bridged by temporary housing (TH) (Johnson et al. 2006). However, these temporary houses have, to date, been criticized for their inability to meet the expectations of displaced people (DP) (Chen et al., 2013).

People affected by a natural disaster have the right to live with dignity and to receive assistance to alleviate human suffering (Sphere Association, 2018) In general, to recover natural-affected population there are three different recovery phases: (1) emergency, (2) temporary, and (3) permanent accommodation (Lizarralde et al. 2009). During the reconstruction of permanent housing, it is a challenge to provide temporary accommodation that can supply security and personal safety, as well as offer protection from the adverse weather conditions, immunize people of diseases, and other possible dangers (Collins et al. 2010; Davis 1978; Félix et al. 2013).

Additionally, to bridge the time gap between natural disaster and permanent housing reconstruction, the DP need a place which enhance their opportunity to return to their normal activities (Davidson et al. 2007; Corsellis & Vitale 2011; Quarantelli 1995).

Furthermore, the provision of temporary housing (TH) is a crucial issue in terms of sustainability due to the economic, social, and environmental aspects involved (Barakat, 2003; Chandler et al., 2007; El-Anwar et al., 2009; Hadafi & Fallahi, 2010; Johnson, 2002; Sadiqi et al., 2012; Wei et al., 2012). TH planning has usually been accomplished in emergency situations after natural disasters (Johnson, 2002). The large amount of TH needs and DP pressure on authorities have a considerable negative impact on the decision-making processes. In general, recovery programs end into failure, when decision-makers neglect to consider correspondences between short- and long-term requirements of all local stakeholders and the characteristics of the chosen TH. Furthermore, strategies, which are provided by a restrained group of professionals, often fail to address the DP expectations (Lizarralde & Davidson 2006). To deal with this objective problem it is necessary to consider a wide range of factors involved, which derive from TH systems and actors beyond this system (Johnson 2007a).

These mentioned problems can be lessened by considering all factors involved in the whole life cycle of TH with regard to special conditions of each case and context. As different areas with diverse local living standards and prosperity require particular strategies (Johnson, 2007a; United Nations Disaster Relief Organization, UNDRO, 1982), a response to different natural affected-areas need to have an individual approach (Kennedy et al. 2008). In this regard, Nigg et al. (2006) stated that the post-disaster accommodation (PDA) typology is not particular or collectively comprehensive; the refinement of typology of these accommodations is required to achieve suitable customized solutions. Additionally, Da Silva (2010) declared that the most adequate programs should be chosen based on: the DP skills and capacity, the availability of the local materials, the housing design and construction type, the reconstruction timescale and the funding availability.

Therefore, it is necessary to consider all factors in terms of fitting with different situations and priorities of stakeholders, including some factors of less importance than others. For instance, site location, which seems to have lower priorities than timing, has a considerable impact on TH delivery time (Johnson, 2002) as one of the major indicators. Furthermore, the importance of indicators can vary from case to case based on natural disasters types and scales. To this end, awareness about outcomes of used PDA in previous recovery programs with the particular circumstances is vital to utilize some PDA approaches for a new case. In line with this, it is difficult to guarantee that the PDA program which has been useful for one case will be suitable for another case with different conditions. In other words, the determination of factors involved in each PDA provision and revealing outcomes, can provide explicit initial outlines.

Therefore, the objective of this research is to present a platform for decision-makers in hazard-prone areas for selecting the suitable post-disaster

accommodation (PDA) strategy to implement, based on short-term and long-term requirements. This platform considers the integration of all associated factors which are organized into three main vertexes: (1) local characteristics, (2) natural disasters, and (3) PDA properties. Additionally, this study aims to display influences of these elements on choosing strategies, which were previously used for PDA provision. In this sense, the main questions to be solved in this research are:

- Which are the main requirements involved in PDA strategies and the constituents?

2. Research Theoretical Literature
2.1. Research Background
Numerous significant research studies have focused on defining the issues related to TH, especially organizational system. However, only a few studies consider TH optimization (El-Anwar et al. 2009), sustainable construction (Yi & Yang, 2014), and technical aspects. Additionally, to provide a proper PDA it is necessary to distinguish between two different areas of recovery programs (*organizational* and *technical* systems). To this end, other researches that deal with issues and aspects (provision, location, and second life) also considered in this research have been previously carried out (see Table 1)

2.2. Post-disaster housing phases
According to (Johnson et al. 2006; Quarantelli, 1995), the post-disaster housing phases are in general as follow: (1) emergency shelter (within hours), (2) temporary shelter (within days), (3) temporary housing (TH) (within weeks), and (4) permanent (within years). Quarantelli (1995) makes a distinction between sheltering and housing. While sheltering refers to a place to stay during the aftermath of the disaster suspending daily activities, housing Immediate denotes the return to household responsibilities and daily routine. (Johnson, 2002). Additionally, UNDRO (1982) considered three phases for post-disaster recovery program: (1) intermediate relief (impact to 5 day), (2) rehabilitation (day 3 to 5 months), and (3) reconstruction (3 month onward).

2.3. Temporary housing provision approach
In general, post-disaster recovery programs in terms of TH provision can be organized into (1) *separate (individual) stages* and (2) *joint stages*, in the first approach, a specific accommodation is used for each recovery phase encompassing the emergency, temporary, and permanent housing phases. However, some materials of these houses can be reused for the next housing phase or a complete unit can be utilized without advanced planning. (Khazai & Hausler, 2005). In the second approach, a settlement that had been used for one of the recovery phases can be operated for other phases with or without modification. (Hadafi & Fallahi, 2010). Furthermore, TH can even play a transition role or permanent housing when the DP does not desire to leave or cannot return to their permanent housing (Peacock et al. 2007).

Table 1. Previous studies on post-disaster accommodations based on considered issues by this study.

Issue	Sub-issue	Research
State-of-the-art	Definition	Abulnour, 2014; Barakat, 2003; Biswas, 2019; Davis & Alexander, 2016; Davis, 1978; DFID, 2010; Félix et al., 2013; Félix& et al., 2015; Johnson, 2009; Hadafi & Fallahi, 2010; Peacock et al., 2007; Perrucci & Baroud, 2020; Quarantelli, 1995; Sphere Association, 2018.
Technical	Provision	Asefi & Farrokhi, 2017; Askar, et al., 2019; Barakat, 2003; Chen et al., 2013; Davidson, et al., 2007; Hosseini et al., 2016a; Johnson, 2002, 2007 b; Johnson et ai., 2006; Yu, & Bai , 2018; Sphere Association, 2018.
	Location	Celik, 2017; Chandler et al., 2007; Chen et al., 2013; Chua & Su, 2012; Hosseini et al., 2016b; Kelly, 2010; Lizarralde & Davidson, 2006; Nojavan & Omidvar, 2013; Omidvar, Baradaran-Shoraka, & Nojavan, 2013; Soltani et al., 2014; Wagemann, 2017; Sphere Association, 2018.
	Second life	Arslan, 2007; Arslan & Cosgun, 2007, 2008; Johnson, 1995, 2007a; Sphere Association, 2018.

2.4. Post-disaster accommodation arrangement

The factors involved in PDA provision, especially TH, from planning to second life, have been considered in PDA arrangement as housing properties. Table 2 and Figure 1. Presents PDA arrangement, which includes: the time-scale, provision, and second life of TH. The *time-scale* index embraces different post-disaster phase, diverse requirements, and features of accommodations which must be provided for DP. The *provision styles* index considers the PDA variety in order to provide this accommodation type and associated factors. The *second life* index takes into account the alternative scenarios of using TH after moving DP to the permanent housing.

Table 2. Post-disaster accommodation arrangement.

Post-disaster accommodation arrangement	Parameters of PDA	REFERENCES
Time-scale	PDA phases differ from each other in terms of the time - (emergency shelter, temporary shelter, temporary housing, and permanent housing, and, within hours, a day or two, weeks, and few years, respectively)- of the provision process, operation, and also services	Quarantelli (1995) Johnson et al. (2006)
Housing styles	(1) available TH that does not need to be provided, such as available rental apartments and some of collective living quarters, and (2) Not Available TH (NATH) that needs to be constructed, such as mobile housing units (shipping containers, trailers, etc.)	Johnson (2009) Wei et al. (2012) UN (2013)
Site location	- involves many steps from planning to construction, consisting of an initial inventory, alternative analysis, assessment, detailed design, and construction procedures and services. - The NATH site location can be chosen by two approaches: camp (grouped) and yard of DP´ pre-disaster housing (dispersed).	Davis (1978) Johnson (2002) Aquilino (2011) Kelly (2010)
Construction system (Not available temporary housing (NATH))	TH units for the provision of NATH have been using on-site masonry construction and prefabrication system consists of (1) ready-made units that are totally constructed in a factory and moved to the site, such as containers or mobile homes; and (2) supply kits whose elements have been produced in a factory and subsequently assembled on-site.	Hosseini et al. (2016) Félix et al (2013)
Labor	There are four labour methods: direct, community, contract, and self-help labour. Meanwhile, by focuses more on technical aspects, the labour methods organized into a couple of main categories: participation and third-party labour methods. The participation method embraces construction approaches when DP only (self-built) or DP with community (semi self-built) undertakes to provide the PDA The third-party labor method considers the construction approaches to provide DPs´ accommodations by other people without the participation of the DP in the construction process.	Davidson et al. (2007)
Materials and building typology	(1) conventional materials which include the common materials of the building construction industry and (2) non-conventional materials	Arslan & Cosgun (2007) Barakat (2003) Bedoya (2004) Lizarralde et al., (2009) Davidson

Post-disaster accommodation arrangement	Parameters of PDA	REFERENCES
Temporary housing second life	TH normally be used for a maximum of five years, after this time, named the "*second life* of TH; include of (1) reuse and (2) storage for potential use, such as future post-disaster TH. According to other author there are two diverse approaches for TH units (THUs), reuse; (1) complete building and (2) component usage. Complete buildings of THUs can be used in different ways in terms of *location* (same or another location), *property condition* (THUs can be sold, rented or donated), and *function* (same or other function). The components of THUs are used as main building components, raw materials, and recycled materials.	Johnson (2009) Arslan (2008) Cosgun (2008)
Local characteristics	(1) *Local potentials*, which consider local possibilities of providing temporary accommodation for DP groups based on material and immaterial properties; and (2) *affected population* by natural disaster with different-features which include DP and others, that play an important role in PDA provision. In other studies, local characteristics have been defined by vulnerability; include of population's capacity to resist and cope with natural disaster	Blaikie et al. (2014) UNDRO (1982) Sliwinsky (2007)
Local potential	Economic, social, and environmental aspects of affected area that are essential to be assessed in terms of (1) vulnerability of the local population against probabilistic natural hazard and (2) alternative temporary accommodation which can be utilized after the disaster.	Davidson et al. (2007)
Stakeholders	It is useful to consider the similarities and differences in the interests of stakeholder groups affected by temporary settlement. This might help to develop common operational guidelines which could improve co-ordination and co-operation between different organizations in the field.	Corsellis (2011), Shelter Center (2012)
Debris removal	Is a priority to enable the provision of shelter and the establishment of appropriate settlement solutions, The use, management, ownership and environmental impact of disposal sites should be considered.	Corsellis (2011), Shelter Center (2012)
legal context	An awareness of local and national laws is essential in order to understand the socio-political context of a settlement: local and national laws will affect the use of land for settlements.	Corsellis (2011), Shelter Center (2012)

Figure 1. PDA arrangement.

2.5. The minimum standards of Shelter and settlement

The Humanitarian Charter expresses all people affected by disaster or conflict have a right to receive protection, security and assistance to ensure the basic conditions for life with dignity.

Shelter is a critical determinant for survival in the initial stages of a disaster. Beyond survival, shelter is necessary to provide security, personal safety and protection from the climate and to promote resistance to ill health and disease. It is also important for human dignity, to sustain family and community life and to enable affected populations to recover from the impact of disaster.(Sphere Association, 2018)

Non-displaced disaster-affected populations should be assisted on the site of their original homes with temporary or transitional household shelter, or with resources for the repair or construction of appropriate shelter. Individual household factors including the extent of the assistance provided, land-use rights or ownership, the availability of essential services and the opportunities for upgrading and expanding the shelter. Displaced populations who are unable to return to their original homes often prefer to stay with other family members or people with whom they share historical, religious or other ties, and should be assisted to do so. When such dispersed settlement is not possible, temporary communal settlement can be provided in planned or self-settled camps, along with temporary or transitional household shelter, or in suitable large public buildings used as collective centers.(Sphere Association, 2018)

The minimum standards are not a complete expression of the right to adequate housing as defined by the relevant international legal instruments (Fig. 2). Rather, the minimum standards reflect the core content of the right to adequate housing and contribute to the progressive

realisation of this right. this right of minimum standards of Shelter and settlement assorted in follow table 3.

Table 3. the Minimum Standards of Shelter and Settlement.

The minimum standards of Shelter and settlement	
Standard 1: Strategic planning	Contribute to the security, safety, health and well-being, promote recovery and reconstruction.
Standard 2: Settlement planning	The planning of return, host or temporary communal settlements enables the safe and secure use of accommodation and essential services by the affected population.
Standard 3: Covered living space	People have sufficient covered living space providing thermal comfort, fresh air and protection from the climate ensuring their privacy, safety and health and enabling essential household and livelihood activities to be undertaken
Standard 4: Construction	Local safe building practices, materials, expertise and capacities are used where appropriate, maximizing the involvement of the affected population and local livelihood opportunities
Standard 5: Environmental impact	Shelter and settlement solutions and the material sourcing and construction techniques used minimize adverse impact on the local natural environment.

3. Research Methodology

3.1. Geographical Scope of the Research

Sarpol-e Zahab earthquake with magnitude 7/3 occurred at 21.48 pm local time on November 11 2017, near Azgaleh city in Kermanshah province in northwestern Iran. The earthquake destroy large parts of Sarpol-e Zahab city and many cities and villages of Kermanshah province. Earthquake power to it was so big that it was felt even hundreds of kilometers from the earthquake center, even in Tehran. At least eight cities have been affected by the earthquake in Sarpol-e Zahab (Qasr-e Shirin, Azgaleh, Salas Babajani, Gilan-e Gharb, Sar-e Poltabah, Dalahoo, Islamabad West and Javanrood) and 1933 villages were damaged. According to forensic statistics as of 18 December 2017, Over 579 people were killed in the earthquake and thousands were injured. (IEES, 2017)

3.2. Methodology

The present research is of applied type and has been done by descriptive-analytical method. Documentary and library methods have been used to collect information. In this study, the main focus is on providing qualitative components of post-disaster housing in the form of a strategic model as a platform for decision makers in crisis situations.

3.3. Review of measures taken in the area of temporary accommodation and reconstruction

The magnitude of damages caused by the Kermanshah earthquake and the dispersal of the affected areas have caused the resettlement process Temporary and reconstructed earthquakes pose different challenges in terms of physical, social and economic aspects. In this Section Summary of Actions in the Area of Temporary settlement and Reconstruction, Challenges Overview Hint will be put:

3.4. Provision of temporary accommodation

Due to the destruction of most public buildings in affected areas, especially schools, it was not possible to use these places for the temporary accommodation of earthquake survivors. As a result, the government's main program is provided the container houses, for temporary accommodation. For this purpose, a contract was signed between the Housing Foundation of the Islamic Revolution and the IRGC 15,000 container houses, were provided for the quake-hit areas, In addition, people, donors and celebrities have taken action to provide shelters for the affected areas there are various ways to providing container

houses, in some cases, prefabricated parts are in place they are shipped and assembled in the workshop and then transported. Figure 2 also in some cases prefabricated shelters are sent and

installed to the area in a relatively complete manner by truck or trailer.

Figure 2. (a) Left: The container houses, Construction Workshop near the Quick Villages.
Figure 2. (b) Right: A fully prefabricated temporary shelter carried by a trailer.
(Source: IEES, 2017)

There were major challenges in providing temporary housing for survivors, some of which are as follows: (IEES, 2017)

3.5.Problems Related to Infrastructure Requirements

One of the problems related to the camps and Temporary shelters, water supply needed for drinking, sanitation, and health issues, as well as electricity supply and Phone access.Thus, it was necessary to prepare and install them before the camps were set up Water pipelines, electricity and telecommunication equipment, sewage disposal facilities are also considered. This dilemma has led to, for example, the use of toilets or Bathrooms, residents of temporary shelters may in some cases have many problems.

3.6. Climatic Problems

The container houses, is not a good fit for the climate conditions of the region Not very compatible with the climate of the region. In recent days, there has been talk of displacement and reversal some of the container houses, have been released due to local storms. It seems like providing temporary housing to the affected villages with using local materials and capabilities can also create Employment for survivors will perform better and accelerate the process.

In some villages indigenous tents are being developed by people using fabrics such as cloth, straw and nylon, which is also more adaptable to the climate of the region. The heating mechanism of these tents is often petroleum heaters or valve lights which can endanger the health of survivors through the limited space inside the tent.

Figure 3. (a) Left: Manufacture of native tents by some survivors. (Internal space)
Figure 3. (b) Right: Manufacture of native tents by some survivors. (Outdoor space)
(Source: IEES, 2017)

3.7. Cultural Issues

Considering that the establishment of shelters without regard to cultural issues and with the social going on in the region, privacy and ethnic issues can be dealt with the future will create problems for the affected community. Such problems in past seismic events The Bam earthquake in particular has also been frequently reported.

3.8. Rights and Ownership

Putting container houses, on land owned by other people is tense There are some villages. For example in the village of zarde payin the landowner desired of the IRGC prevented the camps from setting up camps on their land and tensions in the village Created thereafter.

3.9. Creating Secondary Problems in Reconstruction

Many prefabricated units on private land and they are installed in the vicinity of damaged houses. This can restructure due to limitations Space has problems. Also building temporary housing in the vicinity of damaged units has caused some problems with the removal.

3.10. Feeling Discriminated

Differences in the type of shelters offered to people in temporary housing, it has created a sense of discrimination among the people of the region. While some people in tents they have a hard time living, some of them taking advantage of well-built shelters. Even the difference the type of prefabricated shelters has also intensified the feeling among the people. Shelters All funded by the government have the same size and specifications, but the shelters People's donations range in size from small to large. Hence the conflicts at the regional level Damage is observed when receiving shelter.

3.11. Debris Removal

Many of the buildings in the area were destroyed by the earthquake, and a large amount of debris remained. Thus, the debris removal operations were carried out with the aim of searching and rescuing, reopening roads and preparing the ground for Housing and reconstruction began in the early hours after the earthquake by heavy machinery sent to the area. There are, of course, a number of problems in the removal operations, the most important being the following the problem of lack of proper space for the debris depot has caused the debris to discharge in areas where Can have future environmental consequences. The riverbeds, the roads, the proximity Slopes and ... are some of the

places used to dump waste. In general, the necessary location for this important It's not done Rubble depot in different plains and areas that can have environmental consequences there is no plan for earthquake recycling. Only available iron by local buyers it is separated from the rubble and the rest of the rubble removed by truck is transported out of the city. It seems if such programs exist, the volume of debris would be reduced and in addition to saving the need Materials during the reconstruction, it was possible to preserve the environment in a more desirable way.

3.12. People's Participation

Residents of affected areas should be directly involved in the reconstruction process in Participate in remediation actions. This increases the acceptability of the result of the work, creating the job and the social consequences of the earthquake will be reduced and the work process will accelerate. Also because the reconstruction process is acceptable to the disadvantaged sections of the community; Obtain people's opinions, or at least their representatives, in decision-making sessions. Without the opinion of the affected people was not a successful reconstruction process and the result was widely used it won't take. In this regard, in the process of temporary housing, unfortunately, the participation and how to use it for the affected people has not been given much attention.

3.13. Livelihoods

Currently, the region's economic infrastructure is often damaged and in the future as a major problem, employment and livelihoods will grip people. Many livestock in the village has been destroyed or inevitably sold out, and livestock in these conditions are almost impossible. Therefore, besides paying attention to housing reconstruction, there are ways to ensure people's livelihood Think about reducing the effects of unemployment as much as possible. Some of the solutions available in these relationships are as follows:

- Craftsmanship training and creating handmade cooperatives for the sale of manufactured items Providing employment with new apprenticeships
- Creating job opportunities by distributing micro loans in affected villages
- Helping restore the region's economic infrastructure, particularly in agriculture and livestock, by providing loans or private sector investments

- Providing facilities for resumption of earthquake-affected jobs

4. Research Findings

This research presents a comprehensive strategy in temporary accommodation planning for decision makers by separating the two organizational and technical parts into three main parts (strategic, programmed and project level), to make the necessary decisions in disaster areas.

This new strategy has the ability to be generalized in similar examples, based on the prioritization of components according to the local context of each disaster.

Regardless of the prosperity level of populated areas, almost all affected areas are struggling with post-disaster housing (PDH) aftermath of natural disasters. In these areas TH is the first priority phase for the government (Hidayat 2010) because TH offers security and safety to Displaced People (DP) so they can return the pre-disaster conditions (Collins et al. 2010; Johnson 2007a). However, most Temporary Housing Units (THUs) that have been used for previous recovery programs are rejected by most experts (Johnson 2009). In general, THUs usually do not satisfy all stakeholders due to numerous weaknesses. According to numerous experts (Barakat 2003; Chandler et al., 2007; El-Anwar et al. 2009; Hadafi & Fallahi 2010; Johnson 2002), these units have had economic, social, and environmental problems.

 According to Lizarralde & Davidson (2006), PDH strategies often fail to address the DP expectations. In this regard, Simon (1996) stated that dealing with complex emergency situations cannot rely only on decision-makers due to the bounded rationality (cited by (Kapucu & Garayev 2011)).

Additionally, decision-making processes are usually implemented after natural disasters under high pressure and stressful conditions in extremely tight timeframes. Meanwhile, it is necessary to consider long-term planning (Kennedy et al. 2008) and all stakeholders' participation in decision-making to achieve suitable outcomes. Furthermore, Davidson (2009) stated that even for building construction in normal situations it is necessary to consider stakeholders' characteristics, such as culture in order to achieve appropriate organizational forms. Additionally, it should be emphasized that the organizational strategy has great impact on the supervisors' roles, which is one of the key issues for PDA provision (Gharaati & Davidson 2008).

Additionally, according to United Nations Disaster Relief Organization (UNDRO) (1982), each affected area has individual conditions that lead to choose its particular strategy. Furthermore, different natural disasters have diverse impacts (Lindell & Prater 2003), which need to be considered individually. Therefore, decision-makers need to choose a suitable strategy to deal with PDH issue, which embraces intertwined interior and exterior factors that could have antithetical impacts on each particular case (Hall, 1962) (cited by (Johnson 2007a)). Thus, if decision-makers do not apply previous recovery strategies there is no platform for decision-making process. Moreover, when previous strategies are used there is no guarantee to achieve similar outcomes. In this regard, Kapucu & Garayev (2011) stated that traditional decision-making approaches cannot be used in emergencies, which need flexible tools. Therefore, it is necessary to have a model that could cover human errors and consider the correspondences and interconnections between previous cases and new cases.

The provision of well-planned settlement solutions for people who have been displaced by conflict or natural disasters is crucially important. Bad planning of settlements can have a number of negative effects, in the worst case destabilising whole countries or even entire regions. In contrast, well-planned settlements can have a positive impact which extends beyond the provision of basic shelter.

The influx of large numbers of displaced people into an area, and any TH response to their needs, will have consequences beyond the displaced population itself. Both the local and displaced populations

can expect temporary settlement to have an impact on their lives in many ways:
• protection and security
• survival and health
• social needs, such as privacy and dignity
• livelihoods
• natural-resource management
• communal service infrastructure.

It is essential for organisations responsible for implementing TH programmes to be aware of these consequences, in order to reduce the negative effects and increase the positive effects of their work. As studied in the case of Sar-e-Pol-e-Zahab,

most post-disaster accommodation programs have problems with climate, culture, livelihood and society, which are due to misunderstanding and lack of study of the real context and conditions of people affected by the accident.

For instance, TH responses which match the cultural expectations of the displaced population are less likely to fracture social structures, or to disrupt existing communities within the displaced population. Friction between or within families, or conflicts between clans or ethnic groups, may be reduced through appropriate TH responses. Adapting generic guidelines for the temporary settlement of displaced populations to local and cultural circumstances must be based on sound assessment, monitoring, and evaluation – matters.

The approach of these guidelines to the TH of displaced populations is based on a holistic interpretation of the need for 'shelter'. It goes beyond the temporary provision of tents and camps, aiming instead to support all the settlement and shelter options that are open to displaced people have been categorised into six 'TH programme options. Figure 4. (Corsellis & Vitale, 2011).

Based on a demand and capacity logic and based on studies of minimum standards of (Sphere Association, 2018) the temporary shelters system can be divided into three sub-systems as follow:
• Temporary housing
• Temporary social elements

• Temporary common services or facilities
Each of the above sub-systems has its specific spatial unit(s), and these units can be of three private,
Semi-private, and public type. It is suggested that these units are planned based on the following measures:
• Providing a minimum level of comfort and welfare
• Providing the mental support for refugees
• Following the standards for various functions of spaces
• Organizing the spaces based on their pre-planned functions
• Taking into consideration the local and environmental factors
• Considering multi-functioning for some spaces, if possible
• Creating the tendency of returning back to permanent residence
• Considering the sustainable development principles
Using the experiences gained form the past earthquakes as well as "post occupancy evaluation" are very helpful for meeting the above measures. According to the study of the problems of Sarpol-e Zahab in temporary accommodation, the desired solutions, experts and also the minimum standards of (Sphere Association, 2018) can be divided into four economic, social, cultural and environmental areas in the table 4 below.
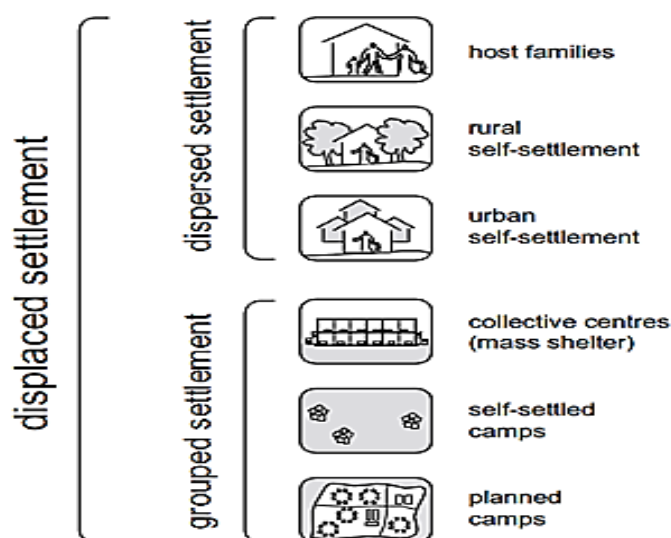
Figure 4. Six 'TH programmed options.
(Source: Corsellis & Vitale, 2011).

Table 4. Guideline for Sustainable temporary housing solutions.

Main Index	Definition	Reference
Ec.	It is useful to consider the similarities and differences in the interests of stakeholder groups affected by temporary settlement. This might help to develop common operational guidelines which could improve co-ordination and co-operation between different organizations in the field.	Corsellis,(2011).Shelter Center, (2012)
	Livelihoods are defined as a range of resource arrangement strategies of production, consumption, and exchange for improving human living conditions.	Twigg, (2006). Allison and Ellis, (2001)
	Space surrounding the units can also be used for cultivating zones or work spaces, which may be profitable for the families' economy. Since a settlement is not just a collection of individual household's design beyond the units is a key to create greater living environments for temporary settlements.	Kellett, Moore, (2003)
	Resource management for post-disaster reconstruction projects.	Chang et al., (2010).
	simple construction systems that are easy to assembly and dismantle, and that use small elements, which are easier to handle, should be preferred	Arslan, (2007)
S.	Recovering the sense of community is very important in post disaster situations and the real meaning of the term community is in the richness of social-relationships	Kellett, Moore, (2003)
	The relation between the temporary housing units and these public spaces and buildings has to be carefully designed too. It is important to yield buffer zones from public domain to the units' private area in order to exist privacy among neighbors, as well as to facilitate social support and interaction.	Caia et al, (2010)
	The units' location has to be carefully established to ensure that people do not feel displaced, and that they are closer to their work places, services and amenities. Usually temporary housing units are built in periphery areas, which can cause social isolation and the need for extra infrastructure and services such as bus transportation.	Johnson, (2007b)
	participation has to be locally decided according to the context	Davidson et al., (2007).
	Community recovery. community-based approaches	Lizarralde & Massyn, (2008)
	An awareness of local and national laws (Legal context), is essential in order to understand the socio-political context of a settlement. local and national laws will affect the use of land for settlements.	Corsellis, (2011), Shelter Center, (2011)
	Skills training programmes and apprenticeship schemes can maximise opportunities for participation during construction, particularly for individuals lacking the required building skills or experience.	Sphere Project, (2018)
	Neighborhood planning should support existing social networks, contribute to security and enable self-management by the affected population. The plot layout in temporary planned camps should maintain the privacy and dignity of separate households by ensuring that each household shelter opens onto common space or a screened area for the use of the household instead of being opposite the entrance to another shelter.	Sphere Project, (2018)
Cul.	Local resources, such as materials, construction techniques and workforce, greatly contributes to reduce costs, to improve local economy and to provide better cultural and local integration.	Gulahane & Gokhale, (2012)
	Local characteristics: (1) *Local potentials*, which consider local possibilities of providing temporary accommodation based on material and immaterial properties; and (2) *affected population* by natural disaster with different-features which include DP and others, that play an important role in PDA provision.	Blaikie et al. (2014), UNDRO (1982), Sliwinsky, (2007)

Main Index	Definition	Reference
	ensuring adequate space provision and privacy in both individual household shelters and temporary collective accommodation. Sufficient space should be provided for culturally appropriate burials and associated rituals.	Sphere Project, (2018)
	Understand precise local context in order to provide solutions that match with their future users and environment	Johnson, (2007a). UNDRO, (1982).
	Flexibility is crucial to allow simple and quick transformations that make the unit able to accommodate these multifunctional spaces. Essential to make users capable of customizing and personalizing their units, making additions or modifications according to their needs and possibilities. In disaster scenarios housing is often a work place for families.	UNDRO, 1982. Kellett& Tipple, (2000), ElMasri& Kellett, (2001). Barakat, (2003). Bedoya, (2004). Lizarralde & Davidson, (2006). Lizarralde & Root, (2007). Arslan & Cosgun, (2008) Sener & Altum, (2009) .
	meeting people's aspirations and incorporating local forms of housing	Barakat, (2003)
	The use of local resources does not mean that innovation should not be used; if properly introduced and culturally integrated, some new materials and technologies may considerably contribute to improve housing solutions after disasters	Davidson et al. (2007). Garofalo & Hill. (2008). Shaw, Takeuchi, Uy & Sharma,(2008)
	Existing local practices in the use of covered living space accommodation of extended family members, should inform the covered area required.	Sphere Project, (2018)
En.	Construction resilience should be consistent with known climatic conditions and natural hazards and should consider adaptations to address the local impact of climate change.	Corsellis, (2011), Shelter Center, (2012)
	Reversibility of the construction process; This strategy proposes the possibility to reintroduce materials and spatial resources into another production cycle or to reintegrate them into the natural environment without production of waste or resides. Just like the reuse possibilities, the reversibility concept is only possible if properly planned ahead during the design phase.	Bologna, (2006)
	Debris removal: Is a priority to enable the provision of shelter and the establishment of appropriate settlement solutions. The use, management, ownership and environmental impact of disposal sites should be considered.	Sphere Project, (2018)
	The impact of a disaster on the natural environment should be assessed to inform the response and mitigating activities required.	Sphere Project, (2018)

5. Discussion and Conclusion

The growing international concern about the increased frequency of large-scale catastrophic disasters has increased the international drive to reduce the destructive effects on the lives and livelihoods of individuals and communities. Moving the trend of tackling disastrous incidents at global level from after to before the event, the proactive entry point, Disaster Risk Reduction (DRR), emphasized, is a shift from reactive emergency relief to proactive disaster risk In parallel, however, the reactive entry point of post-disaster management retains its importance because earthquakes and other extreme natural hazards do not wait until our cities get ready! Prevention following a proactive approach is better than a cure, but it has proved to be illusive in disaster research and response (Pelling, 2012).

This review of the study literature underlines the considerable complexity of post-disaster contexts. With the rising number of victims after disaster and the slow response of government to provide shelter and providing Temporary housing that is a crucial step of the disaster recovery, a new typology, will create a responsive plan to ensure the, protection, security and basic conditions for life with dignity, environmentally conscious, and ready for

implementation into the current framework of society, must be planned.

Any temporary settlement (TH) response For example, planning a post-disaster temporary housing

In the *SarPol-e Zahab Kermanshah* should be planned on the strategic, programme, and project levels. The overall process is the same on all three levels. It consists of developing the profile of a situation, followed by a detailed plan of action to reach the set objectives. The process described here intended as a checklist of factors which should be taken into account when planning temporary settlement. The generic planning process is structured in the following way: Figure 5.

strategic planning- Strategic planning manages temporary settlement on a national or regional level. It deals with the TH and shelter needs of the affected population Several or even all of the six TH programmed options described above are combined to form a coherent strategy.

programmed planning- Programme planning deals with the needs of a specific group of displaced people. For instance, all projects within a particular camp are combined to form a project plan to provide for the TH needs of the camp's inhabitants.

Project planning- Project planning develops and manages the activities required to undertake each project within a programme. For example, the programme plan for the *Sar-e-Pol Zahab* camp might require the expansion of a clinic. This would involve the production of tendering documents and schedules of work – activities which are co-ordinated within the project plan.

Adaitionally, The systems approach allows a comprehensive and cross-disciplinary view of the many apparently separate facets of a complex process such as post-disaster reconstruction. Instead of considering the many elements of the complexity independently, we focus our attention on the important relationships between them, and between them and their environment.

In the systems approach, the Temporary housing projects in post-disaster reconstruction process is recognized for its two main sub-systems: (i) organizational and (ii) technical; their interdependence is (or should be) essential in the environment of chaos following a disaster. The organizational sub-system includes elements regarding 'who is to do what', for example: sources

of financing, and definition of authorization and control mechanisms;

The technical process has to respect the habitual phases of project initiation, preparation, construction and hand-over, within the constraints of limited resources (and limited time) and with the involvement of a great variety of participants, often with divergent objectives. The technical sub-system includes elements regarding 'how' to consume the resources, for example: selection of materials and construction methods.

Thus, this study presents a customizable platform which is able to be applied for each case with regard to the findings from analyzing the case studies.

To this end, the decision-making process algorithm for selecting suitable PDA is presented in Fig.5. In general, this decision-making model embraces two main parts; organizational and technical. The organizational section, which contains Conditions and Availability sectors, is the initial screen phase for selecting PDA. The technical takes into account the alternative availability. Indeed, this section of the model considers whether the alternative PDA exits in the affected area or can be provided. Also, the Conditions part probes required infrastructures and conditions for utilizing each alternative by assessing local And TH characteristics with regard to the material and immaterial aspects. In the second screening phase, the detailed technical indicators are applied to assess acceptable/available alternatives based on economic, social, and environmental impacts by considering exclusive local features and demands to distinguish most suitable alternative(s) among all options. By the Johnson (2009),The systems approach allows a comprehensive and cross-disciplinary view of the many apparently separate facets of a complex process such as post-disaster reconstruction.

Therefore, decision-makers need to choose a suitable strategy to deal with PDA issue, which embraces intertwined interior and exterior factors that could have antithetical impacts on each particular case. It is necessary to have a model that could cover human errors and consider the correspondences and interconnections between previous cases and new cases.

In the end, decision-makers have the ability to deal with PDA for the Sar-e-Pol Zahab programs or each specific case by applying the strategy presented, which are derived from this study by

simplifying the complicated PDA issue into explicit steps and characteristics. This research presents a new strategy to deal with a temporary accommodation and especially temporary housing provision program for decision-makers based on customizing effective factors. Through three main vertexes and other inherent aspects gathered within these vertexes. Figure 6.

In Addition, the choice phases, which include these elements and the interconnections, have been defined. Finally, a customizable model was proposed to carry out a PDA and TH selection process. Figure 7.
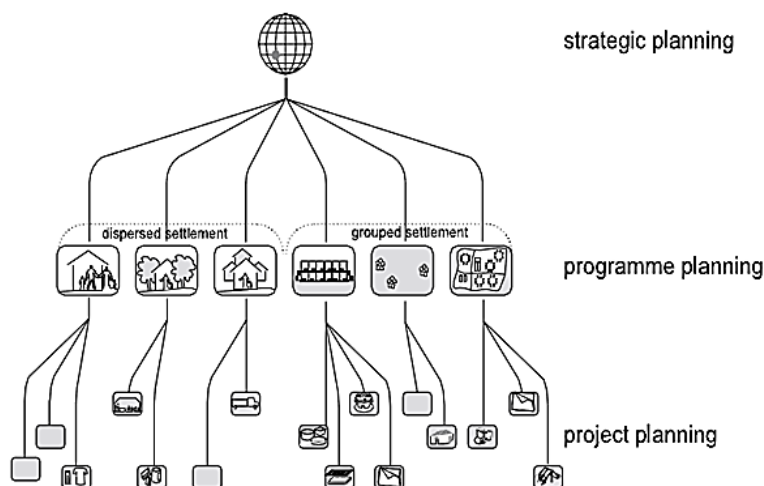
Figure 5. Temporary Settlement Response, Planning.
(Source: Corsellis & Vitale, 2011).
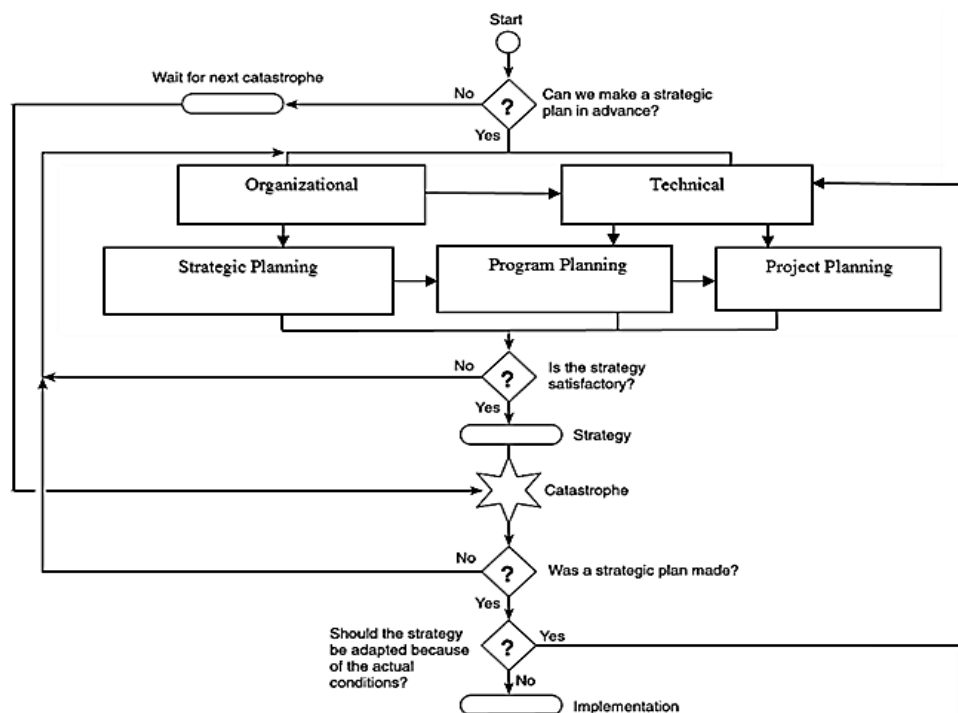
Figure 6. The authors' custom model is based on Johnson's model to perform the PDA and TH selection process.
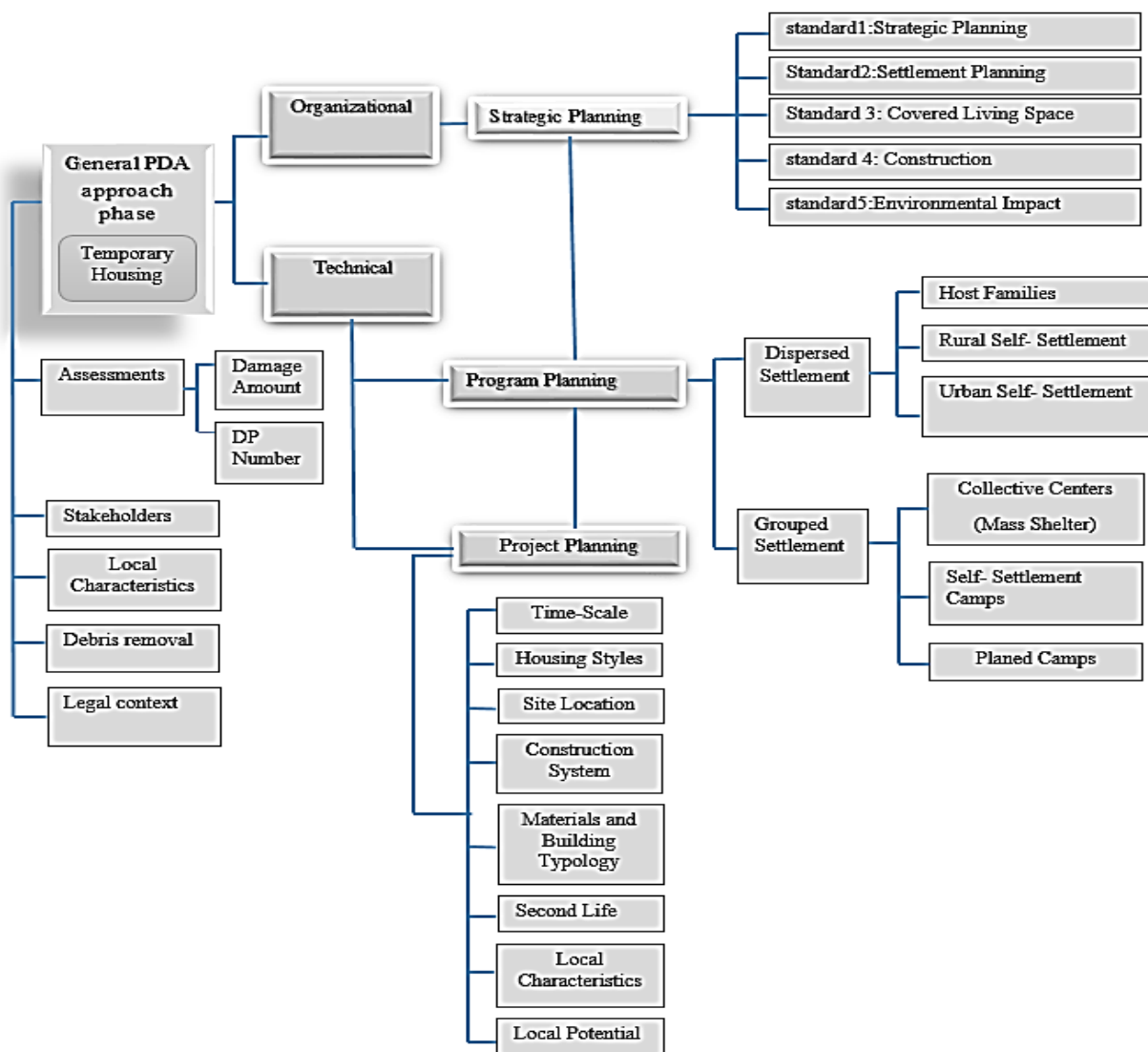
Figure 7. General PDA approach phase.

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Original Article

تبیین مدل استراتژی اسکان پس از سانحه (مطالعه موردی: سر پل ذهاب، کرمانشاه)

الناز عسگری نمین¹- علی جوان فروزنده*²- مازیار آصفی³- کاظم شاکری⁴

۱-دانشجوی دکتری معماری، دانشگاه آزاد اسلامی واحد اردبیل، اردبیل، ایران.

۲- استادیار معماری، دانشگاه آزاد اسلامی واحد اردبیل، اردبیل، ایران.

۳- استاد معماری و شهرسازی، دانشگاه هنر اسلامی تبریز، تبریز، ایران.

۴- دانشیار شهرسازی، دانشگاه محقق اردبیلی، اردبیل، ایران.

چکیده مبسوط

۱. مقدمه

مردمی که تحت تأثیر سانحه قرار می‌گیرند حق زندگی با منزلت و دریافت کمک برای تسکین دردهای انسانی اشان دارند. برنامه‌ریزی مسکن موقتی زمانی که تصمیم‌گیرندگان از در نظر گرفتن ارتباط بین نیازهای کوتاه‌مدت و بلندمدت تمام ذینفعان محلی در مشخصه‌های مسکن موقتی انتخابی غفلت می‌کنند با شکست مواجه می‌شود. باوجوداینکه مسکن موقت جزو لاینفک تمام پروژه‌های بازسازی پس از سانحه می‌باشد همواره مترتب نقدهایی بوده است. نقدهای دریافتی عمدتاً به دلیل عدم مطابقت اقلیمی بحث‌های فرهنگی و اجتماعی بوده است با توجه به بررسی مشکلات اسکان پس از سانحه در سر پل ذهاب نیز عمدتاً مشکلات گفته‌شده به تفسیر بیان گردیده است . ازآنجایی‌که تمامی این مشکلات به دلیل عدم توانایی در پرداختن به جمیع مسائل در زمان اضطرار سانحه است، هدف از این تحقیق ارائه بستری برای تصمیم‌گیرندگان برای انتخاب استراتژی اسکان پس از سانحه بر اساس الزامات کوتاه‌مدت و بلندمدت است. این پلت فرم، کلیه عوامل مرتبط را که در سه محور اصلی ۱) ویژگی‌های محلی ۲) ویژگی‌های بلایای طبیعی و ۳) ویژگی‌های اسکان پس از سانحه در نظر می‌گیرد.لذا مهم‌ترین سؤال این تحقیق عبارت است از: اصلی‌ترین ملزومات استراتژی اسکان پس از سانحه و عناصر تشکیل‌دهنده آن کدام است؟

عوامل دخیل در تأمین اسکان موقت پس از سانحه، از برنامه‌ریزی تا زندگی دوم ، به‌عنوان نظام مسکن موقت در نظر گرفته می‌شود. این نظام شامل:۱) مقیاس زمانی ۲) سبک تهیه و۳) عمر دوم مسکن موقت می‌باشد. شاخص مقیاس زمانی شامل مراحل مختلف بعد از سانحه ، شامل: ۱) پناهگاه اضطراری(در طول چند ساعت) ۲) پناهگاه موقتی(در طول چند روز) ۳) مسکن موقتی (در طول چند هفته) ۴) مسکن دائمی (در طول سال‌ها) و ویژگی‌های آن‌هاست. شاخص سبک تهیه، انواع روش‌های تهیه مسکن موقت پس از سانحه شامل : روش کیت (سرهم‌بندی در محل) و روش پیش‌ساخته می‌باشد. و نیز تقسیمات سکونتگاه پس از سانحه به دو گروه پراکنده و گروهی در ۶ زیر بخش (خانواده‌های میزبان ، خود اسکانی روستایی ، خود اسکانی شهری ، مراکز جمعی، خود اسکانی اردوگاهی و اردوگاه طراحی‌شده) مربوط می‌شود. شاخص زندگی دوم ، سناریوهای مختلف استفاده از مسکن موقتی شامل مراحل استفاده مجدد و بازیافت را پس از انتقال مردم بی‌خانمان به مسکن دائمی در نظر می‌گیرد.

حداقل استانداردها منعکس‌کننده محتوای اصلی حق مسکن مناسب و حداقل استانداردهای اسکان و سکونتگاه است، که شامل ۵ آیتم اصلی: برنامه‌ریزی استراتژیک، برنامه‌ریزی سکونتگاه، استاندارد فضای زندگی سرپوشیده، استاندارد ساخت و تأثیرات محیطی است. توجه به این آیتم‌ها در فرآیند برنامه‌ریزی جزو ضروریات می‌باشد.

*. نویسندۀ مسئول:

دکتر علی جوان فروزنده

آدرس: گروه معماری، دانشکده فنی، دانشگاه آزاد اسلامی واحد اردبیل، اردبیل، ایران.

پست الکترونیکی: Email: alijavanforouzande@gmail.com

با دو زیرسیستم اصلی آن شناخته می‌شود: (الف) سازمانی و (ب) فنی. و وابستگی متقابل آن‌ها، سیستم سازمانی شامل عناصری درمورد "چه کسی می تواند انجام دهد" می‌باشد. به عنوان مثال: منابع تأمین مالی، و تعریف مکانیسم‌های مجوز و کنترل. و سیستم فنی شامل عناصر مربوط به "چگونگی" مصرف منابع می‌باشد، برای مثال: انتخاب مواد و روش‌های ساخت‌وساز.

۵. بحث و نتیجه‌گیری

هر منطقه آسیب‌دیده دارای شرایط اختصاصی است که منجر به انتخاب استراتژی خاص خود می‌شود. در این مطالعه یک استراتژی جامع که شامل عوامل داخلی و بیرونی درهم‌تنیده‌ای که بتواند خطاهای انسانی را در برگیرد و مکاتبات و ارتباطات بین پرونده‌های قبلی و موارد جدید را در نظر بگیرد در قالب مدل فرآیند تصمیم‌گیری برای انتخاب اسکان پس از سانحه ارائه‌شده است. این مدل تصمیم‌گیری شامل دو بخش اصلی است: سازمانی و فنی. بخش سازمانی، به تأمین زیرساخت‌ها با توجه به امکانات در دسترس محلی توجه دارد. شاخص‌های فنی برای ارزیابی گزینه‌های قلبل‌قبول / در دسترس، بر اساس تأثیرات اقتصادی، اجتماعی و زیست‌محیطی با در نظر گرفتن ویژگی‌ها و خواسته‌های انحصاری محلی برای تشخیص مناسب‌ترین گزینه‌ها بین همه گزینه‌ها استفاده می‌شود.

درنهایت استراتژی برنامه‌ریزی مسکن موقت برای تصمیم‌گیرندگان با تفکیک دو بخش سازمانی و فنی در سه رأس اصلی برنامه‌ریزی، ارائه‌شده است تا بر اساس شخصی‌سازی عوامل مؤثر در هر موقعیت تصمیم‌گیرندگان تصمیمات لازمه را اتخاذ کنند.

کلیدواژه‌ها: اسکان موقت پس از سانحه، مسکن موقت، مردم بی‌خانمان، تاب‌آوری، استراتژی.

پژوهش حاضر از نوع کاربردی است و به روش توصیفی- تحلیلی انجام‌شده است. برای جمع‌آوری اطلاعات، از روش اسنادی و کتابخانه‌ای استفاده‌شده است. در این بررسی تمرکز اصلی بر ارائه مؤلفه‌های کیفی مسکن موقت پس از سانحه در قالب یک مدل استراتژیک به‌عنوان بستری برای تصمیم‌گیرندگان در شرایط بحران است.

۴. یافته‌های تحقیق

این تحقیق با تفکیک دو بخش سازمانی و فنی به سه بخش اصلی (سطوح استراتژیک، برنامه‌ریزی و پروژه)، یک استراتژی جامع در برنامه‌ریزی اسکان موقت، برای تصمیم‌گیری‌های لازم در مناطق فاجعه را ارائه می‌دهد؛ که قابلیت تعمیم در نمونه‌های مشابه، بر اساس اولویت‌بندی مؤلفه‌ها با توجه به زمینه محلی هر سانحه را دارا می‌باشد. هر برنامه‌ریزی مسکن موقت باید در سطوح ۱) استراتژیک، ۲) پروگرام و ۳) پروژه انجام شود. در هر یک از این مراحل فوق چک‌لیست عواملی که باید در هنگام برنامه‌ریزی در نظر گرفته شود، مدنظر است. که شامل:

۱) برنامه‌ریزی استراتژیک: برنامه‌ریزی استراتژیک، سکونتگاه موقت را در سطح ملی یا منطقه‌ای مدیریت می‌کند. در این بخش همه شش گزینه برنامه مسکن موقت، برای ایجاد یک استراتژی منسجم، ترکیب‌شده‌اند.

۲) برنامه‌ریزی پروگرام: با نیازهای گروه خاصی از آوارگان سروکار دارد. به‌عنوان‌مثال، تمام پروژه‌های داخل یک اردوگاه خاص برای تشکیل یک طرح پروژه به‌منظور تأمین نیازهای ساکنان اردوگاه ترکیب‌شده‌اند.

۳) برنامه‌ریزی پروژه: برنامه‌ریزی پروژه فعالیت‌های موردنیاز برای انجام هر پروژه را در یک برنامه توسعه داده و مدیریت می‌کند. به‌عنوان‌مثال، برای گسترش کلینیک در یک اردوگاه با هماهنگی فعالیت‌های آن در برنامه‌ریزی پروژه انجام می‌گیرد.

افزون بر این، رویکرد سیستم‌ها یک دیدگاه جامع و مقطعی از بسیاری از جنبه‌های ظاهراً جداگانه یک فرآیند پیچیده مانند اسکان پس از سانحه را امکان‌پذیر می‌کند. به‌جای اینکه عناصر پیچیده بسیاری را به‌طور مستقل در نظر بگیریم، توجه خود را به روابط مهم بین آن‌ها، و بین آن‌ها و محیط آن‌ها متمرکز می‌کنیم. فرآیند اسکان پس از سانحه

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Original Article

Interpret Influencing Factors on Revisit Intention to Rural Tourism Destinations in Yazd Province

Mohammad Reza Asadi Zarch[1]- Mohammad Najjarzadeh [*2]- Sakineh Jafari[3]

1. MSc. in Tourism and Marketing, Semnan University, Semnan, Iran.
2. Assistant Prof. in Tourism, Semnan University, Semnan, Iran.
3. Assistant Prof. Psychology and Educational Science, Semnan University, Semnan, Iran.

Abstract

Purpose- Aim of this study was to interpret the effect of perceived quality and perceived value on tourists' loyalty by the mediation of satisfaction and destination image in the three tourism target villages of Yazd province (located in central Iran).

Design/methodology/approach- Present study is applied research regarding the objective and the type of research is a descriptive correlation. The population of the study consists of all incoming tourists to three tourism villages of Yazd province (Kharanagh, Saryazd, and Sadeghabad). Participants were 200 visitors to three villages of Yazd province that were selected using the convenience sampling method. They all completed the perceived quality, perceived value, satisfaction, destination image, and loyalty scales in a questionnaire. Data were analyzed using the path analysis model (LISREL software).

Findings- The study shows that there is a positive and significant relation between tourists' loyalty and perceived quality, between tourists' loyalty and perceived value, between tourists' loyalty and destination image, and between tourists' loyalty and satisfaction. Moreover, perceived quality and perceived value have a direct, significant effect on tourists' loyalty. Perceived quality by the mediation of destination image has an indirect effect on tourists 'loyalty; perceived quality by the mediation of satisfaction has an indirect and meaningful effect on tourists 'loyalty; perceived value by the mediation of destination image has an indirect effect on tourists' loyalty; perceived value by the mediation of satisfaction has an indirect and meaningful effect on tourists' loyalty.

Keywords- Tourists' loyalty, Perceived value, Destination image, Tourist satisfaction, Perceived quality.

*Corresponding Author:
Najjarzadeh, Mohammad, Ph.D.
Address: Department of Tourism Management, Faculty of Tourism, Semnan University, Semnan, Iran.
Tel: +98937 512 0076
E-mail: mnajjarzadeh@semnan.ac.ir

1. Introduction

Iran is facing an unemployment problem today more than ever. The oil price has shaped the country's economy and has made policymakers look for solutions outside the earlier patterns. Tourism as a complex system with large dimensions can be a pathway through the unemployment gap (Miraj, 2008). Job creation, sustainable development, economic stability, regional balance, aid to global peace, contribution to investing in cultural heritage, etc., have been the advantages of the tourism industry (Sadr Mousavi & Dakhili Kahanmoye, 2005). Hence, our country is one of the top ten countries in terms of tourism (cultural and civilizational attractions) and among the top five countries in terms of diversity (natural environment), and one of the top three countries in terms of handicrafts (Taheri Damneh et al., 2011). Tourism in recent years has been widely considered as a solution for development (Akbarian Ronizi & Ramezanzadeh Lasbuee, 2015).

Tourism, considered as a tool for national income and one of the economic forms of sustainable development, has many forms, one of its forms as rural tourism aimed at sustainable development of local communities. It has turned to a new job in rural development regions (Walpole & Goodwin, 2000).

Rural tourism, one of the most important patterns of tourism, for the first time, appeared in response to increased urbanization and industrialization in the 19th century (Teyu, 2004 as cited in Akbarian Ronizi & Ramezanzadeh Lasbuee, 2015). Rural tourism can play an important role in the diversification of rural communities and in creating new opportunities in rural areas including the creation of profitable employment in rural areas, increasing the income of villagers, public participation and reduction of income differences between villagers and citizens, reducing the migration of villagers to cities and reducing the migration problems of big cities. It must be acknowledged, however, that tourism solely cannot satisfy all the needs of the villagers (Rezvani, 2008).

Today, rural tourism is an obvious factor in rural development that drives tourists to rural areas and improves the quality of life, infrastructure, and employment rates (Bardón, 1990).

Rural tourism emerged as a type of tourism when shore tourism, which had the lion's share, went down to the recession (Besteiro, 2006). Other alternative forms of tourism, such as rural tourism affected by European firms, started to develop (Fernández, 1987 as cited in Hernández-Mogollón et al., 2011). Rural tourism would satisfy the people who want to stay away from the city in the quiet of the suburbs and that later led to credit, order, become academic and more classification of this kind of tourism (Cánoves et al., 2005). Making loyal customers is one of the most important tasks of a marketer because it costs much less to maintain current customers than to attract new ones (Moon & Minor, 2009). By creating loyalty, consumers can form desirable behavioral intentions, such as repurchase, lack of price sensitivity, and product recommendation to others. If the expectations of tourists can be met, these people are sure to recommend a visit to the region, which is the most effective way of marketing and advertising (Sunderland, 1998).

Perceived quality as consumers ' judgment about the superiority of a product or service is an important factor in the selection of goods and services by consumers (Zeithaml, 1988). Perceived value refers to the benefits that a product or service brings to the consumer. These benefits accompany by the costs involved in the purchase of goods or services. Perceived value is a good predictor of behavioral intentions (Williams & Soutar, 2009). Perceived quality as consumer opinion about the superiority of a product or service is a critical factor that is used today for customer satisfaction. Increasing the quality of quality increases the likelihood of desired behavioral intentions (Zeithaml et al., 1996)

Perceived value refers to the benefits that a product or service brings to the consumer by deduction of the costs involved in the purchase of goods or services which is a good predictor of behavioral intentions (Williams & Soutar, 2009). Value as the benefits derived from buying the product are factors that affect satisfaction and behavioral intentions. The perceived value is a better predictor for satisfaction (Chen & Tsai, 2007).

The mental image of the destination consists of a spiritual paradigm or a person's perception of a destination. Furthermore, a mental image can denote a simplified set of perceptions that cover many data about a location.

In one sentence, the subjective image of the destination is the subjective perception of a location that can change from person to person (Chao, 2005). Gallarza et al. (2002) reviewed the previous researches on the mental image of the tourism destination, noted the following results:

- A mental image of a place is a set of beliefs, ideas, and feelings that the individual has (Kotler et al., 1993, as cited in Gallarza et al. 2002).

- The target (destination) image consists of three components associated with each other, cognitive, affective, and behavioral (Gallarza et al. 2002).

- The image is the mental expression of the attributes and interests of a product (Santes, 1994, as cited in Gallarza et al. 2002).

Optimal or unfavorable preconceived notions about the product or a destination (Parneto, 1995, as cited in Gallarza et al. 2002).

Yazd province has a large variety of cultural, natural, and biological world heritage, which was preserved in a rural area for several millennia. Some of them are registered in UNESCO heritage and preserved but others are going to be forgotten. According to the mentioned literature and many years of drought and the loss of major rural businesses which has been agriculture and agriculture. We face a shortage of water each year in Yazd province. The culture and traditions of that region are forgotten and people are forced to migrate to larger cities and earn income and as result, we lose much cultural and natural heritage.
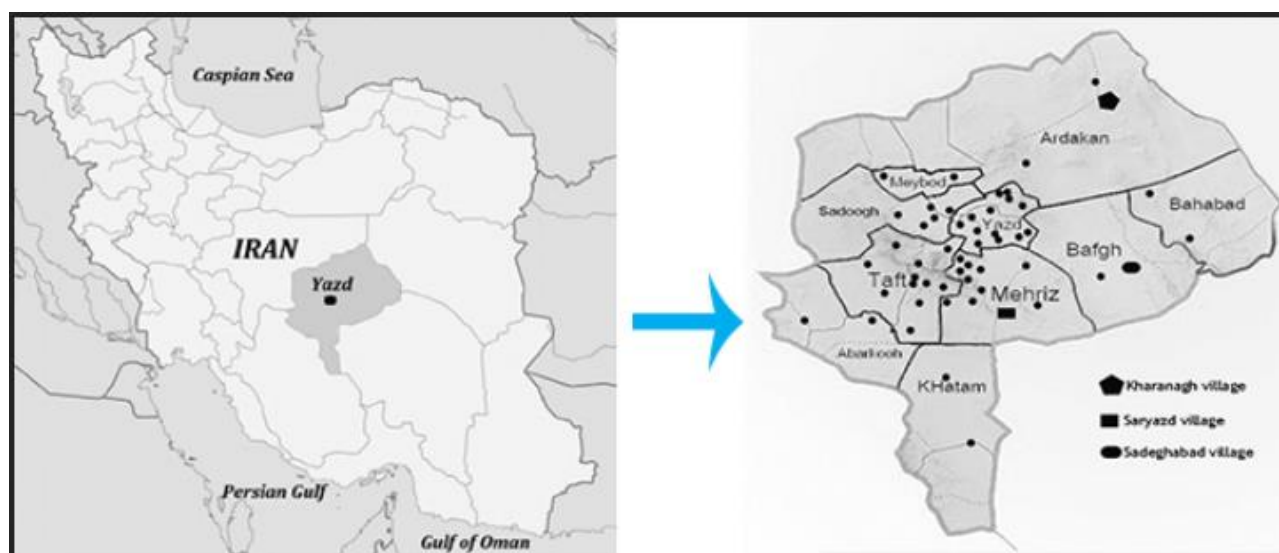
Figure 1. Case study location (Statistical Center of Iran)

With comprehensive and scientific planning of rural tourism development, it can be possible to revitalize forgotten rural areas and develop them and make a permanent job and income for villagers and preserve rural heritage. In addition to the importance of rural development on employment rate and reverse, migration will be tried in this research to study Structural relations of quality and perceived value with loyalty in rural tourism destinations; mediating role of destination image and tourist satisfaction in Kharanagh, Saryazd, and Sadeghabad tourism target villages of Yazd province, which are rich in tourism attraction (Figure1).

There are some researches about revisit factors of destination, but this study was examined four main variables that affect the loyalty of tourists and also

there are rare rural studies operated in the rural desert area of Yazd which nominated as tourism target villages of the province, in this study three tourism target villages of Yazd were studied. On the other hand, most of the time, rural studies neglect the marketing approach of destination management, in this study researchers emphasized this aspect of destination management.

The main question of this study is whether the perceived quality and perceived value have a significant indirect effect on tourists' loyalty by the mediation of satisfaction and the destination image?

2. Research Theoretical Literature

The goal of reviewing the theoretical bases and history of the research is a better description of

tourists' loyalty to the rural destination and effective factors on it. Therefore, the concepts of loyalty in rural tourism destinations and influential elements have been mentioned.

Destination loyalty- Loyalty refers to the repeating of visiting a destination or relative interest to revisit the same destination (Yoon & Uysal, 2005; Prayag, 2009; Ramseook-Munhurrun et al., 2016). Features such as the convenience of facilities, security, suitable infrastructure, cultural attractions and shopping, diversity of tourist attractions, and accessibility are indicators that can influence loyalty (Prayag, 2009).

Previous research has shown that previous visits, general satisfaction, and quality are good predictors of tourists' loyalty (Chen and Tsai, 2007; Prayag, 2009; Li et al., 2009; Ramseook-Munhurrun et al., 2015; Ramseook-Munhurrun et al., 2016.). In addition, it is necessary to consider service quality and satisfaction more indicate because they are predictors of loyalty (Lee, 2009). Many researchers have studied the relationship between service quality and satisfaction in determining loyalty. Recent research on leisure times and travel showed loyalty compared with attitudinal and behavioral factors (Backman & Crompton, 1991; Pritchard & Howard, 1993; Baloglu, 2001). Loyalty is divided into four categories: high loyalty, 2 - hidden loyalty, 3 - secret loyalty, 4 –low loyalty. While the empirical support of the typology in the literature of marketing and leisure services has been stated, the researchers have developed four distinct types of loyalty in many fields.

True faithful customers are characterized by attributes such as attitudinal dependencies and excellent behavior support to a product or service and the least vulnerability to competitors.

Hidden loyal customers are those who show low support to the brand's strong attitudinal dependencies, which may prevent them from buying because of protective barriers such as price and promotion (such as available time, repetitive) or position (convenience of access and distribution).

Fake-Artificial loyal customers are those who repeat the purchase and have no dependency on the brand. The high support level of fake loyal customers may be linked to daily purchasing, financial incentives, persuasive factors, and the absence of alternatives, and so on.

Low loyal clients are, those who perform fewer visits and are at low attitudinal and behavioral levels to use a brand. Hidden and low loyal customers are highly prepared to attract by competitors because they understand a poor connection and support with the brand (Backman & Crompton, 1991; Abdel Kader Fayed et al., 2016)

Concerning perceived value and loyalty, it can be said that perceived value is currently the most prominent element in the intention to purchase and revisit intention. Among quality factors in tourism studies, the perceived value services factor is the best element of loyalty in shopping and visit and travel recommendation. (Abdel Kader Fayed et al, 2016).

Perceived Service quality- Service quality has been defined as how much the needs of the consumer have been met and how much the customer's needs satisfy his expectations. (Kotler et al., 2014). Moreover, the measure of consumer service quality is the satisfaction that arises from an event or a transaction (Oliver, 2010).

Based on tourism literature, many researchers have suggested that service quality performance can be considered a suitable measurement tool for measuring the satisfaction of visitors because the visitor will be satisfied when the quality of the product or service is at the desired level (Chen and Chen, 2010; Oliver, 2010; Udo et al., 2010).

Today, the perceived quality of products and services is considered the most important factor in competition in the business world. Also, the present age is called the Age of Quality, which can significantly increase the level of positive perceptions of services and products, because the quality and type of customer perception affects his behavioral attitude and overall customer community (Figure2)
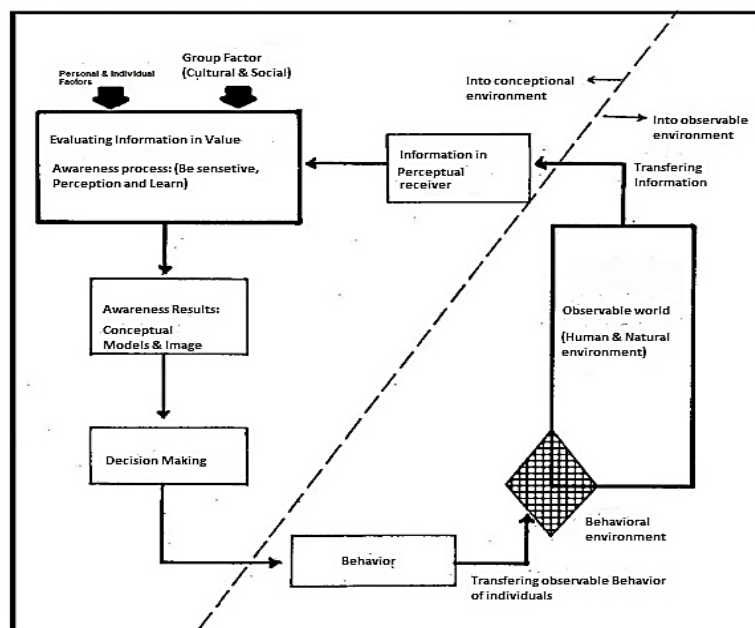
Figure 2. The perceptual relationship of environment and behavior
(Source: Sojasi Gheidari et al. 2015)

According to Figure 2, it is likely that tangible and intangible factors have a significant effect on the subjective image and perceived environmental quality; therefore, the process of emotion, perception, and environmental cognition are important dimensions that must be addressed in the environmental management and planning, because it facilitates the experience of space in terms of quality.

Tourism is a service industry whose mental image is positively affected by their visits to their destination and the quality of perception among them (Sánchez et al., 2001). Also, increasing the quality of the environment has a significant impact on tourist satisfaction and willingness to revisit intention (Petrick et al., 2001).

Every year many tourists in the world choose rural areas as tourism destinations because of cultural, natural, and historical heritage and leisure activities. The role of perceived quality of the environment and mental image of rural tourism destinations is considered as tourist decision making in selecting the destination and attracting enough tourists considering the greater tolerance capacity, as the mental image of a tourism destination is a measure of choosing a destination that many tourists pay attention while traveling.

Having proper awareness of the interests of tourists and their attitude about infrastructure, service quality, tourism capacities, local people, and so on is necessary to control or manage the mental image of tourists from tourism destinations and seek to enhance their environmental perceptual quality from a destination.

Among the past studies on the development of tourism destinations, only a few studies have focused on the topic of perceived quality (Murphy et al., 2000). It is interesting to note that the quality of the environment and service quality is interesting because the overall assessment of tourists from a destination is a combination of products, services, and experiences. Perceived quality and perceived value play a critical role in affecting consumer behavior (Lam et Hsu, 2006).

Therefore, when tourists evaluate services and products properly, the perceived value of their destination is placed at a desirable level; therefore, there is a significant relationship between perceived quality of tangible and intangible factors and perceived value (Moon et al et al., 2011).

Perceived value- The perceived value is the overall consumer evaluation of the usefulness of products or services based on understanding what is received and what has been paid (Zeithaml, 1988). In its research, WoodRuff (1997) has stated the perceived value of the customer as perceived perception and assess the attributes of products, performance value, and consequences of their use

as well as facilitating access to goals that can meet customer goals in certain situations.

Since the mid-1990s, the literature related to perceived value theory was an important topic in the tourism industry that could play an important role in improving the competitiveness of tourism organizations as well as promoting sustainable tourism development (Lee, 2009).

Petrick (2004) found that the perceived value of the visitor could increase the market share of a tourism company, and his research findings indicated that the perceived value affects the behavioral intentions of tourists as well as revisiting the destination.

Mingyan and Seng (2002) suggested that improving the perceived value of the customer can encourage tourists to go to the restaurant and serve the purpose of restaurant operations. Xu et al. (2006) stated that in fierce market competition, the similarity between tourism products offered by different travel agencies would reduce the feasibility of product differentiation strategy, and thus the perceived value of the customer would be their main competitive advantage and also be very helpful in increasing the value of customer perception, cost orientation, time orientation, as well as relationship orientation

Tourist satisfaction- The evaluation of the satisfaction rate of tourists is based on tourist expectations of the visit (Akama & Kieti, 2003) it means that if the overall performance of the tourism service is expected or exceeded, tourists will find satisfaction; on the other hand, if performance is lower than the tourists` expectations, level of its satisfaction is considered low or unacceptable.

Tourist satisfaction is considered an important topic in tourism since it plays a role in decision making, consumption of products and services as well as the decision to revisit (Chen & Tsai, 2007; Armario, 2008; Prayag, 2009).

Accordingly, tourist satisfaction is a key indicator for measuring the success of the services offered at the destination (Prebezac & Mikulic, 2008). The satisfaction of tourists due to the unique characteristics of the destination causes the overall satisfaction of the destination. Satisfaction with different parts of the destination leads to general satisfaction.

The overall satisfaction of hospitality experience involves the satisfaction of unique destination attributes that tourists experience, such as cultural attractions, residence, weather, people, the natural environment, the social environment, and so on (Kozak & Remington, 2000). Many studies in the field of tourism believe that satisfaction affects the future behavioral intentions of tourists (Chen & Tsai, 2007; Chi et al., 2013; Prayag, 2009).

The positive experiences of tourism in the destination can lead to word-of-mouth marketing, recommendation (for example, a good destination), and revisit of destination (Yoon & Uysal, 2005; Oppermann, M. 2000; Chi, C.G.Q., & Qu, H, 2008).

According to the importance of customer satisfaction at the destination level, the concept of satisfaction is still defined in different forms. One of the definitions suggests that satisfaction is a delightful realization, which is defined by Oliver in 1997 (as cited in Giese & Cote, 2000). It means that tourists feel that reaching their needs is somehow pleasurable.

(Lee et al., 2016) said that Satisfaction based on the importance of products or services and their performance was evaluated experimentally. At the destination level, there is an indirect relationship between the importance of their destination attributes and their performance, which is defined by Ryan et al. (2002) and Griffin and Edwards (2013); therefore, it is assumed that tourist satisfaction can be directly affected by the performance of the target features and indirectly by its importance.

In the sense that in the empirical evaluation of tourist satisfaction, the relationship between the unique characteristics of the destination must be recorded. since the ideas of satisfaction and expectation are based on subjective perception, and it`s different from one person to another, it can be difficult to predict the volume of expectations and satisfaction of tourists. However, with regards to appropriate marketing strategies and suitable service, a tourism Destination can benefit from different tourists.

Destination image- The destination image encompasses ideas, thoughts, and effects that people have about one place; so having a mental image and type of perception affect the decisions of tourists (Kazemi et al., 2015). This image or perceived feeling may be unreal or unrealistic from the destination of tourism, but this image of a tourist influences his decisions and shaping his behavioral pattern. Also, in another definition of the destination image, the subjective image of

people is expressed in terms of sensations, knowledge, and overall understanding of the destination (Gomez et al., 2015).

Some of these authors believe that the destination image affects the choice of destination and stated that the destination which has a positive image will be on the decision-making process and this destination is ultimately chosen to revisit. Furthermore, the mental image of the destination affects the behavioral intentions of individuals for visiting the region in the future (Tabatabayenasab S. M. & Mahavarpur, F. 2017).

The key factor for tourism destinations is the subjective image. In choosing tourism destinations, perceptions or positive impressions of tourists have a significant impact. As such, the destination image can affect the satisfaction and future behavior of people (Lee, 2009).

The perception of tourists of the mental destination image should not be overlooked, because this is a decisive factor in choosing a tourism destination for tourists (Mohamad et al., 2015). The mental destination image will have a significant impact on tourist decision-making and behavioral consequences of his travel (Toudert & Bringas-Rábago, 2016). One of the important and effective factors in choosing different destinations from tourists` perspectives is the subjective image of the destination (Puh, 2014). The existing definitions of the target image are related to individual or group

beliefs of one place (Min et al, 2013; Zeugner-Roth & Žabkar, 2015).

The destination image, according to Crompton (1979), "defines the beliefs, opinions, and Impressions that one has from a destination". This definition is at the individual level and is generalizable to the group Lawson and Baud-bovy (1997) have defined the mental image of destination from individual and group aspects: "The image of destination is to express objective knowledge, perceptions, prejudices, imagination, and thoughts that a person or group has to a place or destination" (Lawson & Baud-bovy, 1997).

For theory, the mental image of destination plays a critical role in the destination selecting process, because customers trust significantly their alternatives and subjective destination images while they are choosing tourism destinations (Tasci & Gartner, 2007). In practical terms, the mental image of a destination is an important foundation for destination marketing, because mental destination images can reveal the strengths and weaknesses of the destination in the vision of future tourists (Tasci & Gartner, 2007).

In the area of loyalty, perceived quality, perceived value, destination image, and tourist satisfaction in rural destinations have not been made many Studies; therefore, the researcher has pointed out the results of studies that examining the relationship between variables:

Table 1. Recent researches related to mentioned variables

(Auther, Year)	Topic
(Hosseini, 2015)	The Study of Relations between the subjective image of the destination, the visitor satisfaction, and loyalty to the destination
(Ramseook-Munhurrun et al., 2015)	The Study of Structure of a subjective image of the destination, perceived value, tourism satisfaction, and loyalty
(Parvazi, 2016)	"Special analysis of the value of urban tourism brand (case of study: Baneh),
(Shirkhodaie et al. 2016)	The effect of destination image on satisfaction and behavioral intentions in health tourism (case study: Hot spring of Lavij)
(Taheri and Ansari 2016)	Impact of perceived perceptual Value and sense of place on tourists 'loyalty (case study: Hamedan Province)
(Kiani Feizabadi, 2016)	The effect of destination image and personality on the attachment and satisfaction of tourists (case study: local tourists in Isfahan)
(Jafari et al., 2017)	Examination of effective factors on the special value of tourism destination" (case study: Savadkooh city)
(Abbasi et al., 2017)	Forming destination loyalty regards to the destination experience, destination image, and destination satisfaction
(Akroush et al. 2016)	Quality of Tourism Services and Destination loyalty: The role of the mediator is the mental picture of the destination of international tourist destinations
(Hanaa Abdel Kader et al. 2016)	Impact of motives, perceptions, and satisfaction on tourist loyalty
(Endah et al. 2017)	Subjective image analysis of destination, satisfaction, trust, and behavioral intentions
(Permatasari et al., 2017)	Structural relationships of service quality, subjective image of tourists and loyalty: an integrated approach
(Priporas et al. 2017)	Service Quality, Satisfaction, and Customer loyalty in Airbnb in Thailand
(Ngoc Khuong & My Duyen, 2017),	The impact of the subjective image of the destination, perceived value, and service quality on tourists return based on satisfaction from the destination: studied the city of Ho Chi Minh, Vietnam.

According to the mentioned literature and literature review, there have been some researches in the context variables of perceived quality, perceived value, destination image, and tourist satisfaction with loyalty, but so far no research has been done at the same time interpret the relationship between perceived quality and perceived value with the loyalty of rural tourists with the mediating role of destination image and tourist satisfaction in the country; Additionally, no research has done in Yazd tourism target villages.

Thus, the present study regarding the mentioned cases considered a model of the relationship between perceived quality and perceived value with the loyalty of rural tourists. In the conceptual model of study destination image and tourist, satisfaction has a mediating role between structural relation of perceived value and perceived quality on rural tourists' loyalty (Figure 3).
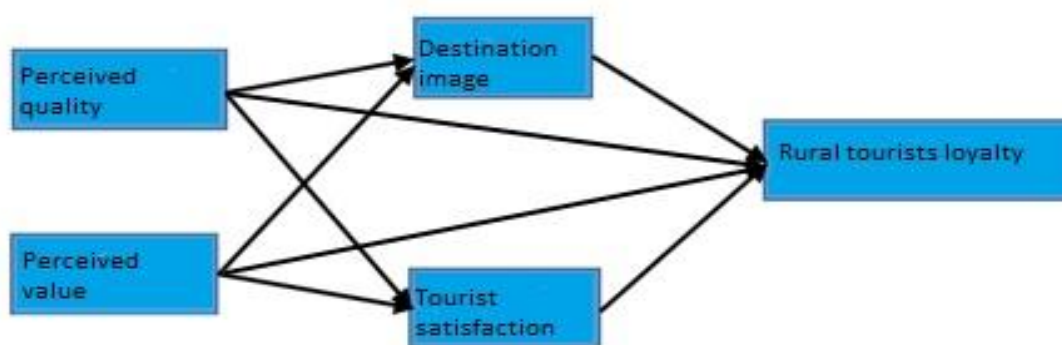
Figure 3. Conceptual model
(Source: Campón-Cerro et al., 2016; Donnelly et al., 2008)

Based on the conceptual model and theoretical bases, the following hypotheses were introduced and tested:

H1: Perceived quality has a direct and significant effect on the loyalty of tourists.

H2: Perceived value has a direct and significant effect on the loyalty of tourists.

H3: Perceived quality with mediating role of tourist satisfaction has an indirect effect on the loyalty of tourists.

H4: Perceived quality with mediating role of destination image has an indirect effect on the loyalty of tourists.

H5: Perceived value with mediating role of tourist satisfaction has an indirect effect on the loyalty of tourists.

H6: Perceived value with mediating role of destination image has an indirect effect on the loyalty of tourists.

3. Research Methodology

The research method has been quantitative research descriptive - correlation concerning the effect of perceived quality and perceived value on tourists ' loyalty by the mediation of tourist satisfaction and destination image. Data was collected with questioner including all variable scales with 5-point Likert scales.

The research community has been determined according to the available parameters in terms of conceptual model parameters. Based on these parameters, the sample size was estimated at 200 domestic tourists of three villages of Kharanagh, Saryazd, and Sadeghabad in Yazd province.

Table 2. Scale used

variables	Based on	indicators	Cronbach Alpha
Image (IMA)	The new scale, based on Echtner and Ritchie (1991)	(IMA1) The destination's conditions are good for engaging in rural tourism (e.g. tourism resources, infrastructures, accommodations, and restaurants). (IMA2) It offers good rural tourism experiences. (IMA3) It reflects an authentic rural environment. (IMA4) It offers possibilities to find out and learn things about rural environments. (IMA5) It offers unique experiences in a rural environment	(0 / 85)
Quality (QUA)	The new scale, based on Zeithaml et al., (1988)	(QUA1) It had what I was looking for. (QUA2) The visit was worth the effort. (QUA3) It made me feel good. (QUA4) It offers quality experiences.	(0 / 88)
Value (VAL)	Mechinda et al. (2009); Mechinda et al. (2010)	(VAL1) It gives me great value for my money. (VAL2) It has good prices. (VAL3) It offers tourism services above my expectations (VAL4) It offers good value for my money.	(0/86)
Overall satisfaction (OVS)	Campón et al. (2016) Williams and Soutar (2009) San Martín et al., (2008); Williams and Soutar (2009) Williams and Soutar (2009); Williams and Soutar (2009); Žabkar et al. (2010); Forgas-Coll et al. (2012); Oliver (1997); Tse & Wilton (1988)	(OVS1) I found all the services needed during my stay. (OVS2) I found everything I needed to have a satisfying experience. (OVS3) I can satisfy my motivations as a rural tourist. (OVS4) I received the services that I expected to receive. (OVS 5) I had a good experience. (OVS 6) I made a wise choice. (OVS 7) I found exactly the rural tourism destination that I was looking for. (OVS8) I feel satisfied with my decision to visit it. (OVS9) My expectations were fulfilled at all times. (OVS10) I feel it is a close-to-ideal destination.	0/89
Loyalty (LOY)	Mechinda et al. (2009); Chi and Qu (2008); Hernández-Lobato et al. (2006), Kim et al. (2012); San Martín et al., (2008); Su et al. (2011); Chi and Qu (2008), Forgas-Coll et al. (2012); Kim et al. (2012); Lee et al. (2016)	(LOY1) I consider myself a loyal visitor. (LOY2) I will visit it on my next rural tourism trip. (LOY3) I will visit the destination again in the future. (LOY4) I will recommend it to people who ask my advice. (LOY5) I will tell other people positive things about it.	0/89

For data analysis, statistical packages were used Statistical Package for the Social Sciences (SPSS V22) and Linear Structural Relations (LISREL V8.54) SOFTWARE. Descriptive indexes including mean, standard deviation, and correlation coefficients were calculated. Structural hypothesized relationships with the test path analysis model and the fit index of the final model were reported.

4. Research Findings
4.1. Relationship between research variables
To determine the mean of perceived quality variables, perceived value, satisfaction, Destination image, and tourists' loyalty were used descriptive statistics, standard deviation, and correlation matrix between the research variables (Table 2)

In this study, the average number of tourists (M =3.81) in a 5 - point range shows that tourists have assessed loyalty at the appropriate level. The mean dimensions of perceived quality, perceived value, satisfaction, and destination image show that tourists have assessed the five variables appropriately. The relationship with perceived quality, perceived value, satisfaction, and destination image has a meaningful relationship. The intensity of the loyalty relationship with the perceived quality is appropriate and more than other variables (r = 0.66, p<0.001). Satisfaction has the highest relationship with perceived value. The destination image is more associated with satisfaction (r = 0.67, p<0.001) than the perceived quality and perceived value.

**Table 3. Mean, standard deviation, correlation, and validity coefficients**

Variables	Mean	standard deviation	(1)	(2)	(3)	(4)	(5)
(1) quality	3/87	0/63	1				
(2) Value	3/55	0/53	0/614**	1			
(3) Satisfaction	3/46	0/61	0/564**	0/705**	1		
(4) Image	3/57	0/66	0/453**	0/526**	0/677**	1	
(5) loyalty	3/81	0/71	0/666**	0/552**	0/619**	0/545**	1

To answer the research hypotheses and investigate the relationship structure of variables in the desired model and the influence of Exogenous variables (perceived quality and perceived value) and mediating variables (satisfaction and destination image) on the endogenous variable (loyalty) was used the statistical method of path analysis by LISREL software (8.54 version).

Standard coefficients and coefficients of the final model of the research are based on the path analysis model in Figures (4) and (5). The model fitting indicators suggest that the final model has a fairly good fit with the data (Table 3). The direct, indirect, and total effects are reported in Table 4.

In the final model, the perceived quality and perceived value affect tourists 'loyalty. There is the indirect effect between perceived quality and loyalty with mediating of destination image and also the indirect effect between perceived quality and loyalty with mediating of satisfaction. Perceived value has an indirect effect on loyalty with mediating of destination image and also Perceived value has an indirect effect on loyalty with mediating of satisfaction. Also, satisfaction and Destination image affect loyalty.
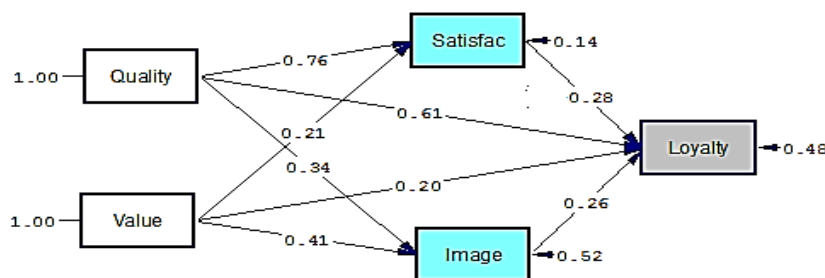
Chi-Square=3.96, df=2, P-value=0.13783, RMSEA=0.071

Figure 4. The standard coefficients of the final model: the effect of perceived quality and perceived value on tourists` loyalty with the role of mediator of satisfaction and destination image
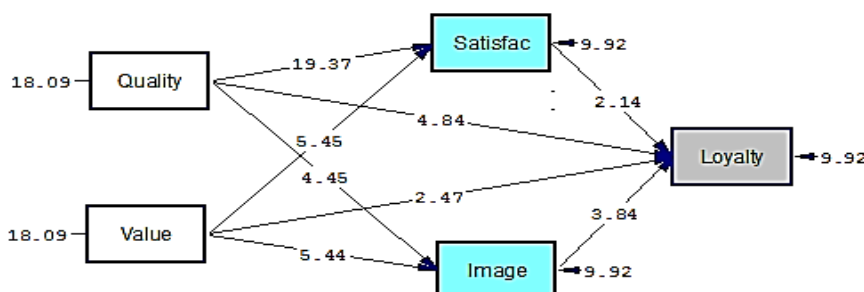
Chi-Square=3.96, df=2, P-value=0.13783, RMSEA=0.071

Figure 5. Significance coefficients of the final model effect of perceived quality and perceived value on tourists ' loyalty with the role of the mediator between satisfaction and the destination image

Table 4: Performance indices of the final model

Indices	Acceptable Dominant	Amount	Result
X^2	$0/05 \geq P$	3/96	Verify
Df	–	2	–
X^2/df	3-5	1/98	Verify
RMSEA	$0/08 < RMSEA$	0/07	Verify
GFI	$0/90 \geq GFI$	0/99	Verify
AGFI	$0/90 \geq GFI$	0/94	Verify
NFI	$0/90 \geq NFI$	1	Verify
CFI	$0/90 \geq CFI$	1	Verify
IFI	$0/90 \geq IFI$	1	Verify

Table 5. Direct, indirect, and total effect of perceived quality, perceived value, satisfaction, and destination image on the loyalty of tourists

Effect	Rout	Direct	Indirect	Total
Exogenous on endogenous	Perceived Quality on Loyalty	**0/61	-	**0/61
	Perceived Value on Loyalty	**0/20	-	**0/20
	Perceived Quality on Satisfaction	**0/76	**0/212	**0/547
	Perceived Quality on Destination Image	**0/34	**0/088	**0/428
	Perceived Value on Satisfaction	**0/21	**0/058	**0/151
	Perceived Value on Destination Image	**0/41	**0/106	**0/516
Endogenous on endogenous	Satisfaction on Loyalty	**0/28	-	**0/28
	Destination Image on Loyalty	**0/26	-	**0/26

5. Discussion and Conclusion

Today, in addition to producing and converting agricultural and livestock fields, rural areas have been able to develop and expand their rural and crafts industries, which include customs, culture, traditions, and encourage tourists to visit these rural areas. Today, because of changing lifestyle of the majority of people in the world and the spiritual and psychological pressure of urban environments, residents are forced to leave cities and join the skirt of nature and enjoy natural and unspoiled environments and travel to the villages. considering the above-mentioned cases, the development and tourism development in the villages depend on the attention of officials and managers to provide a proper platform to improve the quality of environmental services and create a desired perceived value for tourists, it is required to create a proper image of the destination and attract tourist's satisfaction, for tourists will be loyal to the destination. According to this, the main purpose of this study was to investigate structural relations between perceived quality variables, perceived value, destination image, satisfaction, and loyalty of tourists.

The first finding suggests that the perceived quality has a significant effect on the loyalty of tourists, which is consistent with the previous study (Parvazi, 2016) this regard, it can be argued that quality is one of the most important factors on tourists loyalty and revisit intention because tourists who enjoy high service quality in rural tourism destinations are more inclined to return to the same destination with the same quality experienced and this could be important for marketers.

The second finding suggests that perceived value has a significant effect on the loyalty of tourists, which is consistent with previous studies (Kim et al., 2012; Hoseini, 2015; Ngoc Khuong & My Duyen, 2017; Taheri & Ansari, 2016) the justification of this finding can be argued that rural destinations have acceptable value and tourists have considered this services valuable for rural tourism. These tourists have shown willingness to return to that destination and to experience previous valuable services.

The third finding indicates that the perceived quality is indirectly and mediated by satisfaction, It affects the loyalty of tourists. This finding is consistent with the previous study (Kim et al., 2012). the results of this study show that the quality of services offered in rural tourism destinations has a significant impact on the intention of tourists to revisit, in addition by creating a sense of

satisfaction in tourists, it can indirectly have a significant effect on the revisit intention and their loyalty to rural tourist destinations.

The fourth finding suggests that the perceived quality indirectly affects tourists` loyalty by the mediation of the destination image. This finding is consistent with previous studies (Permatasari et al., 2017; Ngoc Khuong & My Duyen, 2017; Shirkhodaye et al., 2016) in this regard, we can say that the quality of services offered in rural tourism destinations has a significant impact on the intention of tourists to revisit the destinations indirectly, by creating a positive image in the minds of tourists, it can indirectly affect tourists and their loyalty to rural tourism destinations.

The fifth and sixth finding indicates two indirect effects in the research model. The fifth finding implies that perceived value indirectly affects tourists` loyalty with mediating of satisfaction. This finding is consistent with some of the previous findings (Shirkhodaye et al., 2016; Kim et al., 2012; Ramseook-Munhurrun et al., 2015; Ngoc Khuong & My Duyen, 2017)

In explaining this, it can be argued that the perceived value of tourism services provided in tourism destinations can have an indirect effect on revisit intention and loyalty to tourism destinations as well as the direct and meaningful effect on revisit intention and loyalty of tourists by creating a sense of satisfaction in tourists who have received valuable services.

Furthermore, the sixth finding suggests that perceived value is indirectly affected by the mediation of the destination image. This finding is consistent with the previous study (Jafari et al., 2017) it can be said that the perceived value of tourism services provided in tourism destinations can have an indirect effect on revisit intention and loyalty to tourism destinations as well as the direct and meaningful effect on revisit intention and loyalty of tourists.

The model of tourists` loyalty in this study presents some limitations. First, tourists` loyalty in rural tourism is affected by many dimensions in this study only perceived quality dimensions, perceived value, satisfaction, and the image destination were considered and neglected from other aspects that could have a potential impact on it. Therefore, researchers are offered to consider other aspects in future research.

In addition, this research has been carried out regarding incoming tourists to three villages in Yazd province (Kharanagh, Saryazd & Sadeghabad) and the results are not generalizable to other villages in other provinces.

Therefore in future research, the model of loyalty of tourists in other cities of Iran as well as from the viewpoint of the local community and comparing their views together can be tested separately. It is also suggested that researchers use other methods to collect data such as interviews and compound methods.

According to the results, some strategies that can lead to competitive advantage for villages in the long term can be suggested to managers and supervisors:

1. According to the results of the study, it has been found that loyalty has a positive and significant relationship to quality and there is a direct and meaningful relation between destination image and perceived quality.

Based on the loyalty of tourists, it is suggested rural tourism aims to increase service quality by creating a sense of satisfaction in tourists and desired image in tourists ' minds, which cause loyalty and word of mouth (WOM) advertisement, in result reduced significantly Tourism advertising cost for attracting new tourists.

2. According to the results of the study, the perceived value of tourists has a positive and meaningful relationship with satisfaction and destination image. It is suggested that in addition to maintaining and enhancing the quality with proper cost management, increase the true value of your service, therefore have a great impact on the tourist intention to revisit. This loyalty will boost further prosperity and significantly reduce the future costs of attracting new tourists.

This study focused on four main variables which impact revisit intention but in the future study researchers suggest study more variables that affect revisit intentions and loyalty of tourists, also in this study, three Yazd rural destinations were studied, in the future study it could be suggested to study other tourism target villages of Iran and results could be compared with each other, Also it could be suggested to used qualitative or mixed-method in the future study for collecting and analyzing data.

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JRRP

Original Article

بررسی عوامل تاثیر گذار بر قصد بازگشت گردشگر در مدیریت مقاصد گردشگری روستایی در استان یزد

محمدرضا اسدی زارچ[1]- محمد نجارزاده[*2] - سکینه جعفری[3]

۱. کارشناسی ارشد مدیریت جهانگردی-گرایش بازاریابی، دانشگاه سمنان، سمنان، ایران.

۲. استادیار گردشگری، دانشگاه سمنان، سمنان، ایران.

۳. استادیار روانشناسی و علوم تربیتی، دانشگاه سمنان، سمنان، ایران.

چکیده مبسوط

۱. مقدمه

با توجه به بحران های اخیر و تک قطبی بودن اقتصاد ایران که متکی بر نفت است، هر روز بر تعداد بیکاران افزوده می‌شود و تصمیم سازان به دنبال راه حلی جدید خارج از الگوهای قدیمی می‌باشند. گردشگری به عنوان یک سیستم پیچیده با ابعاد گسترده می‌تواند راه عبور از این تنگنا باشد.باتوجه به اوصاف ذکر شده و نیز سالیان خشکسالی پی در پی در مناطق کویری ایران به ویژه استان یزد، بسیاری از شغل‌های روستاییان که مبتنی بر کشاورزی و دامپروری بوده است، از بین رفته است و موجب مهاجرت بسیاری از روستاییان به شهرهای بزرگ‌تر برای کسب درآمد شده است؛ که به دنبال ان اثراتی همچون از بین رفتن میراث‌های فرهنگی روستا و اداب ورسوم مردم محلی را در پی داشته و روستا به محلی خالی از سکنه تبدیل شده است. اما با توسعه علمی و جامع روستایی می‌توان مناطق روستایی را احیا کرد و شغل‌ها و منابع درآمدی جدیدی برای حفظ روستاییان در روستا و مهاجرت معکوس انجام داد. لذا در این پژوهش سعی شده است که عواملی که موجب بازگشت گردشگران به روستا و بازدید مجدد آن‌ها از روستا می‌شود مورد بررسی قرار گیرد. هدف این مطالعه تفسیر تأثیر کیفیت ادراک‌شده و ارزش ادراک‌شده بر وفاداری گردشگران با نقش میانجی رضایت و تصویر مقصد در سه روستای هدف گردشگری استان یزد می‌باشد.

۲. روش تحقیق

پژوهش حاضر از لحاظ هدف کاربردی و از لحاظ شیوه گردآوری داده‌ها توصیفی از نوع همبستگی است. جامعه آماری این پژوهش شامل گردشگران داخلی ورودی به سه روستای هدف گردشگری استان یزد (سربزد، خرانق، صادق آباد) بودند که با استفاده از روش نمونه‌گیری در دسترس ۲۰۰ نفر به عنوان نمونه انتخاب شدند. همه‌ی آن‌ها پرسش‌نامه‌های کیفیت درک شده شامل ۴ گویه، ارزش درک شده شامل ۴ گویه، رضایت شامل ۱۰ گویه، تصویر مقصد شامل ۵ گویه و مقیاس‌های وفاداری شامل ۵ گویه با طیف لیکرت ۵ گزینه‌ای از کاملا موافقم (۵) تا کاملا مخالفم (۱) تکمیل کردند. اعتبار درونی پرسش‌نامه نیز بوسیله آلفای کرونباخ مورد تایید قرار گرفت. داده‌ها با استفاده از نرم‌افزار LISREL و آزمون تحلیل مسیر تحلیل شده‌اند.

۳. یافته‌های تحقیق

یافته‌ها نشان می‌دهد که بین وفاداری توریست‌ها با ارزش ادراک‌شده، تصویر مقصد، رضایت توریست‌ها و کیفیت ادراک‌شده رابطه مثبت و معنی‌داری وجود دارد؛ همچنین کیفیت ادراک‌شده و ارزش ادراک‌شده تأثیر مستقیمی بر وفاداری توریست‌ها دارد. کیفیت ادراک‌شده با میانجی‌گری تصویر مقصد تأثیر غیرمستقیم بر وفاداری توریست‌ها دارد؛ کیفیت ادراک‌شده با میانجی‌گری رضایت تأثیر غیرمستقیم بر وفاداری توریست‌ها دارد؛ ارزش درک شده با میانجی‌گری تصویر مقصد تأثیر غیرمستقیم بر وفاداری توریست‌ها دارد؛ ارزش ادراک‌شده با میانجی رضایت، تأثیر غیرمستقیم و معنادار بر وفاداری توریست‌ها دارد.

*. نویسندۀ مسئول:

دکتر محمد نجارزاده

آدرس: گروه مدیریت جهانگردی، دانشکده گردشگری، دانشگاه سمنان، سمنان، ایران.

پست الکترونیکی: Email: mnajjarzadeh@semnan.ac.ir

۵. بحث و نتیجه‌گیری

باتوجه به تأثیر کیفیت ادراک شـده بر وفاداری و قصـد بازگشـت به مقصـد روسـتایی می توان گفت که کیفیت یکی از مهمترین عامل های وفاداری و بازگشت به مقصد روسـتایی اسـت به این دلیل که گردشـگرانی که از کیفیت خدمات بالایی در مقاصد گردشگری روستایی برخوردار هستند تمایل بیشتری به بازگشت به همان مقصد با همان کیفیت تجربه شـده دارند و این می‌تواند برای بازاریابان اهمیت داشـته باشـد. البته باید در نظر داشـت که کیفیت ادراک شده با تصویر سازی مثبت در ذهن گردشگران به طور غیر مستقیم بر وفاداری و قصد بازگشت گردشگران تأثیر می‌گذارد و از سویی دیگر با ایجاد این کیفیت موجب رضایت می‌شود تا گردشگران به مشتریان وفادار تبدیل شده و دوباره به مقصد روستایی برای به دست آوردن دوباره همان رضایت بازگردند. این نتایج با مطالعات پیشـین (پروازی، ۲۰۱۶ و نگوک خونگ، ۲۰۱۷) هم‌راسـتا بوده اسـت. باتوجه به تأثیر ارزش ادراک شده بر وفاداری و قصد بازگشت به مقصد روستایی می‌توان گفت مقاصـد روسـتایی که ارزش قلبل قبولی را برای خدمات ارلیه می‌کنند، اشـتیاقی بیشـتری را در گردشـگران برای بازگشت به مقصد روستایی ایجاد می‌کنند. البته نباید تأثیر غیرمستقیم ارزش درک شده‌ی قابل قبول را در شـکل دادن تصـویری مثبت از مقاصـد گردشـگری روسـتایی نادیده گرفت که

موجب وفاداری گردشـکران به این مقاصـد می‌شـود. از سـوی دیگر این ارزش درک شـده موجب حس خرسـندی در گردشـگر شـده و تمایل وی را برای بازگشت به مقصد گردشگری بر می‌انگیزد. این نتایج یا مطالعات (شیرکوهی و همکاران، ۲۰۱۶ و کیم و همکاران ۲۰۱۲) هم راستا بوده است.

از محدودیت های پژوهش می‌توان به دوری روسـتاهای گردشـگری از یکدیگر اشـاره کرد و نیز در این پژوهش فقط ۴ عامل تأثیر گذار بر قصـد بازگشـت گردشـگران مورد مطالعه قرار گرفت و از روش کمی برای گردآوری و تحلیل داده‌ها اسـتفاده شـد. لذا پیشـنهاد می‌گردد در پژوهش‌های آتی پژوهشـگران متغیرهای بیشـتری را بر وفاداری و قصد بازگشت تأثیر گذار هست مورد مطالعه قراداده و از روش های کیفی و مصـاحبه و یا روش‌های ترکیبی برای گردآوری و تحلیل داده‌ها استفاده کنند.

کلیدواژه‌ها: وفاداری گردشـگران، کیفیت ادراک شـده، ارزش درک شـده، تصویر مقصد، رضایت گردشگران.

Original Article

Integration of Neural Network, Markov Chain and CA Markov Models to Simulate Land Use Change Region of Behbahan

Fatemeh Mohammadyari [1*]- Hamidreza Pourkhabbaz [2]- Morteza Tavakoli [3]- Hossain Aghdar[4]

1. PhD. in Evaluation and Land Use Planning, Malayer University, Malayer, Iran.
2. Assistant Prof. in Environment, Behbahan Khatam Alanbia University of Technology, Behbahan, Iran.
3. Associate prof. in Geography and Rural Planning, Tarbiat Modarres University, Iran.
4. MSc in Remote Sensing and GIS, Shahid Chamran University of Ahvaz, Ahvaz, Iran.

Abstract

Purpose- Land is the place of earthly natural ecosystem functionality that has been used by humans in multiple methods. Land-use change (LUC) simulation is the most important method for researching LUC, which leads to some environmental issues such as the decreasing supply of forestry products and increasing levels of greenhouse gas emissions. Therefore, the present study aims at (i) using the Landsat imagery to prepare land use-cover (LULC) maps for 2000 and 2014; (ii) assessing Land use changes based on land change modeler (LCM) for the period from 2000 to 2014, and (iii) predicting the plausible land cover pattern in the region of Behbahan, using an algorithm based on ANN for 2028.

Design/methodology/approach- A hybrid model consisting of a neural network model, Markov chain (MC), and cellular automata (CA Markov) was designed to improve the performance of the standard network model. The modeling of transfer power is done by multilayer Perceptron of an artificial neural network and six variables. The change allocated to each use and the forecasting is computed by Markov chain and CA Markov. Operation model calibration and verification of land use data at two points were conducted in 2000 and 2014.

Findings- Modeling results indicate that the model validation phase has a good ability to predict land-use change on the horizon is 14 years old (2028). The comparison between modeling map and map related to 2013 shows that residential area and agricultural land continue to their growth trend so that residential area will be increased from 3157 hectares in 2014 to 4180 hectares in 2028 and it has 2% growth that has been 2% from 2000 to 2014. The results of this study can provide a suitable perspective for planners to manage land use regarding land-use changes in the past, present, and future. They are also can be used for development assessment projects, the cumulative effects assessment, and the vulnerable and sensitive zone recognition.

Keywords- Change Detection, Neural Network, Markov Chain, CA Markov, Behbehan County.

Corresponding Author:
Mohammadyari, Fatemeh, Ph.D.
Address: Department of Environment, Faculty of Natural Resources & Environment, Malayer University, Malayer, Iran.
Tel: +98813 245 6518
E-mail: m.fatima.1364@gmail.com

1. Introduction

The land is the place of earthly natural ecosystem functionality that has been used by humans in multiple methods (Mohammadyari, et al., 2020). Land-use change (LUC) simulation is the most important method for researching LUC, which leads to some environmental issues such as the decreasing supply of forestry products and increasing levels of greenhouse gas emissions (Macedo et al., 2013). So, land-use change has attracted the attention of managers and planners who are engaged in the issues related to sustainable urban and environmental development (Mohamed & Worku, 2020). LUC is a complex process (Irwin & Geoghegan, 2001; Lambin et al., 2006), and modeling these systems is challenging. It is well known that the drivers of LUC operate across a variety of spatial-temporal scales in a nonlinear way (Veldkamp & Lambin, 2001) and thus nonlinear tools are needed to simulate these dynamics. The type of land use and the land covering is the result of mutual relation between social-cultural factors and land potential power. In other words, changing land use and the cover is the beginning of the dynamic exploitation of natural resources by human beings to manage their needs (Oñate-Valdivieso & Sendra, 2010). The consequences of this phenomenon are economic, social, and environmental on local, zonal, and global scales (Koomen et al., 2007). Koomen Remote sensing satellites are the most common data source for recognizing, quantifying, manifesting, and mapping land-use changes patterns (Abd El-Kawy, 2011). Therefore, the manifestation and modeling of land-use changes can offer suitable recognition of these changes by remote sensing data in a GIS environment (Mendoza, 2011; Bakr, 2010). Land Change Modeler can revolutionize the analysis and investigation of land cover changes and predicting land-use changes (Schulz et al., 2010). In this modeling, the most important assumption is that the nature of development and changes remain the same during time and past changes can predict future changes based on a historical scenario. The ecosystem can be guided to the desired path by predicting land-use changes and adopting effective managerial policies (Jensen, 2007). Land cover models are widely used for the analysis and prediction of land-use change (Bonilla-Bedoya et al., 2020; Mohammad & Worku, 2020; Silva et al., 2020; Dadashpoor et al., 2019; Sun et al., 2018; Huilei et al., 2017; Tripathi & Mozmder, 2014; Yang et al., 2014; Pijanowski et al., 2014; Arsanjani et al., 2013; Ma et al., 2017; Perez-Vega et al., 2012; Shahidul Islam & Ahmed, 2011). Among these studies, Mohammad and Worku (2020), simulating the dynamics of land cover using cellular automata and the Markov chain approach in Addis Ababa and its suburbs. The research employed a hybrid Cellular Automata, Markov chain, and multi-criteria analytical hierarchy process modeling approach. The result shows the rapid growth of built-up, which accounts for 3.7% in 2005, 5.7% in 2011, and 7.0% in 2015. Moreover, Silva et al. (2020), modeled the land cover change based on an artificial neural network for a semiarid river basin in northeastern Brazil. The results showed that for 2035, an increase in the herbaceous and shrub vegetation class and a decrease in the area occupied by tree-shrub vegetation are predicted. The study aimed to indicate the land cover alterations in the region of Behbahan between 2000 and 2014 to understand the future land use scenario (2028) of the area through integrating remote sensing and advanced GIS techniques with the ANN model, Markov chain, and CA Markov.

The paper is structured as follows. Section 1 presents the study site in Behbahan, the database, and the data preparation process. The two-section briefly introduces the methodology of neural network modeling to determine essential driving forces of sprawl, Markov chain, and CA model. Section 3 discusses the outcomes of the implemented approach, and finally, the paper concludes with a summary and some suggestions for future works.

2. Research Methodology
2.1 Geographical Scope of the Research

The studied region is between 50 degrees and 91 minutes longitude to 50 degrees and 25 minutes eastern, 30 degrees and 45 minutes latitude to north 30 degrees and 32 minutes in zone 39 that the highest altitude is 1380.93 meters and the lowest 267.14. The highest slope is 69.87 and the lowest slope is 1%, the minimum annual temperature is 18.1 c° and the maximum annual temperature is 32.37 °c. The space of area is 615.6 square kilometers and the regional climate is dry based on the Domarten method. A three-

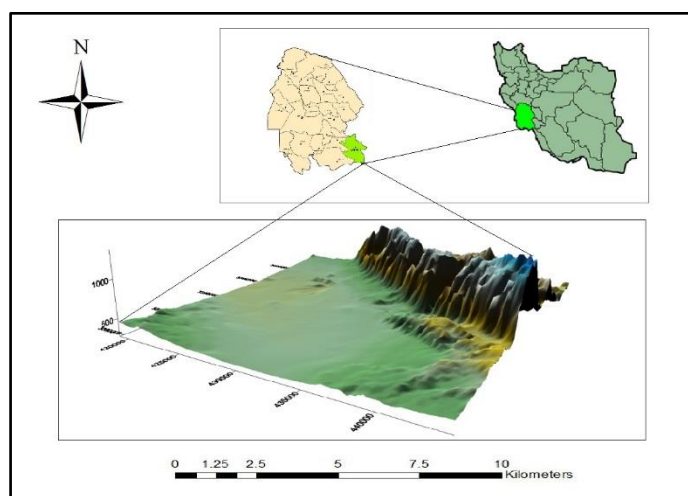dimensional map of the region is provided by

Surfer11 software (Figure 1).

Figure 1. Location of the study region, Behbahan, Iran

2.2. Methodology

The type of this research is the application and data collection is done in two forms: library and mensuration. It is also used ArcGIS 10, Google EARTH, Surfer11, IDRISI Tiga, and ENNVI 4.8 software.

Land use map preparation- Landsat satellite images were used for providing land use maps relating to 2000 and 2014 (Table 1).

Table 1. Specification of satellite images

WRS Row	WRS Patch	Number bands	SIZE Pixels	SENSOR	SPACECRAFT	DATEACQUIRED
39	164	8	28.5	ETM⁺	Landsat-7	2000.01.24
39	164	11	30	OLI	Landsat-8	2014.01.22

In this research, images were used with real colorful combinations for obvious representation of some special phenomenon relating to research purposes. The combination of band 3 infrared, band 2 with green color, band1 with blue color, or 321 RGB models are used for ETM sensor images creation, and for OLI sensors 432 combinations are used. First of all, geometrical, atmospheric correction and early pro processing are done on all used images several times. Then, the supervisory classification method is used for classification. In this controlled classification, the first step is the introduction of a region of intersect for each land cover class. Didactic samples are defined by visual interpretations on colorful combination images and by topography maps provided by the Topography Organization of Iran. In this process, the normal differential vegetation index (NDVI) is used for green coverage classification so that the vegetarian cover is separated from others easily and the sampling is done with more accuracy. The

numbers of classes are selected according to images from available maps, the condition of the region, and the class required for land coverage maps, and six gained separation classes are: 1. residential area, 2. agricultural land, 3. Water, 4. forests, 5. grasslands, 6. bare lands. After didactic samples are determined, satellite images are classified. In this research, the Maximum Likelihood algorithm (Schulz et al., 2010) and AVI, MNF index is used to make a classification. Image classification is one of the main components in data collection that is achieved through the study of the relationship between spectral effects and classes or different classes (Oommen, 2008). The process of images classification is a conversion of data to comprehensible information (Mountrakis et al., 2011). Then, a mode filter is done on classification results so that images are simplified and small parts are removed (Nahuelhual et al., 2012).

Classification accuracy assessment- To ensure the accuracy of an extracted map from satellite images, its accuracy should be evaluated (Lillesand & Kiefer, 2000). The accuracy of classification represents the confidence level of the extracted map and refers to the adjusting level between remote sensing data and source information (Dewan & Yamaguchi, 2009). Evaluating the accuracy of classified maps is done by specifying 200 points for 2014 images by random stratified sampling in the region and the real land use is compared to them by Garmin 62S GPS. Kappa coefficient is calculated. Kappa shows the accuracy of the map. Amounts between 0 to 100 percent show a specific level for this classification and negative amounts show bad results. Kappa coefficient is above 90 percent which shows the high accuracy of prepared maps. Evaluating the maps prepared in 2000 is done by visual interpretations and a controlled spot in a land that has not changed during a time (Schulz et al., 2010).

Changes display- The changes display of land use is an essential tool for environmental analysis, planning, and management. In this research, land use maps relating to 2000, 2014 are entered into the LCM model for analysis and area changes detection. Land change modeler is software to create constant ecological development and it is planned and constructed to identify the increase in land changes and obvious need for biodiversity analysis. It is in IDRISI software and it is also available as an application for Arc GIS. Land change modeler gives a tool to investigate and do the empirical evaluation and modeling of land-use change and its effects on biological variations with the help of the modeler (Eastman, 2006).

Variable election- The variables used for the model are the digital elevation model, slope, distance from residential areas, distance from agricultural lands, distance from roads, and evidence likelihood map. Cramer correlation coefficient is used to determine a correlation between independent variables and dependent variables. This correlation coefficient compares independent variables with subjective classification from land use map (evidence likelihood) (Eastman, 2006). Variables used in this research are used in most of the studies related to land-use change modeling. Euclidian distance analysis is used for providing maps relating to distance from residential are

agricultural land and distance from the road. All of the above variables are quantitative. Map relating to transmission from all use to agricultural land and map relating to transmission from agricultural to all uses are produced for land coverage quantitative variables and they are transformed to quantitative variables model input by evidence likelihood deformation and land coverage map in the early year (Eastman, 2006).

Potential modeling of land-use change by the artificial neural network of multilayer Perceptron- In this section of modeling, transformation power from one use (such as a forest) to another use (such as agriculture) becomes a model according to explaining variables (such as slope, nearness to the road) that is each pixel of the image has how much potential to change from one user to another. The output of this section will be a transformation power map for each variable (for example from forest use to agricultural land). Cramer V coefficient is calculated which shows the amount of relationship between variables and land cover. Six sub-models (agricultural to residential, forest to grassland, grassland to agricultural, grassland to arid land, arid land to residential and arid land to agricultural) and six variables (quantitative variable in agricultural sub-model, digital model of altitude, distance from agricultural lands, distance from residential areas, distance from road and slope) are selected to modeling of the possibility of occurrences in each transformation by multilayer Perceptron neural networks (Pijanowski et al., 2002; Chuvieco, 2002).

Markov chain model- The MC model is a stochastic process model that describes how likely one state is to change to another state. It has a key-descriptive tool, which is the transition probability matrix. The MC model is defined as a set of states where a process begins in one of the states and moves consecutively from one state to another; each move is defined as a step (Zhang et al., 2010). In the MC model, two distinct land use maps at different time points should exist, and then it is possible to calculate the probabilities of transition between these time steps. The analysis of the Markov chain is suitable for use changes and land coverage and it's useful when changes aren't easily describable. Markov chain is the collection of random values whose possibility in a given time depends on the numbers in the past (Fan et al. 2008). In this research, the change

allocation to each use was calculated by the Markov chain (Haibo et al., 2011; Coppedge et al., 2007; Wu et al., 2006).

CA-Markov model- CA-Markov model incorporates the theories of the Markov chain and Cellular Automata (CA) and is commonly used in predicting LUC (Sang et al., 2011). CA has strong capabilities in simulating the spatiotemporal characteristics of complex systems and can be used to simulate unexpected behaviors of complex systems that cannot be represented by specific equations. Markov chain is commonly used for predicting geographical characteristics lacking after-effect events. When LUC is predicted by the Markov chain, land use is regarded as a stochastic process and different land-use types as the states of a chain (Cabral & Zamyatin, 2009; Clancy et al., 2010). Implementation of the CA-Markov model can be described by the following 3 steps:

1. Calculated transition area matrix using Markov Chain analysis is used to predict the transition area matrix of LUC. At first, the original transition probability matrix (denoted by P) of land use type should be obtained from two former land use maps. Then, according to the non-aftereffect of Markov, the transition probability matrix for target simulation periods can be predicted according to Eq. (1).

$$P(N) = P(N-1) \times P \quad (1)$$

where P(N) is the state probability of any time, and P(N−1) is the preliminary state probability. Having a transition probability matrix, the transition area matrix can be easily obtained, which is performed by Eq. (2).

$$A = \begin{bmatrix} A_{11} & A_{12} & \ldots & A_{1n} \\ A_{21} & A_{22} & \ldots & A_{2n} \\ \vdots & \vdots & \vdots & \vdots \\ A_{n1} & A_{n2} & \cdots & A_{nn} \end{bmatrix} \quad (2)$$

where A is the transition area matrix, A_{ij} is the sum of areas from its land-use class to the ith land use to the jth class during the years from start point to target simulation periods; and n is the number of land-use types. This process can be achieved by utilizing the MARKOV mod in the IDRISI Andes, which is a raster-based spatial analysis software developed by Clark Labs at Clark

University. With IDRISI Andes, you can explore, predict, and model impacts on land cover change with the innovative Land Change Modeler facility.

2. Generated transition potential maps

Transition potential maps are the simulation foundation of the Markov-CA model; they are used to control the spatial distribution of land use. At the earliest stage, transition potential maps are generated from the transition probability matrix, which is calculated using Markov Chain. For this type of transition potential maps, patches of a land-use type would transit to other land use classes with the same probabilities. Recently, several studies have attempted to incorporate natural and socioeconomic data (such as slope, elevation, distance to the nearest road, population density, and GDP per capita) to generated transition potential maps. These attempts have helped to improve the simulation accuracy of the Markov-CA model.

3. Simulated land-use change (LUC) using CA model

Simulated LUC using the CA model, provides a spatial framework. Deciding iteration times, integrating transition area matrix and transition potential maps as the local transition rule of CA, land use map in the future could be simulated. The local transition rule of the Markov-CA model can be performed by Eq. (3).

if $S_j = \max(S_1, S_1, \ldots, S_n)$ and $Area_{ij} < A_{ij} T$ then $C_i \rightarrow C_j$ (3)

where S_j is the potential of a patch transit to the jth land-use class; Area is the total area from land-use class I to land-use class j in the current iteration; T is iteration times; C_i is the ith land-use class.

3. Research Findings

The classification of images by maximum likelihood classification shows six land use classes in the study area. Figure 2 shows land use maps relating to 2000 and 2014 and their area are shown in Table 2; Kappa coefficient is 94.35 for 2014 and 93.53 for 2000. Moreover, the overall kappa coefficient for 2000 and 2014 maps, 0.95 and 0.97 respectively, were acceptable results.
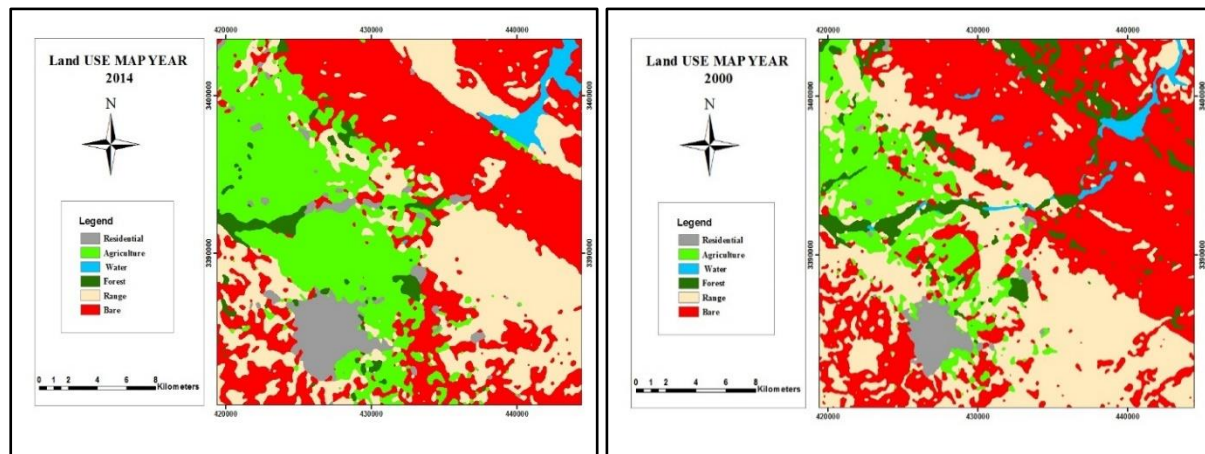
Figure 2. Land use map
(Source: Right: 2000, Left: 2014)

Table 2. User area targeted in the region

Land uses	The year 2000		The year 2014	
	Area (km²)	Area (%)	Area (km²)	Area (%)
Residentia	16.596	3	31.5783	5
Agriculture	69.9444	11	150.3045	24
Water	8.5329	1	11.4093	2
forest	36.5499	6	15.7329	3
Rangeland	220.0572	36	174.4533	28
Bare	264.456	43	232.1217	38
Total	615.6	100	615.6	100

The result of changes display shows the area was under many changes of land use during 2000 to 2014. These changes include decreases, increases, and mere changes for each class and transformation from one class to another class. The most decrease includes grasslands destruction and their transformation to other uses. In this research, according to changes display results, six sub-models are considered for transformation power modeling by multilayer Perceptron artificial neural network. Sub-models are agricultural to the residential, forest to grasslands, grasslands to agriculture, grasslands to arid land, bare land to residential, and arid land to agriculture. After selecting sub-models, six variables are selected according to regional characteristics. Studying Cramer correlation coefficient, variables whose correlation coefficients are more than 0.1 are selected for modeling (Table 3).

Table 3. Overall Cramer's Results

Independent Variables	Overall Cramer's
DEM	0.1391
Slope	0.1099
Distance *Residential*	0.1228
Distance *Agriculture*	0.1296
Distance Road	0.1125
Evidence Likelihood	0.249

According to independent variables and sub-models, transformation potential maps are drawn for every sub-model by multilayer Perceptron neural networks (Figure 3).
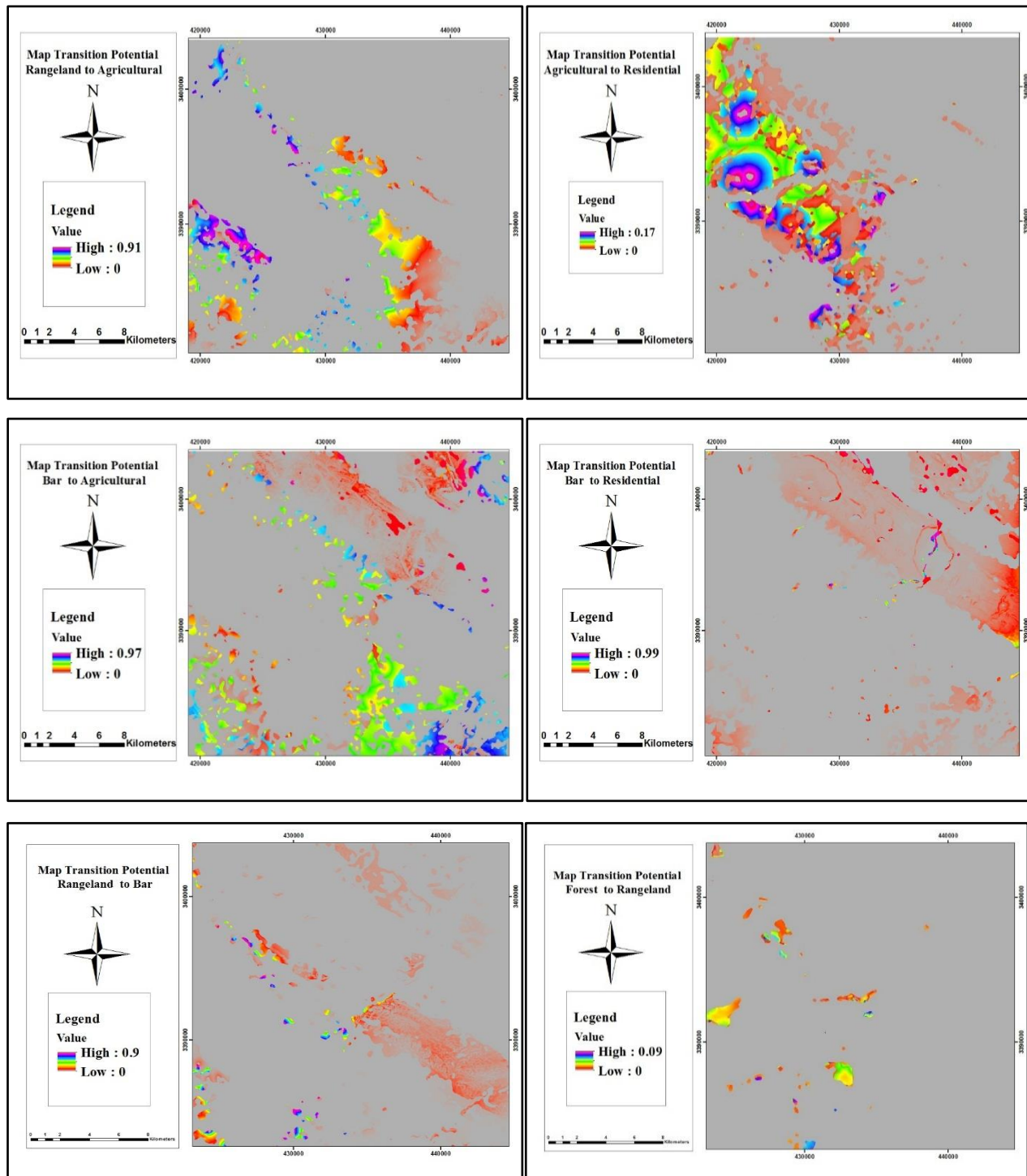
Figure 3. Maps of the potential transmission models

Three accuracy assessment factors, training error, and test error are determined for modeling transformation power modeling (Table 4).

Finally, the amount of each use change is predicted by the Markov chain, and land use maps relating to 2028 are drawn in the LCM model by the multilayer Perceptron neural networks method (Figure 4 and Table 5).

Table 4. Accuracy assessment of artificial neural network

Accuracy rate	Testing RMS	Training RMS
84.35	0.1493	**0.1457**
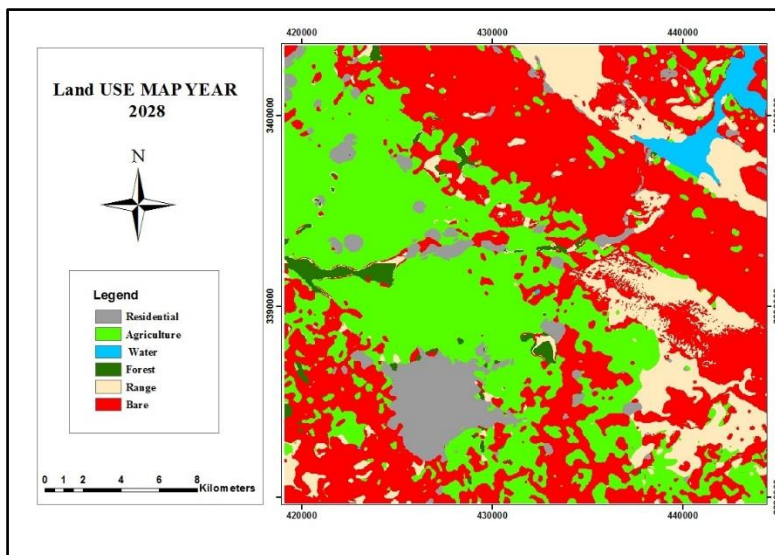
Figure 4. Land use map predicted 2028 (MARKOV chain)

Table 5. User area map modeling (MARKOV chain)

Land uses 2028	Area (km^2)	Area (%)
Residentia	41.8086	7
Agriculture	210.3687	34
Water	11.4093	2
forest	9.3636	2
Rangeland	76.1544	12
Bare	266.4954	43
Total	615.6	100

The possibility of transformation each use to other users is represented by the probability matrix (Table 6).

The transformed area matrix registers the number of cells which are expected in changing from one kind of land coverage to other kinds in the future (Table 7).

Table 6. Transition probability matrix

Land uses	Residential	Agriculture	Water	forest	Rangeland	Bare
Residential	0.9057	0.0287	0.0012	0.0182	0.0033	0.0429
Agriculture	0.0417	0.9019	0	0.0213	0.0179	0.0172
Water	0.0159	0.0277	0.6205	0.0590	0.1587	0.1191
forest	0.1043	0.1312	0.2033	0.2033	0.4049	0.1359
Rangeland	0.0257	0.2890	0.0113	0.0151	0.3479	0.3110
Bare	0.0171	0.0686	0.0109	0.0101	0.3042	0.5891

Table 7. Matrix transferred area

Land uses	Residential	Agriculture	Water	forest	Rangeland	Bare
Residentia	31778	1009	41	639	116	1504
Agriculture	6960	150626	0	3559	2985	2875
Water	202	352	7866	747	2000	1510
forest	1823	2293	356	3554	7079	2376
Rangeland	4977	56012	2183	2935	67440	60290
Bare	4408	17690	2803	2617	78450	151945

This matrix is drawn by multiplying each column from the transformation probability matrix with land use cells relating to it in the second picture (Eastman, 2006). After running Markov, the CA-MARKOV transfer area has tables, maps transfer potential derived from the neural network methods and land use map is the second year of preparation (Figure 5).
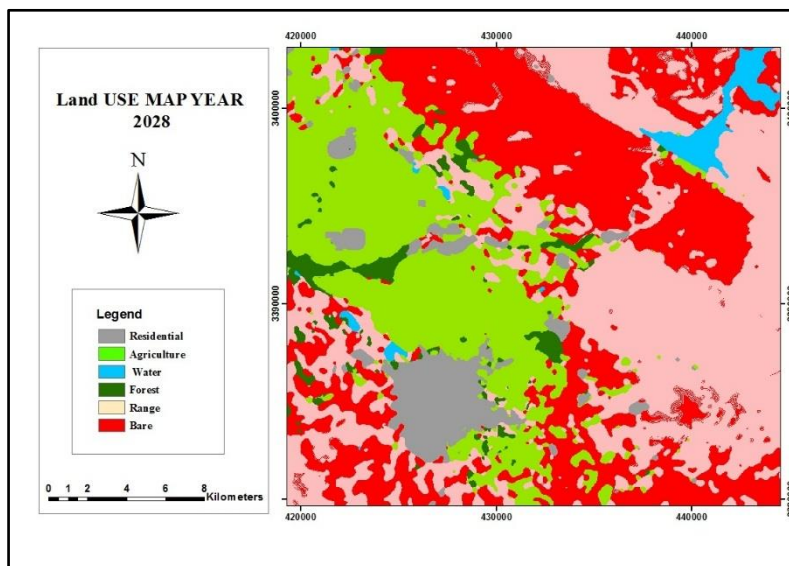
Figure 5. Land use map predicted 2028 (CA-MARKOV)

Table 8. User area map modeling (CA-MARKOV)

Land uses 2028	Area (km²)	Area (%)
Residential	38.584	7
Agriculture	149.656	24
Water	12.965	2
forest	16.981	3
Rangeland	204.896	33
Bare	192.518	31
Total	615.6	100

4. Discussion and Conclusion

After the two methods produce maps with CA-MARKOV modeling and Markov chain prediction, results were compared with the 2014 land use map. According to two different approaches for modeling, results showed that it map Was predicted by Markov- Chain is closer to reality. So, to create a future scenario in the year 2028, forecast maps with the Markov model were chosen.

In this research, a land change modeler is used for land-use changes modeling in the Behbahan region. The results of land-use changes from 2000 to 2014 show that these changes have occurred in the vast area. Among of studied uses, the most increase happens in the area related to agricultural, residential, and water use, and most of the increase in the area is related to agricultural use (8036.01 hectares). The decrease occurred in the grassland, drier land, and forest use and most of the decrease occurred in the area related to grassland use (4560.39 hectares). The decrease in grassland area and its conversion to other uses include 6233 hectares from grasslands to agriculture, 1199 hectares to dried land, 1146 hectares to a forest, and 599 hectares to the residential area. The comparison between the modeling map and map related to 2013 shows that residential area and agricultural land continue to their growth trend so that residential area will be increased from 3157 hectares in 2014 to 4180 hectares in 2028.

An interesting point is that the number of villages does not increase during these 14 years but the extension of village area will be increased and

agricultural land decreases from 15030 hectares to 2103.6 hectares. The growth percentage of this use land had been 10% from 2000 to 2014 but it will be changeless from 2014 to 2028. The dried land area also will increase 5% more than in 2013. Water zone space will be changeless during these 14 years. The decreasing process will probably occur in the water district and Maroun dam in the future decades. Unfortunately, not only destruction process of grasslands and forests is not avoided but also it is followed with more pace than in the past. Grassland had been 17445 hectares in 2014 but it is 7615 on the modeling map. 637 hectares will be decreased from forest area that it is the warring issue and management activities should be done for maintaining forests so that the problems such as flood, soil erosion, increasing of greenhouse gases, and loss of biodiversity are avoided. The decrease also happens in grassland and forests. The compactness of population centers in Behbahan and changing natural views to urban ones are the greatest changes in this city. It is expected that this process will continue with more pace in the future and the increase in agricultural lands confirms this point. About the decrease in grassland areas, it can be said that the growth of population in villages and the need for food made the villagers change grasslands to agricultural lands. On the other hand, another reason for grassland destruction is the excessive livestock grazing that changes vegetation coverage composition and ranchers destruct and changes forest coverage by grazing livestock from young trees, twig trees, livestock born construction, fuel, and household consumption.

The results of this study (increasing residential areas and decreasing forests and grasslands) are in line with the results of Mohammad and Worku (2020), Silva et al. (2020), Dadashpoor et al. (2019), and Sun et al. (2018). Moreover, the result of transformation power modeling assessment by the artificial neural network shows high accuracy. In many studies (Mohammad & Worku, 2020; Silva et al., 2020; and Perez-Vega et al., 2012), the accuracy of this method has been mentioned. Results of this study show that population growth and urban expansion are the main factors of use changes which are in line with the results of Caldas et al. (2010) and Joorabian Shoshtari et al. (2012). The population of this region has increased from 163032 in 1375 to 180593 in 2016

(www.amar.org.ir). The results of the Cramer correlation coefficient show that the most important independent variable explaining Behbahan city changes sequence are: quantitative variable in the agricultural model, digital elevation model, distance from agricultural land, distance from a residential area, and distance from road and slope. These variables are selected in many studies like Gholamalifard et al. (2013) and Schulz et al. (2010).

This paper tried to demonstrate that this hybrid technique (neural network–Markov–CA) offers certain advantages compared with traditional techniques. Firstly, this approach is capable of considering and integrating environmental and socioeconomic factors, which are not considered in current CA models, SLEUTH (Clarke et al., 1997; Yang & Lo, 2002; Dietzel & Clarke, 2006). Secondly, any spatial factor can be imported to this approach to measure its influence on urban sprawl and, accordingly, can be rejected after statistical assessment. Finally, the mentioned approach was tested and verified in two steps: (i) while the approach was being developed (the model calibration process) and (ii) through the comparison of the actual map and the simulated map of 2006, which was generated to verify the outcome of the approach. Whereas the validation of the current LUCC models is still weak (Pontius & Spencer, 2005), it is not feasible to validate the certainty of the simulated maps for the future. Thus, the only possible way to verify the model was to validate it at the most recent time, and following the assurance of the model's performance, future land use maps could be simulated more confidently.

This research is the presentation of an empirical model between a dependent variable (the amount of land-use change) and independent variables. According to the existence of non-linear relationships among variables, an artificial neural network has been used. The development and changes in nature will be the same during a time and it is the most important hypothesis in this modeling. In the other words, the last changes can predict future changes based on a historical scenario. The results of this study can provide a suitable perspective for planners to manage land use concerning land-use changes in the past, present, and future. They are also can be used for development assessment projects, the cumulative effects assessment, and the vulnerable and

sensitive zone recognition. Finally, the results of this research can be used for performing projects relating to decreasing destruction effects, deforestation, and forest destruction in that the main purpose is decreasing greenhouse gases and maintaining biodiversity.

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Original Article

تلفیق مدل‌های شبکه عصبی مصنوعی، Markov chain و CA Markov برای شبیه سازی تغییرات کاربری زمین منطقه بهبهان

فاطمه محمدیاری*۱- حمیدرضا پورخباز۲- مرتضی توکلی۳- حسین اقدر۴

۱- دانش آموخته دکترای ارزیابی و آمایش محیط زیست، دانشگاه ملایر، ملایر، ایران.

۲- استادیار محیط زیست، دانشگاه صنعتی خاتم الانبیاء، بهبهان، ایران.

۳- دانشیار جغرافیا و برنامه‌ریزی روستایی، دانشگاه تربیت مدرس، تهران، ایران.

۴- کارشناس ارشد سنجش از دور و GIS، دانشگاه شهید چمران اهواز، اهواز، ایران.

چکیده مبسوط

۱. مقدمه

زمین مکانی از عملکرد اکوسیستم طبیعی است که توسط انسان به روش‌های مختلف استفاده شده است. شبیه سازی تغییر کاربری زمین مهمترین روش برای تحقیق در مورد تغییر کاربری زمین است که منجر به تعدادی از مسائل زیست‌محیطی مانند کاهش عرضه محصولات جنگل و افزایش سطح انتشار گازهای گلخانه‌ای می‌شود. بنابراین ، تغییر کاربری اراضی مورد توجه مدیران و برنامه ریزان قرار گرفته است که درگیر موضوعات مربوط به توسعه پایدار شهری و مسائل محیط‌زیستی هستند. نوع کاربری اراضی و پوشش سرزمین درواقع نتیجهٔ روابط متقابل عوامل اجتماعی - فرهنگی و توان بالقوۀ سرزمین می‌باشد. به عبارت دیگر، تغییرات کاربری اراضی و پوشش سرزمین آغاز بهره برداری‌های پویای انسان از منابع طبیعی جهت رفع نیازهایش است. وقوع این پدیده پیامدهای اقتصادی، اجتماعی و زیست محیطی در مقیاس محلی، ناحیه‌ای و جهانی به همراه خواهد داشت. ماهواره‌های سنجش از دور رایج ترین منبع داده برای تشخیص، کمی‌سازی و نقشه‌سازی الگوهای تغییرات کاربری اراضی هستند. بنابراین آشکارسازی و مدل‌سازی تغییرات کاربری اراضی با استفاده از داده‌های سنجش از دور در محیط GIS می‌تواند شناخت مناسبی از چگونگی این تغییرات ارائه دهد.

۲. مبانی نظری تحقیق

مدل‌های پوشش زمین به طور گسترده‌ای برای تجزیه و تحلیل و پیش‌بینی تغییر کاربری زمین استفاده می‌شود. در بین این مدل‌ها، مدل‌ساز تغییر سرزمین (Land Change Modeler) می‌تواند انقلابی را در زمینهٔ تجزیه وتحلیل تغییرات پوشش سرزمین و پیش‌بینی تغییرات کاربری اراضی به وجود آورد. مهمترین فرض در این نحوهٔ مدل‌سازی این است که طبیعت توسعه و تغییرات، طی زمان یکسان خواهد بود و تغییرات گذشته می‌توانند تغییرات آینده را براساس سناریوی تاریخی پیش‌بینی کنند. با پیش بینی روند تغییرات کاربری اراضی و اتخاذ سیاست‌های مدیریتی مؤثر، می‌توان در راستای هدایت اکوسیستم به سمت مطلوب گام برداشت. در این مدل دو روش زنجیره مارکوف و اتوماتای سلولی(CA) وجود دارد. آنالیز زنجیره مارکوف ابزاری مناسب جهت مدل‌سازی تغییرات کاربری و پوشش اراضی است و زمانی کاربرد دارد که تغییرات موجود در چشم‌اندازها به راحتی قابل توصیف نباشد. زنجیره مارکف مجموعه‌ای از مقادیر تصادفی است که احتمال آنها در فاصله زمانی داده شده به مقدار اعداد در زمان گذشته وابسته است. همچنین مدل CA- Markov شامل تئوری های زنجیره مارکوف و اتومات‌ای سلولی (CA) است و معمولاً در پیش بینی LUC استفاده می‌شود.

*. نویسندهٔ مسئول:

دکتر فاطمه محمدیاری

آدرس: گروه محیط زیست، دانشکده منابع طبیعی و محیط زیست، دانشگاه ملایر، ملایر، ایران.

پست الکترونیکی: Email: m.fatima.1364@gmail.com

۶۲۳۳ هکتار از تغییرات مرتع به کشاورزی، ۱۱۹۹ هکتار از تغییرات مرتع بـه اراضی لخت، ۱۱۴۶ هکتار از تغییرات مرتع به جنگل و ۵۵۹ هکتار از تغییرات مرتع به مسکونی است.

۵. بحث و نتیجه‌گیری

تحقیق حاضر ارائۀ مدلی تجربی بین متغیر وابسته (میزان تغییـرات کـاربری اراضی) و متغیرهای مستقل (توضیح دهندۀ تغییرات) است. با توجه به وجـود روابط غیرخطی بین متغیرها از شبکۀ عصبی مصنوعی استفاده شده اسـت و شبکه با استفاده از داده‌های سال‌های قبل آموزش دیده است. مهمترین فرض در این نحوه مدل سازی(با توجه ماهیت تجربی) این است که طبیعت توسعه و تغییرات در طی زمان یکسان خواهد بود و یـا بـه عبـارتی دیگـر تغییـرات گذشته می‌توانند تغییرات آینده را بر اساس سناریوی تاریخی پیش‌بینی کنند. نتایج این مطالعه می تواند با توجه به چگونگی تغییـرات کـاربری اراضـی در گذشته، حال و آینده، چشم انداز مناسبی را برای برنامه‌ریزان جهت مدیریت کاربری اراضی فراهم کند. همچنین در پروژه‌های ارزیابی آثار توسعه، ارزیـابی آثار تجمعی، شناسایی زون‌های حساس و آسیب پذیر و احیای آنهـا کـاربرد داشته باشد و در پایان با توجه به این که در منطقه مورد مطالعه تاکنون چنین تحقیقی صورت نگرفته لذا نتایج این تحقیق می‌تواند برای اجرای پروژه‌های کاهش آثار تخریب مراتع، جنگل زدایی و تخریب جنگل که هدف اصلی آن کاهش گازهای گلخانه‌ای و حفاظت از تنوع زیستی است قابل استفاده باشد.

کلیدواژه‌ها: تشخیص تغییرات، شبکه عصبی، زنجیره مارکوف، CA مارکوف، شهرستان بهبهان.

۳. روش تحقیق

این تحقیق از نوع کاربردی و جمع‌آوری اطلاعات به دو شکل کتابخانـه‌ای و میدانی (پیمایشی) انجام گرفته است، همچنین از نرم افزارهای ArcGIS 10، Google Earth، Surfer11، IDRISI Tiga و ENVI 4.8 استفاده شده است. برای تهیه نقشه کاربری اراضی سال‌های ۱۳۷۸ و ۱۳۹۲ از تصاویر ماهواره لندست استفاده شده است. نقشه‌های کاربری اراضی با روش حـداکثر احتمال تهیه شدند. سپس نقشه‌های کاربری اراضی برای تجزیـه و تحلیـل و آشکارسازی تغییرات منطقه وارد مدل LCM شدند. ۶ زیرمدل (کشاورزی به مسکونی، جنگل به مرتع، مرتع به کشاورزی، مرتع بـه اراضـی لخـت، اراضـی لخت به مسکونی و اراضی لخت به کشاورزی) و ۶ متغیر (متغیر کیفی در زیر مدل کشاورزی، مدل رقومی ارتفاع، فاصله از اراضی کشاورزی، فاصله از مناطق مسکونی، فاصله از جاده و شیب) برای مدل‌سازی احتمال وقوع در هر انتقال از طریق شبکه‌های عصبی پرسپترون چندلایه انتخاب شد. همچنین پیش‌بینی سناریو آینده با دو روش زنجیره مارکوف و CA- Markov صورت گرفت.

۴. یافته‌های تحقیق

در تحقیق حاضر، از مدل‌ساز تغییر سرزمین برای مدل‌سازی تغییرات کاربری اراضی شهرستان بهبهان استفاده شد. نتایج تغییرات کاربری اراضی در سـال‌های ۱۳۷۸ تا ۱۳۹۲ نشان می‌دهد این تغییرات در منطقه گسترده بوده است. در بین کاربری‌های بررسی شده کاربری کشاورزی، مسکونی و آب بیشـترین افزایش مساحت را به خود اختصاص داده‌اند، که بیشترین افزایش مساحت در کاربری کشاورزی (۸۰۳۶/۰۱ هکتار) می‌باشد. همچنین کاهش مسـاحت در کاربری مرتع، اراضی لخـت و جنگـل صـورت گرفتـه کـه بیشـترین کـاهش مساحت در کاربری مرتع (۴۵۶۰/۳۹ هکتار) بوده است. کاهش مساحت مرتع و تبدیل آن به کاربری‌های دیگر به ترتیب از بیشترین بـه کمتـرین شـامل:

Original Article

Analysis of Socio-Cultural Challenges Facing Local Managers in the Process of Rural Development
(Case Study: Central District of Rasht County)

Eisa Pourramzan [1*]

1- Assistant Prof. in Geography and Rural Planning, Rasht Branch, Islamic Azad University, Rasht, Iran

Abstract

Design/Methodology/Approach- This is an applied research in which a descriptive-analytical method has been adopted for data collection and analysis. The study data was obtained through documentary analysis and field studies. The statistical population of this study includes 63 villages in the central district of Rasht County. All Dehyars and members of the Islamic Council of these villages (n=284) were interviewed and filled out the questionnaire. Data analysis was performed using statistical methods (t-test and weighted mean). The social challenges facing local managers with 18 items and cultural challenges with 8 items were subjected to analysis at three levels.

Findings- The results suggested that local managers of villages in the central district of Rasht County confront serious social and cultural challenges in the process of rural development. Poor collaboration of villagers with local village managers in rural development plans and projects with a mean of 4.42, reverse migration and social problems caused by the construction of second houses with a mean of 4.41 and migration of youths from villages to the city and non-participation in Council elections with a mean of 4.40 were the major social and ethnic challenges. Also, tribal differences in the villages with a mean of 4.35, lack of solidarity between local managers and people in tackling rural problems with a mean of 4.34 and poor work culture with a mean of 4.13 were also the most important cultural challenges facing local managers in the villages at the central district of Rasht County.

Research Limitations/Implications- The disagreements between local managers, reluctance to provide information on research topic and the difficulty of reaching managers in the villages were the main limitations of the present study. Appointing a member of the village management body as a spokesperson and setting the criterion of permanent residence in the village as a precondition for the nomination of the executive director were among executive strategies offered in the present study.

Practical Implications- Changing the management style from person-centered to participatory management in the administration of rural affairs, monitoring the inflow of non-indigenous people into the village in order to safeguard its social and cultural structure, building a suitable infrastructure to keep young and active forces in rural areas and encouraging them to study in the fields pertained to planning and rural development, participating in the decision-making structure of local management, fostering interaction between local managers and villagers through a management system based on law obedience and transparency and ultimately stimulating villagers to engage in teamwork and its effective results in the process of achieving comprehensive rural development.

Originality/value- Recognizing the main challenges facing local managers in a district of Guilan province can play a prominent role in improving their efficiency in the process of achieving rural development. The results of this research can be useful for district and county managers.

Keywords- Rural management, Rural development, Social challenges, Cultural challenges, Central district, Rasht County.

*Corresponding Author:
Pourramzan, Eisa, Ph.D.
Address: Department of Geography, Faculty of Letters & Humanities, Rasht Branch, Islamic Azad University, Rasht, Iran
Tel: +98911 342 7240
E-Mail: Pourramzan@iaurasht.ac.ir

1. Introduction

A key element in the survival, stability and vitality of a society, management is the main driver behind transition from the status quo to a favorable and desirable situation (Mohammadzadeh & Khosravipour, 2018). The realization of rural development requires applying various strategies and techniques. One of the controversial issues in this regard, which can be seen as a basis for directing the scene of local management and development in rural areas, is the issue of housing in both physical and non-physical dimensions. As mentioned, local management plays a fundamental role in rural development in general and in socio-economic development in particular (Molaei Hashjin et al., 2017). Rural management is a multifaceted process composed of three pillars of people, government and public institutions (Kabiri & Valaei, 2019). Given the importance of rural management in attaining rural goals, rural management in Iran needs to draw on core knowledge and provide the necessary momentum for the realization of this goal in the rural areas (Heidari Mokarrar & Nazari, 2011).

Iranian villages have been struggling with a raft of problems from the past to the present, including the lack of attention to sustainable management in the villages, which give rise to countless problems and challenges such as rural-city migration, weak public participation in administrative activities, imposed planning, lack of competent local management (Dehyar), and youth unemployment, among other things (Mousavi & Badri, 2012: 79). The new concept of rural management underscores the role of local institutions and the participation of villagers as one the fundamental requirements of sustainable rural development. At present, the rural management structure of the country comprises of two parts: The Islamic Council of the village as a decision-making body and Dehyari as an executive branch with legal and financial independence (Moradi & Agahi, 2014). Islamic councils and Dehyars, as the most inclusive chain of the civil society, aims to respond to a social need, which used to be realized in traditional ways in the past, but has currently emerged as a fertile ground for popular participation. Accordingly, in the sixth and seventh principles of The Islamic Republic of Iran, Councils and Dehyars are regarded as pillars of decision-making and administration of the country. In fact, they play a crucial role in various decision-making, supervisory and managerial sectors by relying on public votes collected through elections or referendums (Talib, 2010: 127).

At present, the rural councils, along with Dehyari, which can be seen as the executive branch of the Councils, are in charge of rural affairs. The villages are expected to tap into underdeveloped potentials through a local democratic organization. The expansion of councils can contribute to the development of non-governmental organizations, increase people's participation in local affairs, and bring to account the rural management institution. However, evidence suggests that rural Islamic councils confront several issues and challenges that, if ignored, can beget numerous problems for the villages across the country. Social challenges are one of the main challenges of councils that are directly and indirectly involved in creation of other challenges. Handling affairs and coordinating a specific program or framework that identifies rural problems and adopts the best possible solution seems necessary (Riahi & Masoumi, 2020). In the new approach system, the decentralized approach to national development has led to the inception of a new rural management, i.e. the establishment of Dehyari in rural areas, which was a formal and legal institution in charge of rural affairs and local rural management in rural areas. Currently, it is deeply involved in the villages, addresses a growing body of rural problems and plays a pivotal role in rural development (Estelaji et al., 2011). However, despite all the efforts made by local managers, a variety of factors such as financial variables, people's attitudes, etc., have mounted a number of challenges in social and cultural domains.

The central district of Rasht County, with 75 inhabited rural settlements, 63 of which have Dehyar and Islamic Council, faces multiple challenges in performing its duties and functions, especially in economic, social and cultural domains. More than two decades of experience in modern rural management has not yet translated into effective rural development. This study aims to investigate and analyze the social and cultural

challenges facing local managers in the villages at the central district of Rasht County, and to answer this question, "What are the most important social and cultural challenges facing local managers in the villages at the central district of Rasht County in the process of rural development?

2. Research Theoretical Literature

In the theories on the role of people and government in rural development, the formation of local organizations by local communities has been underscored so that local organizations can play an active role in the development and management of local affairs. Rural society is a kind of social organization built upon the relationship between people and local institutions. Rural management is seen as the technique, organization and order of forging this relationship. As one of the major components of rural development, it is influenced by national macro strategies and approaches in the sphere of management. Management approaches can be classified into traditional approaches, human resources approaches, systemic and contingency approaches. Given that development is a multidimensional concept, it seems that the best approach to rural development management is a systemic, participatory and contingent one, which is described in some references as "the new management" (Estelaji, 2012). Informed by the requirements of the present era, the new strategy and modernity of rural management has been tilted towards partnership with the people, for the people (Pahuja, 2015). Today, local planning and management theorists have proposed the theory of partnership. Local community-based management is akin to the group or participatory approach that chiefly focuses on local communities. In contrast, participatory management approaches stresses partnerships between local rural communities, the public sector, and other stakeholders on a larger scale, without focusing on the local community. In the theory of partnership, as stated by Terner, government or the people rather than acting as the supplier or the decision-maker, take care of affairs together. In this mutual cooperation, the government provides resources that cannot be offered by people and the local people - within the framework of the organization of local communities (Rezvani, 2011: 230).

Pahuja stresses the importance of cooperation, trust and friendship to cultivate harmony and peace between people and local management

(Murarka et al., 2021). This approach, covering a variety of areas, including participation, local community, community-based collaboration, decentralization, and partnership, is associated with approaches that concentrate on local community in the process of sustainable development. Therefore, one of the main factors in the analysis of rural issues is the management structure of these communities. In the past, a traditional management system governed the rural areas of Iran and a survey of rural management in Iran in the post-Revolution era suggests major changes in this period compared to the previous times, but the absence of a precise and goal-oriented approach to policies and macro-plans in rural management is still felt (Ghadiri Masoum & Riahi, 2004). The local organizations are built on the principle of sovereignty of peoples, and participation is a key element underpinning these institutions. Apart from participation, decentralized management, regulated decision-making, systemic thinking, and the model of mission execution are other characteristics of modern rural management (Mahdavi & Najafi Kani, 2005).

At the lower levels of the ruling system, the local management of rural development in Iran is entrusted to the district governor and Dehyar. Dehyari, as a public non-governmental organization that administers local affairs under the supervision of villagers through the Islamic councils, is in charge of public affairs and public services. With the establishment of Dehyaris, for the first time, a formal and legal institution was set up to consolidate public affairs in the villages (Akbari, 2003). For many years, the rural management system in Iran, due to socio-economic structures, developments and lack of efficient management in villages, have undergone complicated changes. In all periods, especially in recent decades, it has given rise to a host of problems for the villagers (Nasiri et al., 2021). The new structure of the rural management in Iran has two main components: The Islamic Council of the village as a decision making body and Dehyari as an executive branch with legal and financial independence. In addition to access to national budgets, this institution has power to impose and collect local tolls for public services. Dehyars are the link that connect and reinforce governance and supervision bodies at the bottom of the hierarchical structure. These two non-

governmental institutions constitute the pillars of rural management which, if supported by the government, can fill a historical gap in rural management (Naderi Mehdi, 2015).

An official executive body with legal legitimacy that operates under the supervision of the Islamic Council of the village to provide public services is a new concept in Iran (Ghadiri Masoum & Riahi, 2004). Part of the problems of Dehyaris could be attributed to their fledgling operation as well as deep-rooted management problems in the country. In the absence of no definite measures and yardsticks for credits and resources allocated to districts and regions, the small communities that are out of reach of the decision-makers, i.e. the villages, would suffer the most serious repercussions. The nascent and inexperienced institution of Dehyari, which closely interacts with the defective institution of the Islamic Council of the village, should advance the development of the village (Office of Program and Budget Studies, 2006). Laws and regulations, even those regarding the interaction between the council and Dehyari, are largely flawed and often lead to overlapping in implementation of duties (Estelaji, 2012). Many of the rural problems, including the lack of coordination and overlapping duties of organizations in charge of villages, the budget constraints of Dehyaris and urban orientation and modeling of most managers of relevant organizations, are levied from outside the village. Other obstacles to modern rural management are the distinctive status of Dehyari management in the management structure, limited experience and lack of expertise of Dehyars (Rezvani, 2011: 260), severe budget constraints of Dehyaris, fragile rural economic the absence of rural management infrastructure in the country, and the abundance of development and service projects undertaken by this institution (Deputy for Dehyari Affairs,2004:6-5). Other problems such as lack of unified management in the village (Darban Astaneh et al., 2010), poor financial resources, non- participation of residents, negative experiences of villagers, overlapping duties of Dehyaris and other organizations (Ghadiri Masoum et al., 2018), lack of staff specialized in rural affairs (Rezvani, 2011: 260), high prices of equipment and machinery, constrained rural income sources, exorbitant costs of carrying out civil and technical projects for rural areas, social barriers and attitudes of rural tribes to issues (Estelaji, 2012) as well as improper distribution of rural funds (Taghdisi et al., 2011) are some of the challenges to modern rural management. In addition to social challenges, there are a number of parameters and criteria related to the peasant subculture in the rural culture. These social and cultural criteria, which have impeded the development of Iranian villages, include poor mutual trust in personal relationships, lack of innovation, low aspirations., inability to sacrifice immediate resources for future gains, underestimation of the time factor, tribalism and nepotism, over-reliance on government, localism, lack of empathy, lack of motivation for progress and improved standard of living (Azkia, 2005).
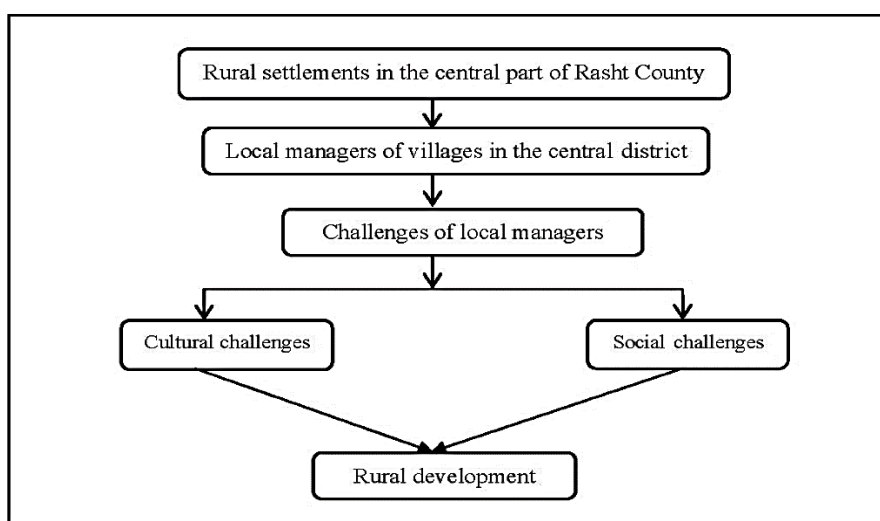

Figure 1. Conceptual model of research

With regard to the challenges of local managers in the rural development process, several studies have been conducted, some of which are listed in Table (1).

Table 1. Some research on the challenges facing local managers

Researcher / Year	Research title	Summary of results
Ghadiri Masoum & Riahi (2004)	Analysis of rural management challenges in Iran	Local managers have faced challenges in the areas of sustainable financial resources, participation of local people, human resource training, equipment, tools and facilities.
Mahdavi & Najafi Kani (2005)	Dehyaris, another experience in rural management of Iran. Case study: West Azerbaijan province	Today, Dehyaris and local organizations can play an important role in rural development, especially in improving physical condition. In this regard, the higher-level supervision of the governorates and allocation of more budget, along with holding training courses related to job descriptions and creating a culture for public participation have been emphasized.
Badri & Nemati (2007)	Evaluating the functional role of the new rural management system in Golestan province	Structural, social and economic determinants of success in Golestan villages.
Imani Jajarmi & Karimi (2009)	Social challenges of rural councils in local management	The major social challenges facing Islamic councils are the small share of women in rural management though they constitute a substantial segment of rural population, low human capital of council members and villagers, migration of the council's members and the young population to the cities, as well as the declining social capital of councils and villagers.
Badri (2011)	Challenges of rural management in Iran and presentation of strategic policies	This study investigates different periods of rural management in Iran while discussing the major challenges of local managers and proposing solutions for current challenges.
Rokn al-Din Eftekhari et al. (2018)	Identifying the problems and obstacles to the success of rural areas in Selseleh city in Lorestan province	The main obstacles to the effective functioning of rural areas are administrative barriers and supports followed by financial and social problems as well as specific issues related to Dehyars and legal obstacles.
Ghadiri Masoum et al. (2018)	Investigating the problems facing rural councils in East Azerbaijan province	In this study, a number of obstacles such as uncertainty and unawareness of Dehyars about their duties, inefficient execution some tasks due to a lack of experience, ethnic bias, lack of support from officials, council and people and limited cooperation of institutions with Dehyar.
Moradi & Aghei (2014)	Analysis of rural management challenges based on a qualitative approach to the Basic theory	Challenges such unfamiliarity of people and local organizations with the duties of Dehyar, a negative stance on Dehyar, the lack of cooperation and support of local and government organizations from Dehyar, the development of top-down plans by executive organizations, the weak spirit of cooperation and voluntary participation of the people, the shaky legal status of Dehyar and finally, the absence of equipment and financial resources
Kabiri & Valaei (2019)	Analysis of Challenges of New Rural Management (Case Study: Villages of Miandoab County)	The most important challenges facing villagers are unemployment, lack of motivation and personal skills, organizational inefficiency, regulatory problems and law gaps, and inadequate funding of Dehyaris with a total variance of 62.97. Job insecurity, poor financing, lack of motivation and income negative attitudes of the people and prejudices of the councils are other main factors.

Researcher / Year	Research title	Summary of results
Riahi & Masoumi (2020)	Challenges facing rural management and its role in the underdevelopment of Peripheral villages (Case: Shiraz)	Socio-cultural challenge has been a key challenge to the development of rural management in the villages of Peripheral in Shiraz. Based on statistical analysis, in the studied villages, a significant difference was observed between rural management challenges in different dimensions. The results also revealed that as the distance from the city increases, the effect of rural management challenges on the underdevelopment of villages in the outskirt of the city declines. In fact, villages closer to the city were more severely affected by city laws and regulations.

Based on the points presented in Table (1), the bulk of studies on challenges facing local managers of rural settlements were on economic challenges and few studies have explored social and cultural challenges, which represent key areas of rural development.

3. Research Methodology

3. 1. Geographical Scope of the research

The geographical area of the present study is the central district of Rasht County. As one largest district of Rasht County, it covers an area of 522 square kilometers and shares border with Khomam and Bandar Anzali on the north, Sangar and Rudbar county on the south, Kouchesfahan district on the east and Tulamat district, Someh Sara county, Fuman and Shaft on the west. The central district of Rasht county, according to the latest General Population and Housing Census in 2016, consists of 4 villages of Pasikhan, Pirbazar, Humeh and Lakan with 78 villages (75 inhabited villages and 3 uninhabited villages). In 2016, this area was home to 246,759 households and 740,985 people, of which 78.24% settled in urban areas and 21.76% in rural areas (Management and Planning Organization of Guilan, 2017).
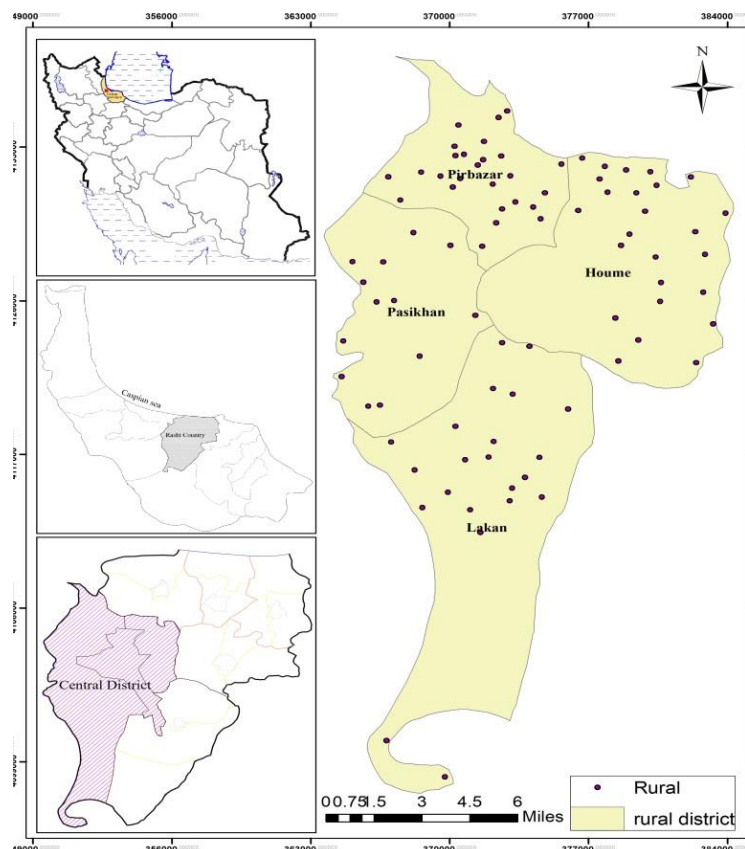
Figure 2. Geographical location of the study area

3. 2. Methodology

This is an applied research in which a descriptive-analytical method has been adopted for data collection and analysis. The research information was obtained using two methods of document analysis and field studies. Information related to the background and subject of research, theoretical framework and scope of research were obtained from document analysis and the major social and cultural challenges facing local managers (Dehyars and Islamic councils) were identified through field studies using observations, interviews and questionnaires. The validity of the questionnaire was assessed based on experts' opinion and its reliability was estimated at 0.975 based on Cronbach's alpha test.

The statistical population of this study consisted of local managers including members of Islamic councils and Dehyars in the central district of Rasht County. This district has 75 inhabited villages, of which 63 villages have Dehyari and Islamic Council. In this study, 284 local managers (Dehyars and the Islamic Council) of these villages were selected using Total population sampling. The t-test and weighted Mean were utilized for data analysis. Data processing was conducted using $SPSS_{22}$ software. The tables were drawn in Excel software, and maps were designed by Arc GIS software. The independent variable of research, i.e. challenges facing local managers, was measured by social and cultural indicators, and the dependent variable is rural development.

Table 2. Indicators and components of research

Indicators	Components	reliability
Social challenges	Low participation of villagers with local village managers, Decrease in social capital (empathy, trust, participation), Migration of rural youth to the city and non-participation in council elections, Existence of deficiencies in the rules and regulations of village administration, The villagers do not value the actions of local managers, Low youth employment (active labor unemployment) in the village, Low executive power required of local managers in solving village problems, Lack of presence and permanent residence of local managers in the village, Multiplicity of government agencies and institutions and parallel work in rural areas, Low level of people's trust in local village managers, Lack of a clear pattern of rural development, Low professional and scientific attitude in local managers, High level of expectations of villagers and limited ability of local managers, Low level of literacy and awareness of villagers about village rules and regulations, Low participation of women in the local management structure, Low human capital of local managers and villagers (general and professional literacy level), Low familiarity of local managers with the problems and difficulties of the village and providing appropriate solutions to solve it	0.987
Cultural challenges	The politicization of local village managers, Physical and verbal conflicts between the local community and non-natives through the construction of second homes in the village, The small share of women in rural management, Individualism of villagers and low interest in collective work, Low public acceptance of new management practices, Low coordination between managers and people to solve the problems of the village	0.964

4. Research Findings

4. 1. Demographic characteristics of the respondents

The analysis of respondents' profile suggests that 91% of respondents were male and 9% were female. In terms of age, 30.6 of respondents were in the age group of 20 to 30 years, 64.5% were between 30-40 years old and 4.9% were between 40 to 50 years old. The local managers' level of education will play a significant role in managing rural affairs and mitigating village issues and problems. With regard to education, local managers in the study area could be divided into 5 groups: Below school, diploma, associate's degree, bachelor's degree, master's and doctoral degree. Of the total local managers in the central district of Rasht County, 97.5% had a university education, with their vast majority (73.9%) having a bachelor's and master's degree (Table 3).

Table 3. Personal and general characteristics of the respondents

description		Frequency	percent
Gender	Male	261	91
	Female	23	9
Age	20-30	87	6/30
	30-40	183	5/64
	40-50	14	9/4
	50-60	-	-
	60 years and older	-	-
Level of education	Below Diploma	-	-
	Diploma	7	5/2
	Associate Degree	67	6/23
	Bachelor Degree	162	0/57
	Master degree & Doctoral	48	9/16

4.2. Social challenges of local managers

The social challenges facing local managers in the villages at the central district of Rasht with 18 items were analyzed using t-test and weighted mean, as shown in Table (4). Accordingly, the social challenges of local managers in the study could be classified into three levels in terms of importance: first-level social challenges with an weighted mean of above 4 (very important), second-level social challenges with an weighted mean of 3.5-4 (important) and third-level social challenges with an weighted mean of less than 3.5 (average).

First-level social challenges: In this category of challenges facing local managers of villages in the central district of Rasht, there are 6 challenges with a weighted mean of 4.10 to 4.42 (i.e. very important). The participation of villagers in various plans and projects is a key way to achieve rural development. Low participation of local people in rural plans and projects due to their inefficiency was the main challenge facing local managers at the studied villages, which was recognized as the biggest social challenge by local managers with a mean of 4.42. Improving access to services in the villages of the central district of Rasht County, especially gas supply to the villages, paving roads, and giving loans for the renovation of houses have fueled the reverse trend of migration to the villages of this district. Reverse migration and the social problems ensuing the construction of second houses represent one of the problems confronted by local

village managers. This item, with a mean of 4.41, was the second important social challenges facing local managers in the studied villages after the low participation of villagers. These problems are especially evident in Pastak and Alman villages, where a large share of lands has been acquired by the people of Tehran to build their second houses. The long-term presence of candidates in the council without any contestant (in some cases, due to the special situation of the villages and the financial benefits attached to council, and in other cases, due to the unwillingness of other villagers and the absence of a quorum to hold council elections), members and local people are not sufficiently motivated.

For this reason, in most of the studies prior to the rural elections, one of the biggest problems facing Islamic councils and Dehyaris was the small number of candidates and the continued appointment of elderly and unmotivated people as the members of the Islamic councils and Dehyaris, which has overshadowed the presence of youths. The tendency of villagers and the young and active rural population to migrate to the city and therefore their absence in the management system with a mean of 4.40 underlines its importance as one of the major social challenges facing local managers in the study area. Villages such as Selki Sar, Lakan, Khajan Chahar Dang have been among the villages that have experienced this important challenge in recent years.

Surveys have shown that many local managers, especially Dehyars, have no permanent residence in villages and dwell in the cities. This has disturbed the ongoing interaction of villagers with the local managers. As a result, some rural issues and problems village still remain unresolved. On the other hand, in some cases the absence or temporary residence of local managers, especially Dehyars in the village has an adverse impact on their activity, decreasing their efficiency in advancing and implementing rural development programs. The absence and temporary residence of local managers in rural areas, with a mean of 4.25, was also confirmed by local managers in the villages under study. Despite the fact that villages in the central district of Rasht County are dense and positioned in the plains in the vicinity of city, most local managers stated that if local managers lived in the village, they would pay more attention to rural issues as they would feel the shortcomings. Islamic councils and Dehyaris at the central district of Rasht County struggle with the inadequacy of laws and regulations in village administration. Such inadequacies, with a mean of 4.21, was proposed as the fifth social challenges facing local managers in the area. Research suggests that in the villages of Saghalaksar,

Alman and Pastak, this issue was more prominent than other villages in the central district of Rasht County. Local organizations and managers, as institutions that safeguard the rights of exploiters and the local people in the rural and agricultural sectors, are a powerful means of exerting pressure on government agencies in this sector to force them into respecting the rights of citizens, meet the unfulfilled demands and expectations of various stakeholders, improve transparency, reduce corruption, cut red tape and ultimately promote efficiency of government management in rural development. Given the large raft of problems in the villages, most of the villagers attribute rural problems to the Dehyars and hence have trouble trusting Dehyars. For example, in Islamabad village, the local people held Dehyar responsible for power outage. Also, the extent of demands and expectations of the people vary in villages. Therefore, when some expectations are not met, villagers may lose their trust in Dehyar. As such, the little trust of people for local village managers with an average of 4.10 was proposed as the sixth social challenge facing local managers in the villages of the central district of Rasht County (Figure 3).
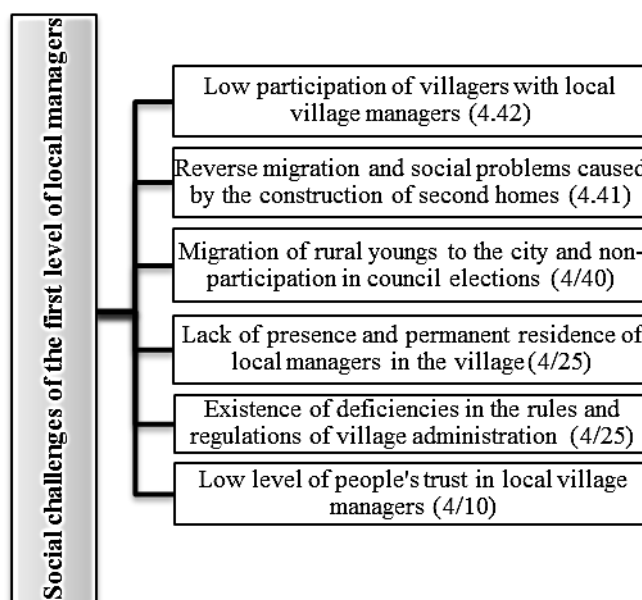
Figure 3. Social challenges of the first level of local managers

Second-level social challenges: Second-level social challenges facing local managers of villages in the central district of Rasht County, with an weighted mean of 3.5 to 4, included 10

"important" challenges, as shown in Figure (4). Social capital in rural areas was measured in terms of empathy, trust and participation, and human capital was assessed through literacy,

education, and so on. Development process in villages of the central district of Rasht County has not been executed effectively, which has dwindled the level of trust and participation of villagers in local managers. Most of Dehyars are well-educated, but since their managerial and professional knowledge is fairly low, their drawbacks begin to stand out. The reduced social capital and low human capital in the villages of the central district of Rasht County with a mean of 3.94 is one of the main challenges facing local managers in the process of rural development. According to studies, villagers tend to visit different government organizations in person to tackle problems and they are not satisfied with Dehyars performance and the village council. This reflects the little trust of local people for Dehyar and members of Islamic council.

Unemployment is a key issue in today's societies and in developing societies, youth unemployment may turn into a serious issue with huge deleterious socio-economic, cultural and cultural effects. Thus, it can be argued that one of the primary goals of the government in the economic domain is to generate full-time employment and fight unemployment. The responsibilities in this regard, particularly in lower subdivisions, are shouldered by governorates. Full employment also describes an economic situation in which all job seekers in the society have access to a decent job and unemployment is scarce. Today, creating jobs for the youth in rural areas is one of the social problems of local managers, which was noted as one of the main challenges facing local managers in villages at the central district of Rasht County with a mean of 3.90. Different countries and regions of the world have adopted varied rural development approaches, and strategies relative to their specific conditions and priorities. Certainly, it is not possible to make sustainable achievement in this area without drawing on the global experiences or only focusing on job creation in rural areas and without considering the rural development strategy. Cooperation at the local management level offers several benefits, including increased local decision-making capacity, protection of local identity, expanded access to external resources, cost reduction, greater productivity and efficiency, conservation of economic resources, and growth of political influence by empowerment of individuals. Accordingly, the lack of a vivid

development pattern is one of the challenges confronting local managers of the studied villages in the rural development process, which was proposed as a major social challenge facing local managers with a mean of 3.67. Islamic councils and Dehyars play a crucial role in the development of villages and the recruitment of efficient and indigenous people. If cognizant of the laws, regulations and duties of councils and Dehyaris, they can further improve this role. The expansion of the agricultural sector is one of the main pillars of the country's economic planning and the development of villages aimed at preventing the rural-urban migration and their growing activities in the agricultural sector and conversion industries is of utmost importance. Due to the multiplicity of their problems, the villagers underestimate the measures taken by village managers and fails to appreciate the efforts of Dehyars and Islamic councils to deal with rural problems. In this regard, most of Dehyars stated that what they have done for the village was not appreciated by the villagers and they solely cared about tackling their own problems. With a mean of 3.60, this challenge was one the social challenges facing local managers in the villages of the central district of Rasht County. For example, in the village of Shalkuh, some of the local people's lands were in the course of the water canal and they were ready to do anything to deal with this problem irrespective of its consequences for the future of the village.

One of the persistent problems in rural communities is the poor coordination between the relevant executive bodies, parallel work, waste of capital and disregard for the real needs of the villages. To optimally allocate scant government funding, it is necessary to focus on rural planning and develop comprehensive and integrated programs. Undoubtedly, there is an interplay between improved social conditions, the change of the cultural system and the productive and economic situation of the society. That is, economic, social, and cultural goals are interdependent. In rural societies, production, distribution, consumption, administration, education and promotion are foundations of rural communities that are closely interrelated. Together, these factors forge the network of social and economic system of rural society. Therefore, the ultimate goal of rural planning is to improve these relationships so that material and human

resources could be optimally exploited to increase the level of production and improve the level of consumption.

Increased production levels are directly linked to better education, public health and social welfare. Since one of the goals of rural development is to improve the living conditions of the villagers, it is essential to provide conditions for villagers to gain access to quality health, education and enhanced social welfare. This largely depends on the sound performance of the relevant bodies, but in the current situation of villages, the multiplicity of executive bodies in charge of planning with a mean of 3.61 was proposed as a challenge, for the abundance of government agencies leads to parallel work and reduces their efficiency. The educational needs of Islamic councils and Dehyars include specialized knowledge in agricultural sciences, natural resources and activities related to these sectors, as well as familiarity with public services. Regarding educational methods, based on the results, it seems that Islamic councils and Dehyars have concluded that in-person education at classes is more effective than other methods. As for the specialized knowledge of council members and Dehyars, it should be stated that most important materials such as familiarity with legal and judicial affairs, administrative and organizational affairs, as well as social and cultural affairs are provided at high school and universities. Hence, to improve the efficiency of councils. Dehyars need to first upgrade their general trainings and then provide specialized training accordingly. The results of the studies revealed that the low knowledge and awareness of the villagers about the rules and regulations of Dehyari with a mean of 3.57 was one of the social challenges facing local managers.

Lack of familiarity with the rules and regulations of the rural guide plans as well as constructions within the river path, which is a usual cause of conflict in the villages, is a clear example of villagers' lack of knowledge and awareness of rules and regulations of Dehyari. Research shows that local people have high and unrealistic expectations of councils and Dehyari, holding the council accountable for solving many of the village's problems. People are under the assumption that all issues or deficiencies in the village must be handled by the Islamic councils and the Dehyar. However, when they learn that

the councils and Dehyari are devoid of the executive power to tackle these problems, they are disillusioned with the local managers. In the long term, this negative attitude undermines the status of Council and Dehyar in village management and leadership and debilitates their acceptance by local people.

The results of studies on the low executive power of local managers in tackling village problems with a mean of 3.56 was one of the social challenges in the rural development process. More than 70% of local managers in the study area admitted they lacked the executive power to handle the problems of the villages. For example, in the village of Pastak, due to the limited power of Dehyar, the rural guide plan was not revised, and therefore many villagers kept struggling with issues related to the land use change and construction of residential settlements for themselves or their children.

The high level of local people's expectations and the limited capacity of local village managers suggest that public attitude of the Islamic councils of Dehyars is a function of their expectations from this institution. These expectations are largely affected by the type of activity and literacy of the villagers. The results concerning the high level of villagers' expectations and limited capacity of local managers indicate that this factor, with a mean of 3.55, was mentioned by about 63% of local managers. Local administrators in the villages surveyed announced that people expect all their problems to be resolved quickly in the shortest time possible, while Dehyaris are unable to do so. For example, people want issues related to the land use change process be settled in the shortest time possible, while it is not possible due to the surfeit of land use change cases and the relatively long red tape (e.g. villages of Pastak, ALman, Bala koy-e Yakh, Kafteh rud, kamakol, and flooded streets in Pirbazar).

Despite global studies and experiences, modern rural management in Iran has fallen short of formulating a suitable and efficient model of rural management. Perhaps one of the social challenges of village managers is lack of expertise and knowledge of issues related to management. It is because many local managers are appointed by the people without any background and expertise in rural development planning. That is, they have not received any special training in the field of rural studies during their tenure. Hence, the lack

of professional training and expertise of local managers in the villages at the central district of Rasht County with a mean of 3.51 was also proposed as a challenge. Accordingly, they asserted that local managers have little expert knowledge and it is vital to improve knowledge

and awareness by holding specialized courses. The general literacy of council members and Dehyars is mostly limited to the compulsory education they have received at the primary school (Figure 4).
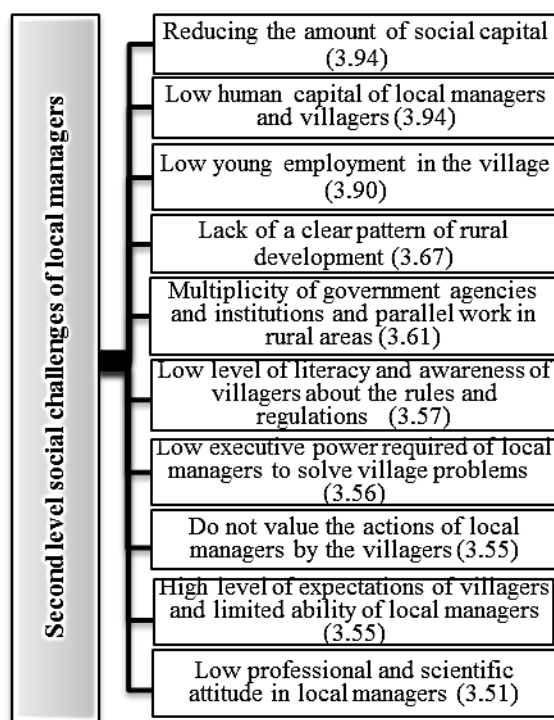

Figure 4. Second level social challenges of local managers

Third-level social challenges: This category of social challenges facing local managers in the studied villages were of "medium" level of importance with a weighted mean of less than 3.5. They include two factors of a lack of local managers' familiarity with the problems of the village with an mean of 3.24 as well as the low participation of women in the local management structure with a mean of 3.07. Although the extent of training provided to councils and Dehyars has taken an upturn in each period, these trainings are still far from the actual needs of village councils and Dehyars, not to mention that the council members and Dehyars are bereft of specialized knowledge in many domains. The educational needs of council members and Dehyars can be categorized into several groups based on research findings including familiarity with administrative and organizational affairs, legal and judicial

affairs, social and political affairs, cultural affairs and finally rural development. The results of the studies on the extent of local managers' awareness of the problems at the villages suggest that most of the village managers in the central district of Rasht County (54.6% with a mean of 3.24) are against this issue, believing that Islamic councils and villagers are largely cognizant of the rural problems. The low participation of women with a mean of 3.07 was also a social challenge in rural management set forth by local village managers in the area. Studies suggest that in the villages of the central district of Rasht County, women have a limited participation in various village affairs and even Dehyars are indisposed to use their help in matters related to rural women. However, considering the improved literacy of rural women, their participation can aid achieve sustainable rural development management (Figure 5).
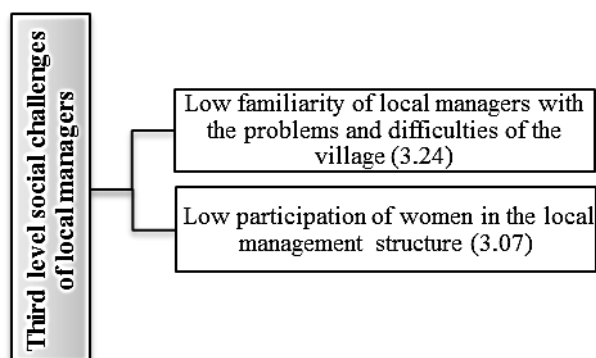
Figure 5. Social challenges of the third level of local managers

Table 4. Statistical test- t and weighted average of social challenge components

Component	Test Statistics- t	Weighted mean	standard deviation	sig	95% confidence level		Rank
					lower bound	upper bound	
Low participation of villagers with local village managers	35.46	4.42	0.66	0.000	1.32	1.49	1
Reverse migration and social problems caused by the construction of second homes	28.27	4.41	0.84	0.000	1.31	1.50	2
Decrease in social capital (empathy, trust, participation)	13.93	3.94	1.14	0.000	0.81	1.08	7
Migration of rural youth to the city and non-participation in council elections	28.26	4.40	0.84	0.000	1.31	1.50	3
Existence of deficiencies in the rules and regulations of village administration	15.68	4.21	1.30	0.000	1.06	1.36	5
Do not value the actions of local managers by the villagers	13.95	3.55	0.67	0.000	0.47	0.63	13
Low youth employment (active labor unemployment) in the village	17.56	3.90	0.86	0.000	0.79	0.99	8
Low executive power required of local managers to solve village problems	8.70	3.56	1.19	0.000	0.43	0.69	12
Lack of presence and permanent residence of local managers in the village	20.15	4.25	1.04	0.000	1.12	1.37	4
Multiplicity of government agencies and institutions and parallel work in rural areas	16.65	3.61	0.62	0.000	0.54	0.68	10
Low level of people's trust in local village managers	28.79	4.10	0.69	0.000	1.02	1.18	6
Lack of a clear pattern of rural development	10.52	3.67	1.07	0.000	0.54	0.79	9
Low professional and scientific attitude in local managers	7.49	3.51	1.13	0.000	0.37	0.63	14
High level of expectations of villagers and limited ability of local managers	8.87	3.55	1.05	0.000	0.43	0.67	13
Low level of literacy and awareness of villagers about the rules and regulations	7.37	3.57	1.29	0.000	0.42	0.72	11

Component	Test Statistics- t	Weighted mean	standard deviation	sig	95% confidence level		Rank
					lower bound	upper bound	
Low participation of women in the local management structure	1.19	3.07	0.99	0.000	-0.05	0.19	16
Low human capital of local managers and villagers	13.93	3.94	1.14	0.000	0.81	1.08	7
Low familiarity of local managers with the problems and difficulties of the village	3.95	3.24	1.02	0.000	0.12	0.36	15

4. 3. Cultural challenges of local managers

The role of cultural planning in the sustainable development of rural social capital should be geared toward strengthening the foundations of rural participation as an empowerment process to consolidate the values of public participation, power and authority of their community, allowing people to take control of their own destiny and granting opportunities for progress to the lower classes of rural society. The cultural challenges of local managers in the villages at the central district of Rasht County were evaluated and analyzed using eight components at three levels of "very important", "important" and "medium". The details of each challenge are shown in Figures (6), (7) and Table (5).

First-level cultural challenges: In the first level of cultural challenges facing local managers at villages in the central district of Rasht County, there are 3 factors with a weighted mean of above 4 that are classified as "very important". Differences abound in villages, especially those with multi-ethnic population. In some cases, ethnic conflicts in rural areas lead to physical skirmishes. Therefore, ethnic-tribal differences and poor solidarity of villagers are considered as a major challenge in rural management. In this regard, more than 89% of local managers with a mean of 4.35 acknowledged that ethnic-tribal differences have given rise to a host of problems in the studied villages. The weak coordination between the villagers and the people thwarts may efforts at villages. This has compounded the problems of the village and prolonged their processing, which was expressed as the second cultural challenges by Dehyars ag the central district of Rasht County with a mean of 4.34. For example, in villages where the electricity and lighting are not desirable and Dehyar go to great lengths to solve the problem, but his efforts are foiled by the non-cooperation of the electricity department, an issue documented in at least 20% of villages. Focusing on resources available in rural areas, meeting public needs and providing public facilities and welfare services, optimal use of available resources and increased rural income can help build up national capabilities.

One of the main goals of development in any country is to foster public capacity and promote participation, but this goal will not be realized in rural communities in the absence of development programs. People in the community tend to participate in economic and social issues when they possess the skills and ability required for participation. The low level of education and small income deter individuals from taking part in social and economic matters. On the other hand, a prerequisite for the optimal exploitation of resources in rural areas is the availability of potentials that must be cultivated in the rural population. The ability to use machines, new production methods, and improve operation procedures, etc., depends on the existence of capabilities in rural communities. The weak culture of collective work is one of the cultural challenges facing village managers in this area with a mean of 4.13 (Figure 6).
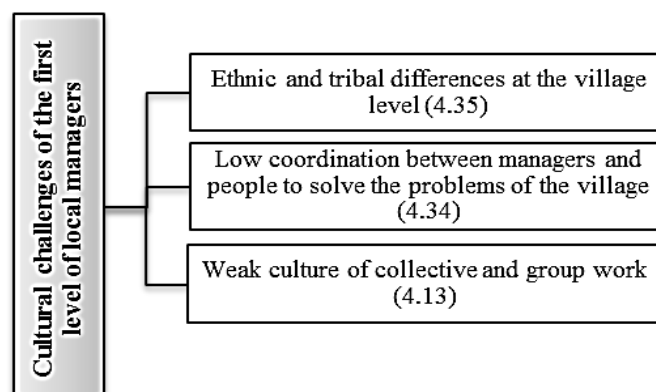
Figure 6. Cultural challenges of the first level of local managers

Second-level cultural challenges: The second level of cultural challenges facing local managers at the studied villages included 4 components with a weighted mean of 3.5 to 4, which were classified as "important". In recent years, villagers in the study area have witnessed the inflow of non-indigenous people through the acquisition of agricultural land and the construction of second houses in these villages.

The highlighted presence of these wealthy people has induced tensions between the local community and non-natives in the studied villages. Verbal abuse and quarrels between villagers and non-natives due to cultural differences represented one of the main cultural challenges facing local managers in villages in the central district of Rasht County with a mean of 3.81. In most cases, these challenges arose in the community under their management. This was especially the case in Alman, Saghalaksar and Pestak villages where several land buyers from Tehran negotiated with the Islamic Council and Dehyar about building constructions.

Low support of villagers for collective work is another challenge to rural management. Individualism of rural people and their disinclination to engage in collective projects was also recognized as an important cultural challenge facing rural managers with a mean of 3.63. One of the most prominent challenges confronting local management in the villages at the central district of Rasht County was the politicization of Islamic councils and Dehyaris. Far beyond the job description of local managers, this has interfered with the process of tackling rural problems. The debate over the politicization of Islamic councils

and Dehyaris is controversial, but it is one of the realities of today's rural society.

In some villages, Islamic councils usually get involved in politics to accomplish their goals. The component of politicization of Islamic councils and Dehyaris with a mean of 3.61 is a major cause of schism and conflicts among the villagers. Rural women have their own special needs and desires in terms of education, health, culture, etc., many of which are overlooked by male managers. Therefore, it is essential to promote the participation of women in village councils and Dehyaris; however, under the current situation, it is highly unlikely that the problems related to their presence in councils and Dehyaris are solved any time soon. Extensive research has investigated the reasons for the low participation of women in rural activities and organizations. In most rural areas, patriarchy is the rule, with men recognizing women management only in household chores, as they believe women's engagement in out-of-house work is their duty rather than a form of participation. Accordingly, the research manifests that a major barrier to women's participation in rural affairs is the socio-economic situation and cultural discrimination in rural society. Studies show that the small share of women in rural management (with a mean of 3.57) is seen as an issue of medium to high importance, so that among 63 villages in the central district of Rasht County, 14 (22.2%) villages had a female Dehyar (Figure 7).
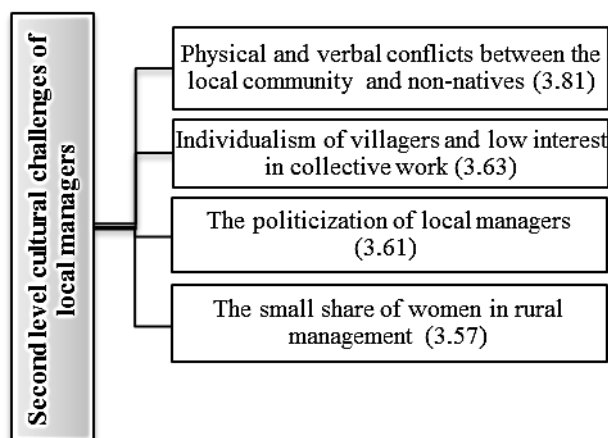
Figure 7. Second level cultural challenges of local managers

Third-level cultural challenges: This level of cultural challenges facing local managers at villages in the central district of Rasht County with a weighted mean of less than 3 was classified as "medium" importance. Rural areas struggle with a myriad of problems and challenges for development, and recognizing these issues guides authorities toward the selection of the appropriate strategy for development of the villages. Challenges in rural areas include inadequate access to capital and facilities, difficulty in providing goods and services, concentration on a particular industry or business, strong tendency for migrate, and increasing trend for agricultural land use change, among other things. Rural development programs should address issues such as job creation in the agricultural and non-agricultural sectors, curbing migration to cities, improving welfare, stressing the development of new technologies, education and training of skilled manpower, and so forth. The weak adoption of modern management techniques has also mounted challenges to rural management, but its share with a mean of 2.04 is below average, suggesting that the villagers welcome new management methods.

Table 5. Statistical test t and weighted average of cultural challenge components

Component	Test Statistics- t	Weighted mean	standard deviation	sig	95% confidence level		Rank
					lower bound	upper bound	
Weak culture of collective and group work	19.18	4.13	0.99	0.000	1.02	1.25	3
Ethnic and tribal differences at the village level homes	18.97	4.35	1.19	0.000	1.20	1.48	1
The politicization of local managers	11.48	3.61	0.89	0.000	0.50	0.71	6
Physical and verbal conflicts between the local community and non-natives through the construction of second homes in the village	9.02	3.81	1.52	0.000	0.64	0.99	4
The small share of women in rural management	6.71	3.57	1.43	0.000	0.40	0.74	7
Individualism of villagers and low interest in collective work	13.54	3.63	0.78	0.000	0.54	0.72	5

Component	Test Statistics- t	Weighted mean	standard deviation	sig	95% confidence level		Rank
					lower bound	upper bound	
Low public acceptance of new management practices	-14.27	2.04	1.14	0.000	-1.09	-0.83	8
Low coordination between managers and people to solve the problems of the village	21.54	4.34	1.05	0.000	1.46	1.22	2

5. Discussion and conclusion

In the new management system of the country, the management of villages has been entrusted to councils and Dehyaris. Rural management is in fact the process of organizing and directing rural community by setting up organizations and institutions. Rural development management is also a multifaceted process involving people, government and public institutions. In this process, with the public participation and contribution of rural organizations, rural development plans and projects are developed, implemented and evaluated. More than two decades have passed since the adoption of the modern rural management, but it seems that the Islamic Council and Dehyars still struggle with countless challenges in the management of their organizations, which have stalled the process of rural development.

The analysis of problems facing Islamic councils and Dehyars suggests there are important challenges that, if overlooked, can significantly obstruct the functioning of these organizations. In this study, social and cultural challenges of local managers in villages in the central district of Rasht County were investigated using 26 factors including 18 social challenges and 8 cultural challenges in three categories of "very important, important and medium" factors. Accordingly, among social challenges, 6 challenges with an aggregate share of 33.3% were assigned to the first category, 10 challenges with a share of 55.6% to the second category and 2 challenges with a share of 11.1% to the third category. Also, among cultural challenges, 3 factors with a share of 37.5% were assigned to the first category, 4 factors with a share of 50% to the second category level and one factor with a share of 12.5% to the third category. The results revealed that among the social challenges facing local managers in the study area, the factors of low cooperation of

villagers with local village managers with a mean of 4.42, reverse migration and social problems caused by the construction and expansion of second houses with a mean of 4.41 and the migration of rural youths to the city and non-participation in council elections with a mean of 4.40 were the most important social challenges, respectively. Similarly, among cultural challenges facing local managers in villages at the central district of Rasht County, the factors of ethnic and tribal differences in the villages with a mean of 4.35, poor solidarity between local managers and villagers to solve rural problems with a mean of 4.34 and the weak collective and group work culture with a mean of 4.13 were the most important cultural challenges confronting local managers at the studied villages, respectively.

The findings of the present study are aligned with those reported by Ghadiri Masoum and Riyahi (2004) about the low participation of people and human capital of local managers; Imani Jajarmi & Karimi (2009) about the small share of women in rural management despite their significant share of population in the rural population, low human capital of council members and Dehyars, migration of council members and youths to cities and also the diminishing social capital between councils and villagers, and Badri (2011) about the variety of economic, social and cultural challenges facing rural management in Iran in different periods.

Moreover, the results are in agreement with those reported by Roknauddin Eftekhari et al. (2018) on administrative, and social barriers, as well as specific problems of Dehyar and legal barriers together with their impact on the performance of local managers; Ghadiri Masoom et al. (2018) on obstacles such as unawareness of their duties, inefficiency in performing duties due to lack of experience and ethnic tendencies; Moradi & Aghei (2014) on challenges such as people and

local organizations' lack of knowledge about the duties of Dehyar, negative stance towards Dehyar, lack of cooperation and support of local and government organizations with Dehyar, weak spirit of cooperation and involuntary participation; Kabiri & Valaei (2019) on challenges such as lack of personal skills, organizational inefficacy, regulatory problems facing the villagers, and finally Riahi and Masoumi (2020) on socio-cultural challenges as the main challenges confronting rural management in the villages of Peripheral Shiraz. In light of the above, in order to mitigate the socio-cultural challenges of local managers of villages in the central district of Rasht County in the process of rural development, the following suggestions are raised:

- Organizing regular monthly meetings between local managers and the villagers to discuss issues and problems with an emphasis on participatory management in village affairs.

- Changing the local management system from person-centered management (Dehyar) to participatory management in the studied villages in order to mitigate social challenges and accelerate the process of rural development.

- Providing a development model and training local managers of the studied villages to advance sustainable rural development;

- Encouraging young, active and educated local forces in the studied villages to participate in the elections of Islamic councils and then engage in the process of making decisions on rural issues,

- Holding regular training courses to improve the efficiency and skills of local managers at the studied villages in rural administration;

- Considering that a significant portion of the social and cultural challenges at the studied villages is rooted in the individualism and lack of coordination of local managers with the villagers,

it is suggested that local managers communicate their executive plans to villagers through regular monthly meetings and draw on the views of the people, elites and informants of the villages.

- Cultivating a culture that favor women's participation in the management structure of the studied villages, especially as a Dehyar and executive director;

- Reforming the structure and duties of rural areas and increasing the share of people in the management of rural affairs based on participatory management model;

- Adapting the new model of management to the strategy of authority delegation and the theory of pluralism. This means that not only rural management needs to possess strong decision-making authority, but also paves the way for people's participation and respects their right to determine their own destiny. In this regard, it would be beneficial to recruit educated managers with master's and doctoral degree in the management system of the studied villages.

- Encouraging local managers and villagers in the study area to engage in collective work and avoid individualism in handling village affairs.

- Discouraging local managers, especially Dehyars in the study area from involving in political issues instead of focusing on handling important issues and problems of the village.

- Encouraging local managers of villages in the study area to study in fields related to rural planning and development in order to adopt scientific and practical methods to tackle or mitigate various challenges in the villages.

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Original Article

تحلیل چالش‌های اجتماعی – فرهنگی مدیران محلی در فرآیند توسعه روستایی (مطالعه موردی: بخش مرکزی شهرستان رشت)

عیسی پوررمضان[1]*

۱- استادیار جغرافیا و برنامه‌ریزی روستایی، دانشگاه آزاد اسلامی واحد رشت، رشت، ایران

۲. مبانی نظری تحقیق

مدیریت محلی توسعهٔ روستایی در ایران، در سطوح پایین هرم حاکمیت بـه بخشدار و دهیار ختم می‌شود. با شکل گیری دهیاری‌ها، بـرای نخسـتین بـار نهادی رسمی و قانونی برای تثبیت امـور عمـومی در روسـتاها تجلـی یافـت. شورای اسلامی روستا و دهیاری دو بال مدیریت روستایی را تشکیل می‌دهند که در صورت هماهنگی و همراهی دولت می توانند نقطهٔ پایانی برخلا تاریخی مدیریت روستاها باشند. بخشی از مشکلات دهیاری‌ها ناشی از نوپا بودن آن‌ها و مشکلات کلان مدیریتی کشور است. وقتی در میزان اعتبارات و توزیـع بخشی و منطقه‌ای آن معیار و شاخص درستی وجود نداشته باشد، بیشترین تأثیر سوء را بر جوامع کم ادعا و دور از دسترس تصمیم گیران، یعنی روسـتاها خواهد گذاشت. نهاد نوپا و کم تجربهٔ دهیاری که در تعامل تنگاتنـگ بـا نهـاد شورای اسلامی روستا قرار دارد، می‌بایست امور توسعهٔ روستا را پیش ببـرد. قوانین و مقررات حتی در خصوص نحوهٔ تعامل بین شورا و دهیاری نیز دچـار نقص و کاستی هستند و منجربه تداخل وظایف و دوبـاره کـاری مـی‌شـوند. بسیاری از مشکلات روستا از قبیل ناهماهنگی و تداخل وظایف سـازمان‌هـای مرتبط با روستا؛ محدودیت شدید سرانهٔ اعتباری دهیاری‌هـا؛ جهـت‌گیـری و الگوگیری شهری در نگاه اغلب مدیران سازمان‌هـای ذی ربـط، کـه از خـارج به روستا تحمیل می‌شوند؛ تفاوت جایگـاه دهیـاری در سـاختار مـدیریت؛ تجربه و تخصص اندک دهیاران؛ فقدان مـدیریت واحـد در روسـتا؛ مشـارکت نداشتن روستاییان؛ تداخل وظایف دهیاری‌ها با دیگر سازمان‌هـا؛ محـدودیت منابع درآمدی دهیاری؛ بالابودن هزینه‌های اقدامات عمرانی و فنـی مطلـوب، موانع اجتماعی و نگرش طایفه‌ای روستاییان بـه مسـائل و توزیـع نامناسـب اعتبارات دهیاری‌ها، از چالش‌های مدیریت نوین روستایی به شمار می‌آیند.

چکیده مبسوط

۱. مقدمه

ساختار مدیریت روستایی ایران از دو بخش شورای اسلامی روستا به عنوان نهاد تصمیم گیرنده و دهیاری به عنوان نهاد اجرایی تشکیل شده و انتظار آن است که روستاها با برخورداری از سـازمان دمـکراتیک مــحلی، توسعه نیـافتگی موجود را تا اندازه زیادی به سمت توسعه یافتگی هدایت کنند. توسعه شـوراها می‌تواند موجبات گسترش نهادهای غیردولتی، افزایش مـشارکت مــردم در اداره امور خود و پاسخگو نمودن نهاد مدیریت روستایی شـود. بـا ایـن وجـود شـواهد حکایت از آن دارد کـه شـوراهای اسـلامی روسـتایی بـا مسـائل وچالش‌هایی مواجه هستند که بی توجهی به آن‌ها می‌تواند مشکلات بیشتری را بـرای روستاهای کـشور ایجاد کند. چالش‌های اجتماعی یکی از مهم‌ترین چالش‌های شوراهاست که در بـروز سـایر چـالش‌هـا بـه صـورت مسـتقیم و غیرمستقیم اثرگذار است. برقراری امـور و سـازماندهی برنامـه یـا چـارچوب مشخص که به بررسی و شناسایی مشکلات روستا و اتخـاذ بهتـرین راه حـل ممکن برای رفع آن‌ها می‌پردازد ضروری بـه نظـر مـی‌رسـد. بخـش مرکـزی شهرستان رشت بـا ۷۵ روسـتای دارای سـکنه کـه ۶۳ روسـتای آن دارای شوراهای اسلامی و دهیار می‌باشند، در انجام وظایف و کارکردهـای خـود بـا چالش‌هایی مواجه می‌باشند. این پژوهش با هدف تعیین چالش‌هـای اجتماعی و فرهنگی مدیران محلی روستاهای بخش مرکزی شهرستان رشت، در صـدد پاسخگویی به این سوال اصلی است که مهمتـرین چـالش‌هـای اجتماعی و فرهنگی مدیران محلی این محدوده در فرآیند توسعه روستایی کدامند؟

*. نویسندهٔ مسئول:

دکتر عیسی پوررمضان

آدرس: گروه جغرافیا، دانشکده ادبیات و علوم انسانی، دانشگاه آزاد اسلامی واحد رشت، رشت، ایران.

پست الکترونیکی: Email: pourramzan@iaurasht.ac.ir

۳. روش تحقیق

پژوهش حاضر از نظر هـدف کـاربردی و ماهیـت روش انجـام آن توصـیفی-تحلیلی است. اطلاعات مور نیاز از طریق منابع اسـنادی و مطالعـات میـدانی، روایی ابزار پرسش‌نامه با استفاده از نظر متخصصین و پایایی آن از طریق آزمون آلفای کرونباخ به مقدار ۰/۹۷۵ بدست آمده است. جامعه آماری این پـژوهش مدیران محلی روستاهای بخش مرکزی شهرستان رشت مـی‌باشـند. بخـش مرکزی شهرستان رشت با ۷۵ روستای دارای سـکنه، ۶۳ روسـتای آن دارای دهیاری و شورای اسلامی است که بر این اساس از ۲۸۴ مدیر محلی (دهیاران و شورای اسلامی) اقدام به جمع‌آوری اطلاعات از طریق مصاحبه و پرسش‌نامه شده و برای تجزیه و تحلیل اطلاعات از آزمون t و میانگین وزنی استفاده شده است.

۴. یافته‌های تحقیق

چالش‌های اجتماعی مدیران محلی روستاهای بخش مرکزی شهرستان رشت با ۱۸ گویه و با استفاده از آزمون t و میانگین وزنی و بر اساس اهمیت در سـه سطح چالش‌های سطح اول با میانگین وزنی بالای ۴ (خیلی مهم)، سطح دوم با میانگین وزنی ۳/۵-۴ (مهم) و سطح سوم با میانگین وزنی کمتـر از ۳/۵ (بـا اهمیت متوسط) مورد تجزیه و تحلیل قرار گرفته است. بر این اساس ۶ چالش در سطح اول مهمترین چالش‌های اجتماعی، ۱۰ چالش در سطح دوم اهمیت و ۲ چالش در سطح سوم با اهمیت متوسط قرار گرفته‌اند. در بین چالش‌های اجتماعی مشارکت پایین روستاییان با مدیران محلی روستا در طرح‌ها و پروژه‌های توسعه روستایی با میانگین ۴/۴۲، مهاجرت معکوس و مشکلات اجتماعی ناشی از احداث خانه‌های دوم با میانگین ۴/۴۱ و مهاجرت جوانـان روسـتا بـه شهر و عدم شرکت در انتخابات شورا با میانگین ۴/۴۰ مهمترین چالش‌هـای اجتماعی مشخص شده‌اند. همچنین چالش‌های فرهنگی نیـز در سـه سـطح دسته بندی که از مجموع آن‌ها ۳ چالش در سطح اول مهمترین چالش‌هـای فرهنگی، ۴ مورد در سطح دوم اهمیت و یک چالش در سطح متوسط اهمیت قرار گرفته‌اند. از بین ۸ مولفه سنجش چالش‌های فرهنگی اختلافات قـومی و طایفه‌ای در سطح روستاها با میانگین ۴/۳۵، پایین بـودن همـاهنگی بـین مدیران محلی و مردم در جهت رفع مشکلات روستا با میانگین ۴/۳۴ و ضعف

فرهنگ کار جمعی و گروهی با میانگین ۴/۱۳ به عنوان مهمترین چالش‌هـای فرهنگی مدیران روستاهای بخش مرکزی شهرستان رشت بوده است.

۵. بحث و نتیجه‌گیری

در این پژوهش چالش‌های اجتماعی و فرهنگـی مـدیران محلـی روسـتاهای بخش مرکزی شهرستان رشت با بهره‌گیری از ۲۶ مولفه شـامل ۱۸ مولفـه چالش‌های اجتماعی و ۸ مولفه چالش‌های فرهنگی و در سـه سـطح خیلـی مهم، مهم و با درجه اهمیت متوسط مورد بررسی قرارگرفتـه اسـت. بـر ایـن اساس از مجموع چالش‌های اجتماعی ۶ چالش با سهم ۳۳/۳ درصد در سطح اول، ۱۰ چالش با ۵۵/۶ درصد در سطح دوم و ۲ چـالش بـا ۱۱/۱ درصـد در سطح سوم اهمیت قرار گرفته‌اند. همچنین از مجموع چالش‌های فرهنگی ۳ چالش با ۳۷/۵ درصد در سطح اول، ۴ چالش با سهم ۵۰ درصدی در سـطح دوم و یک چالش با ۱۲/۵ درصد در سطح سوم اهمیت مـی‌باشـند. تشـکیل جلسات منظم ماهانه مدیران محلی با روستاییان به منظـور آگـاهی بیشـتر از دیدگاه مردم، نخبگان و مطلعین روستا، تغییر شیوه مدیریت محلی ازمدیریت فردی نگر‌به مدیریت مشارکتی، برگزاری دوره‌های منظم آموزشـی در جهـت بهبود کارایی و اثر بخشی مـدیران محلـی در اداره روسـتاها، فرهنگ سـازی افزایش مشارکت زنان در ساختار مدیریت روستاها، تشویق مـدیران محلـی و روستاییان به انجام کار جمعی و عدم پیگیری امور روستا بـه صـورت فـردی، جلوگیری از ورود مدیران محلی به ویژه دهیاران در مسائل سیاسی و اختصاص زمان لازم برای پیگیری امور روستا، برخی از مهمترین راهکارهای پیشـنهادی به منظور کاهش چالش‌های اجتماعی و فرهنگی مـدیران محلـی روسـتاهای مورد مطالعه در فرایند توسعه روستایی است.

کلیدواژه‌ها: مدیریت روسـتایی، توسـعه روسـتایی، چـالش‌هـای اجتمـاعی، چالش‌های فرهنگی، بخش مرکزی، شهرستان رشت.

تشکر و قدردانی

فهرست مندرجات

داوران این شماره به ترتیب حروف الفبا

دکتر نسرین آذرباد (استادیار جغرافیا و برنامه‌ریزی روستایی دانشگاه پیام نور)

دکتر منیژه احمدی (استادیار جغرافیا و برنامه‌ریزی روستایی دانشگاه زنجان)

دکتر بهرام ایمانی (استادیار جغرافیا و برنامه‌ریزی روستایی دانشگاه محقق اردبیلی)

دکتر معصومه پازوکی (استادیار جغرافیا و برنامه‌ریزی روستایی دانشگاه پیام نور)

دکتر ندا ترابی فارسانی (استادیار مدیریت گردشگری دانشگاه هنر اصفهان)

دکتر مهدی حسام (استادیار جغرافیا وبرنامهٔ ریزی روستایی دانشگاه گیلان)

دکتر حسن دارابی (استادیار جغرافیا و برنامه‌ریزی روستایی دانشگاه تهران)

دکتر وحید ریاحی (دانشیارجغرافیا و برنامه‌ریزی روستایی دانشگاه خوارزمی)

دکتر مسعود صفایی پور (استاد جغرافیا و برنامه‌ریزی شهری دانشگاه شهید چمران اهواز)

دکتر علی‌اصغر عبداللهی (استادیار جغرافیا و برنامه‌ریزی شهری دانشگاه شهید باهنر کرمان)

دکتر زهرا عنابستانی (استادیار جغرافیا و برنامه‌ریزی شهری دانشگاه آزاد اسلامی مشهد)

دکتر علی‌اکبر عنابستانی (استاد جغرافیا و برنامه‌ریزی روستایی و GIS دانشگاه فردوسی مشهد)

دکتر سید فرزین فائزی (استادیار مهندسی عمران دانشگاه پیام نور)

دکتر سعید کامیابی (استادیار مدیریت گردشگری دانشگاه سمنان)

دکتر صدیقه کیانی سلمی (استادیار جغرافیا و برنامه‌ریزی روستایی دانشگاه کاشان)

دکتر علی گلی (دانشیار جغرافیا و برنامه‌ریزی روستایی دانشگاه شیراز)

دکتر سعدی محمدی (استادیار جغرافیا و برنامه‌ریزی روستایی دانشگاه پیام نور)

۹.۳. انواع نقل قول‌ها (مستقیم و غیر مستقیم)، نقل به مضمون و مطالب به دست آمده از منابع و مآخذ، با حروف نازک و استفاده از نشانه‌گذاری‌های مرسوم، مشخص شود و نام صاحبان آثار، تاریخ و شماره صفحات منابع و مآخذ، بلافاصله در میان پرانتز نوشته شود.

۱۰. مقالات برگرفته از رساله و پایان‌نامه دانشجویان با نام استاد راهنما، مشاوران و دانشجو به صورت توأمان و با مسؤولیت استاد راهنما منتشر می‌شود.

۱۱ . چنانچه مخارج تحقیق یا تهیه مقاله توسط مؤسسه‌ای تأمین مالی شده باشد، باید در بخش تشکر و قدردانی مشخص گردد.

۱۲ . شیوه ارزیابی مقالات: مقالات ارسالی که شرایط پذیرش را احراز کنند، برای داوران خبره در آن موضوع ارسال می‌شوند. داوران محترم، جـدای از ارزشـیابی کیفـی مقالات، راهبردهای سازنده‌ای پیشنهاد می‌کنند. پیشنهادهای داوران محترم به طور کامل، اما بدون نام و نشان داور، برای نویسنده مقاله ارسال خواهد شد.

۱۳ . مجله حق رد یا قبول و نیز ویراستاری مقالات را برای خود محفوظ می‌دارد و مقالات مسترد نمی‌گردد. اصل مقالات رد یـا انصـراف داده شـده پـس از سـه مـاه از مجموعه آرشیو مجله خارج خواهد شد و مجله پژوهش و برنامه‌ریزی روستایی هیچ مسئولیتی در این ارتباط نخواهد داشت.

۱۴ . مسؤولیت ارائه صحیح مطالب مقاله بر عهده‌ی نویسندگان مقاله است. از این‌رو، نسخه‌ای از مقاله آماده برای چاپ برای انجـام آخـرین تصـحیحات احتمـالی بـه نشـانی الکترونیکی نویسنده ارسال خواهد شد. چنانچه ظرف مدت یک هفته پاسخی از سوی نویسندگان واصل نگردید به معنای موافقت آنها با اصلاحات انجـام شـده تلقـی و نسبت به چاپ آن اقدام می‌شود.

۱۵. دریافت مقاله صرفاً از طریق سامانه مجله (http://jrrp.um.ac.ir) خواهد بود و مجله از پذیرش مقالات دستی یا پستی معذور خواهد بود.

۱۶. نویسندگان گرامی، مقالاتی که مطابق فرمت مجله تهیه نشده باشند به نویسنده بازگردانده شده و در فرآیند ارزیابی قرار نخواهد گرفت.

۱۷. فایل های ضروری برای ارسال از طریق سامانه عبارتند از:

الف) فایل مشخصات نویسندگان: در محیط word شامل اسامی و مشخصات نویسندگان به فارسی و انگلیسی.

ب) فایل اصلی مقاله بدون مشخصات: در محیط word شامل متن اصلی مقاله بدون اسامی و مشخصات نویسندگان.

ج) فایل چکیده مبسوط (مکمل) مقاله: شامل چکیده مبسوط فارسی در قالب یک فایل در محیط Word.

۱۸. شرایط جزئی تر و دقیق تر نیز در فایل راهنمای نگارش و ارسال مقاله توسط نویسندگان ارائه شده است.

۱۹. مقاله پس از ارزیابی علمی به زبان انگلیسی برگردانده شده و نویسنده(گان) موظف به ترجمه آن در مراکز ویراستاری معتبر خواهند بود و تا قبـل از انجـام ترجمـه، امکان ارسال گواهی پذیرش مقدور نمی‌باشد. لذا پیشنهاد می‌شود نویسندگان فارسی زبانان مقاله خود را به زبان فارسی تهیه و ارسال نموده و پس از طی فراینـد ارزیـابی علمـی و پذیرش نسبت به ترجمه آن اقدام شود.

آدرس پستی: مشهد–میدان آزادی–پردیس دانشگاه فردوسی مشهد–دانشکده ادبیات و علوم انسانی–دفتر مجلهٔ پژوهش و برنامه‌ریزی روستایی.

کد پستی: ۹۱۷۷۹۴۸۸۸۳   تلفن و نمابر: ۳۸۷۹۶۸۴۰-۰۵۱   پست الکترونیکی Rplanning@um.ac.ir

وب سایت: http://jrrp.um.ac.ir/

فرم اشتراک (یک ساله/ دوشماره) **مجلهٔ پژوهش و برنامه‌ریزی روستایی**

این جانب .... شغل .... با ارسال فیش بانکی به مبلغ .... ریال به حساب جاری شماره ۴۲۵۲۹۹۶۳۸ بانک تجارت شعبه دانشگاه مشهد کد ۴۲۵۰ به نام عواید اختصاصی دانشکده ادبیات و علوم انسانی، متقاضی اشتراک فصلنامه از شماره .... هستم. چنانچه صاحبان مقالات منتشر شده متقاضی دریافت مجلّه و تیراژه‌ی آن از طریق پست پیشتاز باشند، باید هزینه‌ی آن را به شماره حساب مذکور واریز و اصل فیش پرداختی را به نشانی دفتر مجلّه ارسال کنند.

نشانی: ....   کدپستی: ....

شرایط پذیرش مقاله

برای سرعت بخشیدن به امر داوری و چاپ مقالات، از همهٔ پژوهشگرانی که مایل به چاپ مقالات علمی خود در این نشریه هستند، درخواست می‌شود به نکات زیر توجه کافی داشته باشند:

۱. مقالهٔ ارسال شده نباید قبلاً در هیچ نشریهٔ داخلی یا خارجی چاپ شده باشد. هیئت تحریریه انتظار دارد نویسندگان محترم تا هنگامی‌کـه جـواب پـذیرش از نشـریه نرسیده است، مقالهٔ خود را به مجلهٔ دیگری برای چاپ ارسال نفرمایند.

۲. مقالات انگلیسی با قلم نازک Times New Roman11 با نرم افزار Word تهیه شود. مقالات، روی کاغذ A4 (با حاشیه از بالا ۳ و پـایین ۲ و راسـت ۲ و چـپ ۲ سانتی‌متر) تایپ شود. متن به صورت دو ستونی با رعایت فاصله ۱ سانتی‌متر بین دو ستون و فواصل بین خطوط به صورت single باشد. ۳. حجم مقاله نبایـد از حـدود ۹۵۰۰ کلمه و یا حداکثر ۱۵ صفحهٔ چاپی به قطع نشریه بیشتر باشد (با در نظر گرفتن محل جداول، اشکال، خلاصه فارسی و فهرست منابع).

۴. عنوان مقاله با در نظرگرفتن فواصل بین کلمات نباید از ۶۰ حرف تجاوز کند و با قلم Times New Roman14 سیاه تایپ شود.

۵. نام نویسندهٔ مقاله با قلم سیاه Times New Roman10 عنوان علمی یا شغلی او با قلم Times New Roman10 در زیر عنـوان مقالـه ذکـر شـود. ضـمناً آدرس الکترونیکی و شماره تلفن نویسندهٔ مسؤول در پاورقی آورده شود.

۶. چکیدهٔ مقاله ساختاریافته با قلم نازک Times New Roman 11 به صورت تک ستونی باشد.

۷. شکل‌ها و نمودارهای مقاله حتماً اصل و دارای کیفیت مطلوب باشد. فایل اصلی اشکال (تحت PDF، Word،Excel) و با دقت ۳۰۰ dpi ارائه شـود. انـدازهٔ قلم‌هـا خصوصاً در مورد منحنی‌ها (legend) به گونه‌ای انتخاب شوند که پس از کوچک‌شدن مقیاس شکل برای چاپ نیز خوانا باشند.

۸. ساختار مقاله شامل عناصر زیر است:

۸.۱ صفحهٔ عنوان: در صفحهٔ شناسنامه باید عنوان مقاله، نام و نام خانوادگی نویسنده (نویسندگان)، درجهٔ علمـی، نشـانی دقیـق (کـد پسـتی، تلفـن، دورنگـار و پسـت الکترونیکی)، محل انجام پژوهش، مسؤول مقاله و تاریخ ارسال) درج شود. عهده‌دار مکاتبات باید با علامت ستاره مشخص شود.

۸.۲ چکیده: شامل چکیده‌های فارسی ساختار یافته (شامل هدف؛ روش؛ یافته‌ها؛ محدودیت‌ها؛ راهکارهای عملی؛ اصالت و ارزش و واژگان کلیدی (۳ تا ۶ کلمه) است. تا حد امکان چکیدهٔ مقاله از ۳۰۰ کلمه تجاوز نکند. علاوه بر چکیده ساختار یافته، لازم است چکیدهٔ مبسوط فارسی بین ۷۵۰ تا ۱۰۰۰ کلمه نیز حـاوی مقدمـه، مبـانی نظری، روش، نتایج و بحث، نتیجه‌گیری و کلیدواژه‌های مقاله تهیه شود، به طوری که حاوی اطلاعاتی از کل مقاله باشد و بتوان جداگانه آن را چاپ کرد. با توجه به این که مقاله بعداً به صورت کامل به انگلیسی برگردانده خواهد شد، نیازی به ترجمه چکیده مبسوط به انگلیسی نیست.

۸.۳ مقدمه: شامل ۱- طرح مسئله؛ ۲- اهمیت و ضرورت؛ ۳- اهداف و سوالات اصلی تحقیق.

۸.۴ ادبیات نظری تحقیق: شامل ۱- تعاریف و مفاهیم؛ ۲- دیدگاه‌ها و مبانی نظری؛ ۳- پیشینه نظری تحقیق و ... .

۸.۵ روش‌شناسی تحقیق: در برگیرندهٔ ۱- محدوده و قلمرو پژوهش؛ ۲- روش تحقیق و مراحل آن (روش تحقیق، جامعهٔ آماری، روش نمونه‌گیری، حجم نمونه و روش تعیین آن، ابزار گردآوری داده‌ها و اعتبارسنجی آن‌ها)؛ ۳- سؤال‌ها و فرضیه‌ها؛ ۴- معرفی متغیرها و شاخص‌ها؛ ۵- کاربرد روش‌ها و فنون.

۸.۶ یافته‌های تحقیق: ارائهٔ نتایج دقیق یافته‌های مهم با رعایت اصول علمی و با استفاده از جداول و نمودارهای لازم.

۸.۷ بحث و نتیجه‌گیری: شامل آثار و اهمیت یافته‌های پژوهش و یافته‌های پژوهش‌های مشابه دیگر با تأکید بر مغایرت‌ها و علل آن، توضیح قابلیت تعمیم‌پذیری و کاربرد علمی یافته‌ها و ارائهٔ رهنمودهای لازم برای ادامهٔ پژوهش در ارتباط با موضوع، نتیجه‌گیری و توصیه‌ها و پیشنهادهای احتمالی.

۸.۸ تشکر و قدردانی: قبل از منابع مورد استفاده ارائه شود و از ذکر عناوین دکتر و مهندس خودداری شود.

۹. نحوهٔ ارجاعات: منابع و مآخذ باید به صورت درون‌متنی و همچنین در پایان مقاله ذکر شود.

۹.۱ ارجاعات در متن مقاله باید به شیوهٔ داخل پرانتز (APA) نسخه ۶ باشد؛ به گونه‌ای که ابتدا نام مؤلف یا مؤلفان، سال انتشار و صفحه ذکر شود. شایان ذکر است کـه ارجاع به کارهای چاپ شده فقط به زبان فارسی بوده و در اسامی لاتین معادل آن در زیر نویس همان صفحه ارائه شود. به عنـوان نمونـه: (شـکوئی، ۱۳۸۷، ص. ۵۰) یـا (وودز، ۲۰۰۵، ص. ۲۷).

۹.۲ در پایان مقاله، منابع مورد استفاده در متن مقاله، به ترتیب الفبایی نام خانوادگی نویسنده بر اساس الگوی فهرست نویسی APA تنظیم گردد.

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بسم الله الرحمن الرحيم

مقالات نمودار آرای نویسندگان است و به ترتیب وصول و تصویب درج می‌شود.