Investigating the Causes and Factors affecting the Improvement of Rural Housing Quality
(Case Study: Oraman District, Sarvabad County)

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Abstract

Purpose- The purpose of the present study was to investigate the causes and factors affecting the improvement of rural housing quality (case study: Oraman District, Sarvabad County).

Design/methodology/approach- The present study is an applied research in terms of purpose and has a descriptive-analytical nature. Also, in terms of data collection method, it is a documentary-survey research. In the present study, the quality of rural housing was assessed to evaluate the effective factors in improving the quality of rural housing using the relevant indicators. The statistical population of the study was the Oraman District with 2468 households. The samples of the study were selected by simple random method, and the sample size of 345 households was obtained using the Cochran sampling formula.

Finding- The results showed that the economic, physical, social and management factors (P <0.000) are effective in improving the quality of housing in Oraman villages. Also, according to the rating level of the indices, the physical dimension with the mean rating of (3.91) has the highest effect and the management dimension with the mean rating of (1.00) has the lowest effect.

Research limitations/implications- Due to the low cooperation of local people and the cultural, ethnic and political sensitivities in the region, this study encountered numerous limitations and difficulties during the distribution of the questionnaire which challenged the research work.

Originality / value- The earthquake happened in Western Iran destroyed many homes and killed many people, emphasizing the importance and quality of housing. Given that there has been no research on housing, especially its quality in this area, therefore, investigating the factors contributing to the improvement of housing quality in the future can reduce many of the human and financial losses.

Key words- Housing quality, Rural housing, Social participation, Oraman villages.

Paper type- Scientific & Research.

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1. Introduction

Paying attention to the development of rural settlements is a central and irrefutable necessity for the regional and national development in every country, because there is a crucial link between rural and urban development. Without considering this link, the regional and national development will not be successful. The development of rural settlements is a dynamic and continuous process where besides the economic aspects (income, production, consumption, employment, etc.), the non-economic aspects have been highly suggested and emphasized by experts. Among the most important suggestions are the recognition of capabilities of rural settlements with special focus on dealing with the natural environment and the serious attention to the main and full dimensions of the rural environment in the studies and planning (Saeedi & Amini, 2010).

Housing is one of the most important sectors of development in a society, because its broad economic, social, cultural, environmental, and physical dimensions have significant effects on the provision of features and public image in the general sense. On the one hand, the economic and social importance has made the housing sector the focus of public attention and, on the other hand, because of the job creation and relationship with many other economic sectors, this sector is considered an appropriate tool for the realization of economic policies (Seifoddini, Ziari & Azimi, 2013).

In addition, the proper planning for the housing sector in developing countries is of great importance for many reasons. One of the most important reasons is that the housing sector accounts for about 5% of GDP and 20% of total investment in these countries. Therefore, the proper planning is essential owing to the long-term nature of housing investment. Housing is more than just a physical shelter and includes all the public services and facilities necessary for human well-being and should provide the occupant with a relatively long tenure. Housing is of great importance to the extent that it is currently one of the development indicators along with the literacy rate, economic per capita income, and so on (Sartipipour, 2007).

Therefore, given the high importance of housing from different economic, social, cultural and even political dimensions, it is evident that explaining the dimensions of housing quality plays an important role in further understanding the housing quality.

Since housing is one of the important dimensions in the study of quality of life, identifying the housing quality levels in the rural areas is certainly an effective step in explaining the life quality levels and the sense of satisfaction of residents. Also, as the rural areas in Oraman are different from most rural areas in the country, providing the housing quality is one of the main goals in the housing programs of developed countries. In Iran, the quality of housing is considered an important challenge; therefore, paying attention to the qualitative dimensions along with addressing the quantitative aspects of meeting the housing needs should become an essential component of housing programs. Thus, it seems that attention to housing quality, especially in rural areas of Oraman, according to the climate and architecture conditions is a concept that shows how human needs are met, and it is also a criterion for the perception of satisfaction or dissatisfaction of individuals and groups with the housing quality with regard to different aspects of life. Anyway, everyone has somehow emphasized certain aspects of housing quality that are often relevant, and has chosen a flexible tool to assess the housing quality that is applicable to all types of architecture, climate and place. However, it should be acknowledged that improving the housing quality in the Oraman region is strongly influenced by the architecture and climate. To this end, the main purpose of this study is to investigate the causes and factors affecting the improvement of rural housing quality in Oraman District, Sarvabad County, and that what factors affect the improvement of rural housing quality (in terms of economic, social, physical and management indices) in Oraman District.

2. Research Theoretical Literature

Housing has a broad and complex concept (Maleki & Sheikhi, 2009). It is very difficult to grasp its concept using a comprehensive definition, as it is a concept in the field of housing of the societies with their own social and spatial environments including various forms of different homes, styles, and architectural designs (Maliene & Malys, 2008). It is an essential environment for family life, a place to rest from work, school, and a private space, as well as being filled with cryptic values as a sign of dignity and interpretation of life; it is an essential element of the sociability of people in the world and a place for ideological goals. In fact, its general definition is not a residential unit, but the whole

residential environment. In other words, it is more than just a physical shelter, encompassing all public services and facilities for human life, and it should provide the user with a relatively long and secure tenure (Majidi, 2012). Housing is one of the most important constituents of rural texture which is affected by natural and human factors, and hence, any change in natural and human conditions is manifested in housing in different ways. Therefore, serious attention to rural housing is required in rural development programs, because it is one of the indicators of rural development. Hence, given the high importance of housing in different economic, social, cultural and even political dimensions, it is evident that the description of housing quality dimensions has a great role in understanding its quality (Seifoddini et al., 2013).

Therefore, multidimensionality is one of the basic and fundamental characteristics of quality of life. Most scholars and experts in this field believe that quality of life has physical, social, psychological, environmental and economic dimensions. The physical dimension interprets and assesses the questions about human physical dimensions, including strength, energy and ability to perform daily activities and self-care, as well as symptoms of diseases, such as pain. The social dimension explains the feeling of being better and the quality of communication with family, friends, co-workers and community. However, in the psychological dimension, most of the psychological symptoms such as anxiety, depression, fear and relative deprivation are measured. In the environmental dimension, the quality of the human living environment is analyzed, and from the economic dimension, the components such as the satisfaction with income, job type or job satisfaction are evaluated (Dehdari, 2001).

Rural development originates from various factors; one of the factors is the adequate housing that has been closely examined in the socio-economic and spatial studies by planners, especially the rural actors; notably, if the housing issue has a quantitative approach in the process of implementing development plans (Lotfi, Ahmadi & Hoseinzadeh Farjood, 2009). Housing is the smallest form of physical embodiment of human-environment interaction and the spatial manifestation is the vital function of human habitation in playing its essential roles. In addition to the home space, housing encompasses the entire living environment and its quality appeals to the

users in many respects. Housing ownership and quality brings about family comfort and well-being, contributes to economic growth, increases household wealth, enhances social status, reduces social harms and disorders, encourages civic engagement and stabilize neighborhood. Therefore, in the scientific literature of the world, housing pursues some goals, including quantitative goals. The emphasis of these goals on the quantity of housing units that need to be built during the planning period and distributing the coverage of the goal, and that what social groups are included are of great importance; qualitative goals: Improving the quality in the construction of durable buildings, improving basic indicators, enhancing the existing per capita and directing the housing production to the smaller floor area along with a better quality have a special place in overall housing goals (Feghhi Farahmand, 2009). In general, housing quality in research depends on the options such as optimal housing form, housing strength, security, safety, comfort and accessibility of residents to facilities, the equipment and facilities (infrastructure) needed for housing and so on. These options are interconnected and all contribute to improving the quality of housing. An important point in the concept of housing quality is that, in addition to being a shelter and a place that provides numerous social services and facilities, it also has a physical structure (Arjmandnia, 2001). High-quality housing protects residents from contagious diseases, and the impact of housing quality on health is so significant that the deprivation is an important factor in the life cycle and has negative consequences for future health of people. It should be noted that the quality of housing in terms of impact on health, safety and living conditions is linked to the affordability and income of people and affects the welfare of people (Maleki, 2011). Hence, in the scientific literature of the world, housing pursues the following goals:

Quantitative goals: The emphasis of the goals on the quantity of housing units that need to be built during the planning period and distributing the coverage of the goal, and that what social groups are included are of great importance.

Qualitative goals: Improving the quality in the construction of durable buildings, improving basic indicators, enhancing the existing per capita and directing the housing production to the smaller floor area along with a better quality have a special place in overall housing goals (Feghhi Farahmand, 2009).

Bayat (2017) analyzed the effects of housing poverty on the quality of life of rural households in the case study of Mojezat, Zanjan County. The findings of the study showed that the poor health status, facilities and welfare related to housing poverty were evaluated more than average conditions. This difference was significant at the 0.001 alpha and the difference from cardinal utility was positively evaluated and estimated. Also, taking a look at the β coefficients, it is clear that a unit change in the standard deviation of housing poverty (security, health, facilities, building strength, and housing welfare) had a moderately positive effect on the quality of life of the households in the study villages. Therefore, the greatest impact of housing poverty dimensions was related to the building strength.

Anabestani & Mahmoudi (2017) investigated the effect of quality of life of villagers on the quality improvement of rural housing (in Shandiz District, Binalood County). The results showed that among ten variables of quality of life included in the regression test, five indicators, namely economic justice, individual well-being, access satisfaction, environmental quality, and housing, were included in the model and explained 46% of the changes related to the dependent variable. Given the significance level obtained for the model, which is less than 0.05, the model is significant and the research hypothesis is proved. Among the indices of quality of life, the economic justice had the greatest impact on the changes in rural housing quality. In a study, Mohammadi Yeganeh, Cheraghi, Abbasi & Samadi (2016) evaluated the effects of housing quality on the vitality of rural settlements of Khavmirabad, Marivan County. The results of the study indicated that the level of economic, political, vitality and housing quality dimensions is lower than average. This difference was significant at the alpha level of 0.001 and the difference from the cardinal utility was evaluated as negative. The results also showed that the highest impact of housing quality occurs on the social dimension with beta coefficient of 0.570 and the lowest on the economic dimension with beta coefficient of 0.077.

Ebrahimzadeh & Ghadermarzi (2015) analytically studied the housing quality of urban neighborhoods and proposed a strategy to improve the quality of life of citizens in the case study of Dehgolan Neighborhoods. The results of the analysis showed the inequality and significant difference between Dehgolan Neighborhoods; therefore, in the final housing index only 27.3% of neighborhoods are in a desirable condition and 36.3% of neighborhoods are in poor condition and need empowerment. There was also a significant difference in housing status in the old and newly established neighborhoods, which is caused by the instability and poor quality of old neighborhoods. In a paper titled Rural Housing Quality Assessment, a Strategy to Improve Quality of Life, Ahadnejad Roshti & Hosseini (2013) investigated the quantitative and qualitative housing indicators in the rural areas of Zanjan. The results showed that in addition to the low quality of housing in rural areas of Zanjan, there is a significant difference between the quality of housing in urban areas. Shakouri & Asgari (2012) evaluated the performance of rural housing programs and their effects on the quality of rural construction in the fourth development plan. The evaluation results showed the good effectiveness in the area of the issue of certificate, rural technical system, improvement and repair facilities and the poor performance in education of local builders and architects.

In a study, Mohammadi Yeganeh, Cheraghi, Abbasi & Tarasi (2012) investigated the role of housing improvement credits on improving the quality of life in rural areas of Zanjan. The obtained results showed that the received credits have the greatest effect on the physical dimensions and the lowest effect on the economic dimension and its indices. Mastern (2014) explored the housing status, housing quality segmentation in the study areas, and quality criteria in favorable human settlements and concluded that the housing status in the mentioned studies does not have a good quality, and the required standards in terms of tectonic features, architecture, building materials, population densities and extent of physical environment, role and function of area, network of roads, etc. should be considered in the housing design to prevent natural disasters and improve the rural housing status. It is also necessary to implement the rural housing master plan and create a hierarchical and categorized list of quality criteria in desirable human settlements based on expert analysis and appropriate construction technology in compliance with the safety of buildings.

In a paper titled 2000 Rural Welfare Vitality Assessment Indices, Etuck (2012) investigated the rural welfare indices based on the framework presented by the Ford Foundation. At the end of this work, he classified the residential units in the area

according to the vitality and stated that the vitality components should first be carefully identified in order to determine the vital communities. In a paper titled Housing Quality and Housing Provision for Low-Income Housing Groups in Ibadan, Nigeria & Emanoel (2012) investigated the housing indices of low-income groups in a quantitative and qualitative manner, and the results propose the change in the social totality approach for improving the low-income housing quality to enhance the quality of life in urban areas. Zainal et al. (2012) examined the relationship between housing conditions and quality of life of urban low-income people in Malaysia. This study evaluated the housing conditions and indices, including the physical structure of housing, occupancy, housing welfare and services facilities, and health and safety of housing in Malaysia. The results showed the significant relationship between housing quality and quality of life.

In a study titled Rural Community Vitality, Case Study: Fort Benton, Montana, and Watford City, North Dakota & Husar (2011.B) attempted to gain a better understanding of rural community vitality, and the results suggested the clear relationship between the population changes and the community vitality. This study also provided a conceptual framework to better understand the people in order to assess the vitality of rural communities. Rangwala (1998) believes that inadequate housing leads to the spread of diseases, disorder, depravity, and lack of well-being of the youth, and therefore, inadequate housing can pose various social and cultural problems in the society. Parasuraman (1994) described housing quality as sustainable compatibility with the expectations of users and identification of their expectations of specific services. He also described the housing quality as the amount of difference between the rational expectations of users and their perceptions of performance. According to Liabnda (2001), in the physical development of rural settlements, in addition to observing the processes of sustainable development, the government agencies and organizations should always be in line with the culture and traditions of an area, which encompasses the customs and national identity of the area , implements the functional and structural policies of their programs for the expansion and physical sustainability of rural settlements, creates equal opportunities in rural areas, and improves the structural quality of life of villagers.

Edwards & Turret (2002) believe that the important factors for the sustainability of rural housing are: 1) conservation of natural resources (land, energy, water), 2) rational use of human resources, 3) preservation of ecosystems and their restoration potentials, 4) Fairness in products, humans and categories, 5) Prediction of health, safety and security.

Oddershede (2007) believes that the lack of understanding of differences in rural housing in terms of alignment and overlap with other economic activities and social trends and its profound impact on the employment and welfare process of rural communities have a great effect on the overall planning system of the country and have created various social, economic and physical consequences and tensions. Therefore, in recent decades the understanding of the rural construction and development has been considered one of the main examples of development in most Third World countries, especially in Iran. Eben Saleh (2001) considers one of the major problems of the new rural housing as the incompatibility of the housing with cultural and economic characteristics and attributes part of the existing cultural and economic losses to this problem. Tress & Tress (2003) also believe that industrialization and the introduction of new materials have led rural housing to depart from its old indigenous nature. Moini (2008) believes that sustainable housing should be ecologically adequate and that the energy and materials should be efficiently used. From an economic point of view, it should increase individual satisfaction and decrease indirect costs such as transportation, etc. and should socially provide mental characteristics and personal comfort.

Based on the mentioned literature review, it can be stated that this study examines the causes and factors affecting the improvement of housing quality from the economic, social, physical and management aspects, while in the previous research introduced as the background, the issues such as the effects of housing poverty on the quality of life of households, quality of life of villagers, effects of housing quality on the vitality of rural settlements, evaluation of rural housing quality, effects of housing improvement credits on improved quality of life, housing conditions, and quality of life of villagers are presented. The evaluation of most of the indices in these studies shows the extent the considered factors can improve the quality of life and vitality of rural households. In other words, the

indices explored in the research background are quite distinct from the indices of this study, because this study seeks to investigate the causes and factors of the indices in improving the quality of housing, but the research background explores how these causes can be managed to improve the quality of housing.

The housing indicators are one of the most important and key tools in housing planning, because they are explored as one of the ways to identify housing characteristics to help determine effective housing parameters and facilitate any proper planning and decision making on housing (Arjmandnia, 2001). One of the most effective and useful tools is the use of indicators for assessing the quality of rural housing. To date, various indicators on housing quality assessment have been presented in various studies (Habibi & Ahari, 2004). For example, in the US and UK, the quality of residential projects is evaluated with the indicators shown in Table 1.

Table 1. Indicators for evaluation of quality of residential projects in US and UK
(Source: Anabestani & Mahmoudi (2017)

Housing quality standards in US	Facilities and health conditions, food preparation and waste disposal, space and safety, heating, lighting and electricity, structures and materials, indoor air quality, tap water, lead paints, accessibility, location, adjacency and neighborhood
Housing quality standards in UK	Location, visual impact, collection and landscape arrangement, site, outdoor, site, roads and travels, residential unit size, spatial arrangement of residential unit, noise, lighting and services of residential units, residential unit access, energy, green space and sustainability issues of residential unit, procedure in use

Therefore, in recent decades, attention to the physical properties of housing has become one of the most important issues in the qualitative studies of housing. The qualitative studies on the efficiency of the physical components of housing and the structural efficiency under various factors form the basis for formulating the policies and practical guidelines for the physical improvement of housing.

3. Research Methodology
3.1 Geographical Scope of the Research
This section deals with the features of the study area. Table 2 shows the demographic characteristics of the area.

Table 2. Demographic characteristics of area
(Source: Research findings, 2018)

Population of Villages	Male	Female	Total
Oraman Takht	1366	1395	2761
Sarpir	382	363	745
Rivari	208	211	419
Kamaleh	338	328	666

Oraman or Huraman Takht is located in the Oraman District of Sarvabad County in Kurdistan Province of Iran. Oramanat Takht is located in an east-west valley on a steep slope on the opposite side of "Takht" mountain. The homes are generally made of dry stone in a stepped form, and this is why it is also called "Hezar Masouleh". According to the belief of people, Oraman was once a big city and had a special centrality, and thus it was referred to as the Takht (throne) or center (government) of Oraman region. Oraman is a district of Sarvabad County with the area of 217 km². This district is adjacent from north to Dezli, from east to Robab, from south east to Jerijeh and from west and south west to Paveh county in Kermanshah Province and to Kamyaran County, respectively. This district is inhabited by the population of 9543 people and 2468 households with two rural areas called Oraman Takht and Shalyar and a city called Oraman Takht, 12 inhabited villages and 2 uninhabited villages (see Figure 1).
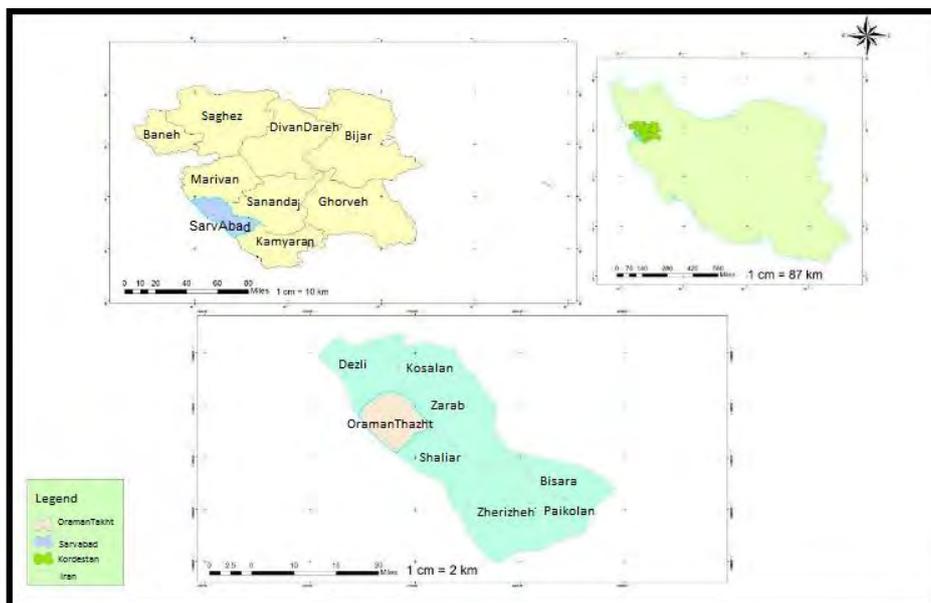
Figure 1. Geographical and political divisions of study area
(Source: Research findings, 2018)

3.2. Methodology

The present study is an applied research in terms of its purposes and has a descriptive-analytical nature. In addition, in terms of data collection method, it is a documentary-survey research. In the present study, the quality of rural housing was assessed to evaluate the effective factors in improving the quality of rural housing using the relevant indicators. The statistical population of the study was the Oraman District with 2468 households. The samples of the study were selected by simple random and stratified method, and the sample size of 1135 households was obtained using the Cochran sampling formula. The questionnaires were equally distributed in each village (see Table 3).

Table 3. Distribution of questionnaires in Oraman district
(Source: Research findings, 2018)

Oraman Takht	499
Sarpir	172
Rivari	182
Kamaleh	282
Total	1135

The data collection was done by library and field methods and the data collection tool was the interview and questionnaire. The questionnaire consists mainly of closed-ended questions with the answers in five-point Likert scale. The descriptive (mean and standard deviation) and inferential statistics (chi-square factor analysis and Friedman) were used to analyze the data from the questionnaire by SPSS software. Also, the Cronbach's alpha was used to assess the reliability of the research tool, and the obtained values were 0.84 for economic dimension, 0.72 for physical dimension, 0.74 for social dimension, and 0.77 for management dimension.

3.3. Research variables and indicators

Housing indices are one of the most important and key tools in housing planning, because they are one of the ways for identifying housing characteristics and can help to identify the effective housing parameters and facilitate any proper planning and decision making on housing. One of the most effective and useful tools is to use indicators for evaluating the housing quality of rural areas. So far, several indicators on the evaluation of housing quality have been presented in various studies, some of which are selected here as the research indicators (see Table 4).

Table 4. Research indicators
(Source: Research findings, 2018)

Dimensions	Indicators	References
Economic Dimension	Government credits in housing; Private sector investment in housing; Subsidies in housing sector; Credit facilities of banks and institutions in housing sector (relative to loan); Employment created by housing sector; Annual rate of increase in housing price; Ratio of housing cost to total cost of household; Ratio of housing cost to household income; Price of land; Price of building materials; Cost of land preparation; Household income; Costs gained from tourism; Economic diversity in region; Investment of indigenous people living in adjacent villages	Afrakhteh & Havasi (2011), Seifoddini et al. (2013), Anabestani & Mahmoudi (2017), Majidi (2012), Dehdari (2001), Moini (2008)
Social Dimension	Existing housing; Number of households; Annual population growth rate; Housing demand; Households dimension; Household density in residential units; People density in residential unit; Room density in residential unit; Social participation of people in enhancement of housing quality; Rivalry of people and families for social prestige; Increasing household literacy; Return of immigrants or reverse migration of townspeople to village; Methods for using existing building materials	Ebrahimzadeh & Ghader Marzi (2015), Bayat (2017), Habibi & Ahari (2004), Sartipipour (2007), Shakouri & Asgari (2012), Mohammadi et al. (2013), Husar (2011), Malian (2008), Tress & Tress (2003)
Physical Dimension	Housing patterns (single-unit, high-rise); Building density; Residential density (body, landscape, face); Average floor area (composition and formation of physical form of village); Floor area per capita (composition and formation of physical form of village); Facade and type of building materials (exterior view); Construction methods (exterior view); Abnormal housing units relative to all available housing; Materials used at site for improving housing quality; Spatial relationship with city; Village access to adjacent towns and villages	Maleki (2011), Maleki & Sheikhi (2009), Mohammadi Yeganeh et al. (2016), Anabestani & Mahmoudi (2017), Majidi (2012), Shakouri & Askari (2012), Oddershede et al. (2007), Eben & Mohammad (2001)
Management Dimension	Needs of village to other uses and forcing village to change use to other housing needs; Space intended for pre-construction; Technical capability and equipment for conducting guidance plan; Correct planning; Dutiful managers and authorities and paying attention to problems; Rural management and lack of tribal management; Creativity and innovation in positions assigned to authorities and lack of stagnation of ongoing works; Housing Foundation measures on housing lending and retrofit; Imam Khomeini Relief Committee measures on housing construction for clients; Financial assistance from Welfare Office; Consultation of governmental and non-governmental organizations such as Red Crescent and others for housing construction	Arjmandnia (2001), Bayat (2017), Saeedi & Amini (2010), Seifoddini et al. (2013), Anabestani & Mahmoudi (2017) , Majidi (2012), Dehdari (2001), Husar (2011), Malian (2008), Edwards & Turret (2002)

4. Research Findings

In this section, the samples are described after collecting the data using the descriptive statistics including the frequency, frequency percentage, diagram and table.

Reviewing the information obtained from the questionnaire, the frequency of subjects according to the education level of respondents is illustrated in Table 5. According to the study sample, the highest frequency is related to the subjects with diploma and associate degree education levels.

Table 5. Education levels of respondents
(Source: Research findings, 2018)

Variable		Frequency	Percentage
Education level	illiterate	232	20.44
	certificate	408	35.94
	diploma and associate degree	253	22.29
	Bachelor and higher	242	21.32
	Total	1135	100.0

The results of Table (6) show that the frequency observed in the economic dimension for the very high rural housing quality has the highest value, and considering the positive residual of the very high class, it can be stated that most subjects consider the high influence of economic index on the quality of housing. Based on the scores obtained from the sample in the economic index and the one-sample T-test, the results showed a significant level (Sig), which is below the error level of 0.050 in the economic index, as shown in the figure above. The T statistic in this index is smaller than + 1.96 (t-table) and is not in the critical area of the test. According to the mean index, the economic dimension (38.21) is in good condition (see Table 7). Of the economic indicators, the respondents considered the amount of loans to be low and believed that it does not suffice the construction costs. Furthrmore, the low income and high construction costs along with the price of building

materials can be mentioned. Notably, the respondents believed that the price of materials was higher than cities due to the transportation cost which was an obstacle to housing improvement and enhancing the housing quality. However, the job creation capability of rural housing is limited and the construction costs are high. Rural employment is also an important factor in housing quality. In fact, in the low-employment villages, because of the low income, the homes are also of poor quality. The families with many employed people have more adequate buildings. The amount of investment in housing is limited, and it is also related to the people who are sometimes unable to invest, meaning that the lack of private sector in housing construction is an important issue from the viewpoint of respondents with regard to the housing quality. Therefore, the economic dimension is the most important factor affecting the quality of housing from the viewpoint of the respondents.

Table 6. Descriptive results of rural housing quality Indices in economic dimension
(Source: Research findings, 2018)

Economic dimension	Frequency	Residual	Mean	T value	Sig.
very low	170	-57.00			
low	116	-111.00			
moderate	109	-118.00	38.21	-22.63	0.000
high	175	-52.00			
very high	565	338.0			
Total	1135				

The results of Table 7 show the descriptive study of the physical dimension indices, which in addition to the descriptive results, shows that the respondents consider the physical dimension to be highly influential on the factors affecting the quality of housing. The test was also used to examine the mean physical dimension, and according to the mean physical dimension (44.84), it can be stated that the physical dimension status is an effective factor in improving the quality of housing. From the perspective of the respondents, it indicates that the physical dimension of housing is very important in determining the quality of housing. The variables of quality of materials are of great importance because the quality of materials, according to Pakhvan, differs from that of the city and has a lower quality level, which makes rural housing less adequate. The

relationship between the city and the village and the density and patterns of housing are all important factors in the physical dimension which the respondents think that may reflect the high quality of rural housing. The villages that are less distant from the city and the villages where the people are more connected to the city have better housing quality. This finding suggests that improving the physical variables will improve the housing quality. The construction method is also important and the use of indigenous and environmentally friendly facades is one of the factors affecting the quality of housing. In other words, the respondents believed that the homes with the indigenous design were of higher quality, but because they need specific materials, builders and architects, it was difficult to implement.

Table 7. Descriptive results of rural housing quality indices in physical dimension
(Source: Research findings, 2018)

Physical dimension	Frequency	Residual	Mean	T value	Sig.
very low	198	-39.00			
low	205	-22.00			
moderate	266	-29.00	44.84	-6.82	0.000
high	96	-131.00			
very high	370	143.0			
Total	1135				

The results of Table 8 show that the social dimension of housing quality was high. According to the social participation indices of residents, increasing the literacy of households has a great effect on the housing quality, and if the participation of villagers is increased, housing of higher quality will be built. Given the mean social dimension (34.79), it can also be stated that the social dimension is moderately proportional to the economic and physical dimensions. This dimension includes the influencing variables such as literacy level and number of households. The households with a higher literacy level had higher quality housing, indicating that literacy is an important factor in enhancing the housing quality, because the residents have realized the importance of high-quality housing. The reverse migration is also a factor for the improvement of housing quality. The migrants who have returned to the village are more likely to build quality homes, and their homes have better conditions, which can be due to the impact of living in the city. The rivalry causes the people in the village to seek housing reconstruction and thus, to improve housing quality. Population growth also affects housing quality and increases the housing quality. In the rural areas with a higher population growth and higher population, housing is of better quality.

Table 8. Descriptive results of rural housing quality indices in social dimension
(Source: Research findings, 2018)

Social dimension	Frequency	Residual	Mean	T value	Sig.
very low	136	-91.00			
low	182	-45.00			
moderate	214	-13.00	34.79	25.42	0.000
high	191	-36.00			
very high	412	185.0			
Total	1135				

The results of Table 9 show that the frequency observed in the management index in the very high quality of rural housing has the highest value. Considering the positive residual of the very high class, it can also be stated that most subjects consider the moderate influence of management index on the quality of housing. Based on the scores obtained from the sample in the management index and the one-sample T-test, the results showed a significant level (Sig), which is below the error level of 0.050 in the social index, as shown in the figure above. The T statistic in this index is smaller than + 1.96 (t-table) and it is not in the critical area of the test. According to the mean index, the management dimension (24.70) is in good condition (see Table 9). For example, the activity of the Housing Foundation in the village plays an important role in the quality of rural housing. In the villages where the activity of Housing Foundation is more evident, housing is of better quality. The institutions such as the Imam Khomeini Relief Committee, Welfare Organization and the charity organizations promote the housing quality with the financial support. On the other hand, the performance of village administrations and village councils leads to the improved quality of rural housing. In fact, the performance of village administrator and the individual and management characteristics of the village administrator play an important role in the quality of rural housing. One of the major challenges of housing quality is the tribal management issue which has caused disputes on the quality of housing in the regions of cultural diversity. The villagers believe that the village

administrators are not impartial in such regions and
are more in favor of their tribe.

Table 9. Descriptive results of rural housing quality indices in management dimension
(Source: Research findings, 2018)

Management dimension	Frequency	Residual	Mean	T value	Sig.
very low	34	-91.00			
low	235	-45.00			
moderate	382	-13.00	24.70	-11.71	0.000
high	0	-36.00			
very high	484	185.0			
Total	1135				

In the following, the research components are
identified through the factor analysis.
Based on the results of KMO test with the value of
0.796, the research data can be reduced to a number
of underlying and fundamental factors. Also, the
result of Bartlett test (1774.58), which is significant
at the error level of 0.05, shows that the correlation
matrix between the items is not a similarity and
identity matrix. This means that, on the one hand,
there is a high correlation between the items of one
factor and, on the other hand, there is no correlation
between the items of one factor and the items of
other factor (Table 10). The findings of this table
show that the data used in this study are suitable for
factor analysis; therefore, this test can be performed.

Table 10. Kaiser-Meyer index/Bartlett test for suitability of factor analysis test
(Source: Research findings, 2018)

Bartlett Test		
Kaiser-Meyer/Bartlett test for sampling adequacy of factor analysis		0.796
Bartlett sphericity test	Chi-square value	1774.58
	Degree of freedom	6
	Significance level	0.000

In the Extraction column, the value of this variance
ranges from (0) to (1), the nearer the values to (1),
the better they are. These findings are shown in
Table 11. In the first column, there are the raw data
that have been analyzed from the beginning. The
next column shows the data after the factor rotation
(it was varimax rotation). This rotation causes the
variables to be placed in the considered factor,
which are referred to as the extracted values.

Table 11. Set of factors for explaining variance of each item (specified communalities)
(Source: Research findings, 2018)

Variables	Raw extraction	Rescaled extraction
Government credits in housing	1.860	.897
Private sector investment in housing	.805	.753
Subsidies in housing sector	1.750	.868
Credit facilities of banks and institutions in housing (relative to loan)	559	.532
Housing sector employment rate	.407	.525
Annual rate of increase in housing price	.819	.721
Ratio of cost of housing to total cost of household	.022	.025
Ratio of housing cost to household income	.358	.254
Land price	.333	.335
Price of building materials	.434	.323
Cost of land preparation	.219	.280
Household income	.866	.750

Variables	Raw extraction	Rescaled extraction
Costs gained from tourism	1.649	.875
Economic diversity in region	.848	.756
Indigenous people investment in adjacent cities	1.636	.833
Existing housing	.827	.649
Number of households	.757	.585
Annual population growth rate	.692	.767
Need for housing	.043	.059
Household dimension	.565	.378
Household density in residential unit	1.807	.881
People density in residential unit	.816	.711
Room density in residential unit	1.772	.888
Social participation of people in improvement of housing quality	1.719	.868
Rivalry of people and families for social prestige	.818	.654
Increasing household literacy	2.097	.841
Return of immigrants or reverse migration to village	.031	.125
Methods for using existing building materials	1.638	.697
Existing housing	.818	.654
Number of households	2.097	.841
Annual population growth rate	.099	.157
Need for housing	.006	.024
Household dimension	.805	.680
Household density in residential unit	.077	.098
People density in residential unit	.996	.737
Room density in residential unit	1.853	.862
Social participation of people in improvement of housing quality	.745	.693
Rivalry of people and families for social prestige	1.658	.846
Increasing household literacy	.351	.365
Village need for other uses and fording village administration to change use to other housing needs	.515	.561
Space intended for pre-construction	.785	.723
Technical capability and equipment for conducting guidance plan	.901	.763
Correct planning	1.711	.892
Dutiful managers and authorities and paying attention to problems	.798	.771
Rural management and lack of tribal management	1.736	.862
Creativity and innovation in positions assigned to authorities and lack of stagnation of ongoing works	.808	.648
Housing Foundation measures on housing lending and retrofit	.339	.493
Imam Khomeini Relief Committee measures on housing construction for clients	.842	.674
Financial assistance from Welfare Office	.321	.404

The scree test is one of the most popular graphical methods for selecting the appropriate number of factors in the exploratory factor analysis from the eigenvalues. This test shows the results in the form of a diagram where the factors or components are represented in the horizontal axis Y and the eigenvalues in the vertical axis X, so that the eigenvalues are decreased by moving to the right.

As shown in Fig. 2, to select the appropriate number of factors, we can use both the eigenvalues greater than one and the point at which the curve line is sharply decreased. In the scree method, the factor extraction continues until the specific variance is lower than the common variance, that is, before the specific variance exceeds the common variance. In other words, it continues until the share of common variance is greater than the share of the specific variance (see Fig. 2). Based on the results of this diagram, only the factors are extracted whose eigenvalues are higher than one. Therefore, according to the figure above, four of the analyzed factors can be reduced. Thus, the results show that a new structure can be designed and analyzed from the set of factors. Also, the share of each factor in explaining the

variance of items related to the housing quality is descending, that is, gradually decreased.
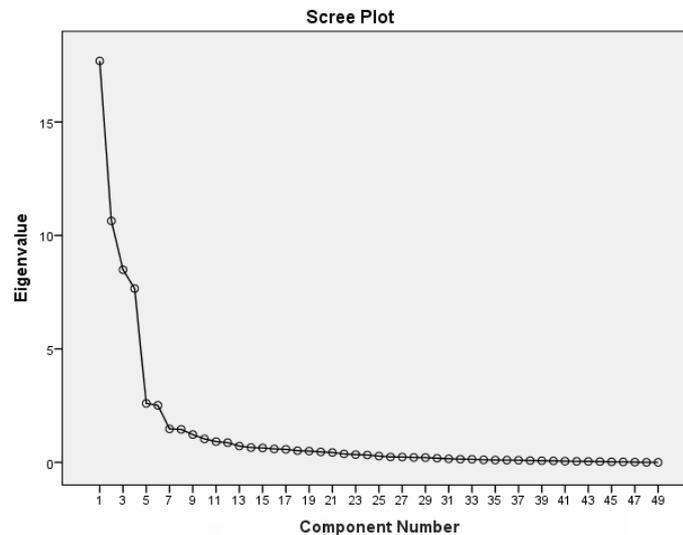

Figure 2. Scree plot
(Source: Research findings, 2018)

Table 12 shows the names of the extracted components. The coefficient of determination of the components is 68.13. This means that the four components alone account for 68.13% of the total weight affecting the housing quality. The most important component is the economic one which has the greatest impact on the quality of housing. Within this dimension there are the variables of income, loan and facilities, paying attention to which has the greatest impact on the quality of rural housing. The social component is ranked second, which shows that social variables have a significant impact on the quality of rural housing, and should not be overlooked. The variables within this component are the education level, number of households, reverse migration, and so on, which improves the quality of rural housing. In the third rank the physical component is listed, which indicates that physical variables play a significant role in the quality of rural housing. The variables within are the quality of materials, the indigenous design and rural urban communications which improve the physical quality and thus, the quality of rural housing. The last one is the management variable that should be considered to improve the quality of rural housing. The functions of the village administration council and the organizations and institutions and the individual characteristics are the determining factors which improve the quality of rural housing.

Table 12. Components and percentage of explained variance
(Source: Research findings, 2018)

No.	Component	Explained Variance Percentage
1	economic	27.10
2	social	16.30
3	physical	13.00
4	management	11.73
Total		68.13

In the following, the normality of the statistical population is explored through performing statistical tests. In this regard, the data normality assumption is examined using the Kolmogorov-Smirnov (K-S) test. The K-S test shows the normality of the data distribution. That is, it compares the distribution of an attribute in a sample with a distribution assumed for a community. If the data has normal distribution, the parametric test can be used; otherwise, the nonparametric test should be used.

According to the results of Table 13, as the level of significance for all the components is less than the error value of 0.05, the variables have non-normal distribution and the non-parametric tests are used to test the hypotheses.

Table 13. Results of normality test of effective factors in improvement of rural housing quality
(Source: Research findings, 2018)

	Economic Index	Physical Index	Social Index	Management Index
Number	345	345	345	345
Mean	38.21	44.84	34.97	24.70
Standard deviation	4.27	7.73	5.13	4.28
Z statistic	2.13	1.60	3.36	1.60
Significance level	0.000	0.011	0.000	0.012
Hypothesis confirmation	H_1	H_1	H_1	H_1
Results	non-normal	non-normal	non-normal	non-normal

The chi-square (X^2) statistic was used to answer the research questions. The results of Table 14 show that the chi-square statistic was used for the factors affecting the improvement of rural housing quality (economic factors: 139.13, physical factors: 139.44, social factors: 146.12 and management factors: 123.05) and the significant level of all factors is less than the error level of 0.05 which is significant, suggesting that it can be deduced that the indices can well influence the improvement of housing quality although the effect of each index varies. That is, the management index is much less effective in improving the quality of housing than other indices.

The dimensions (economic, physical, social and management) of housing had a greater impact on improving the quality of rural housing. In addition, Table 14 shows that all three variables are interrelated, that is, one cannot just focus on the economy of people for the quality of rural housing, as each dimension affects other dimensions. This refers to improving the physical or social dimension of the village affects the management and economic dimensions, and vice versa. Thus, to improve the quality of rural housing, all aspects should be taken into account and be developed at the same time.

Table 14. Chi-square (X^2) test results for factors affecting improved rural housing quality
(Source: Research findings, 2018)

Variable	X^2	Degree of Freedom	Significance Level
Economic dimension	139.13	16	0.000
Physical dimension	139.44	21	0.000
Social dimension	146.12	16	0.000
Management dimension	123.05	17	0.000

In the following, the question is that what significant difference exists between different dimensions of housing quality in Oramanat villages? The Friedman statistic was used to test this question. The results of Table 15 show that because the level of significance is less than 0.05%, it can be stated that the difference between the means is significant. In this case, the null hypothesis is rejected and the researcher hypothesis is confirmed. This shows that housing quality was more adequate from some dimensions and poorer from some other dimensions, suggesting that housing quality from some dimensions needs to be improved and invested more than others.

Table 15. Friedman test
(Source: Research findings, 2018)

Variable	Friedman Statistic	Degree of Freedom	Significance Level
Factors affecting improved rural housing quality	941.87	3	0.000

Table 15 shows that some dimensions are weaker than other dimensions. Table 16 shows that the management dimension is the weakest index and the economic dimension is the strongest dimension of housing quality. That is, more work needs to be done on the management factors, because the weakest and least influential dimension for improving the quality of rural housing is the

management that should be considered. On the other hand, the economic dimension, which is the most important dimension, has received the most work and attention. There are two physical and social dimensions in between, indicating that these two variables are also influential, but to a lesser extent than the economic and greater than management dimensions.

Table 16. Mean rating of dimensions affecting improvement of rural housing quality
(Source: Research findings, 2018)

Mean rating	Dimensions of Improved Housing Quality
Economic dimension	2.89
Physical dimension	3.91
Social dimension	2.20
Management dimension	1.00

5. Discussion and Conclusion

The lack of facilities and welfare of villagers as compared to urban environments is the main reason for the migration of villagers from the villages. Therefore, the tendency of governments to provide rural housing in recent decades is very important for maintaining the population in rural areas. Because of the greater relevance to economic activities and the natural environment, rural housing has some features that distinguish it from urban housing, and therefore, rural housing is one of the most important elements in the rural areas and a symbol of human interaction with the surrounding natural environment. Therefore, this study investigated the causes and factors affecting the improvement of rural housing quality in the case study of Oraman District, Sarvabad County. The findings of this study were analyzed at two levels of descriptive and inferential statistics. The inferential results of this study showed the extent to which the economic, physical, social and management dimensions have an impact on improving the quality of rural housing. Consistent with the results, Bayat (2017) showed that low health status, facilities and welfare related to housing poverty can influence the improved housing quality. Moreover, Anabestani & Mahmoudi (2017) showed that among ten variables of quality of life introduced to the regression test, five indices, namely economic justice, personal well-being, access satisfaction, quality of environment and housing, were entered into the model and 46% explained the changes related to the dependent variable. Also, consistent with the results outside of Iran, Emanoel (2012) suggested that the

changes in the social totality approach for the improvement in the quality of low-income housing to enhance the quality of life in urban areas. Zainal et al. (2012) also showed that the physical structure of housing, occupancy, housing welfare and services facilities, and health and safety of housing in Malaysia were evaluated and the results of the research demonstrated the significant relationship between housing quality and quality of life.

Shakouri & Asgari (2012) believed that there were weaknesses in the area of the issue of certificate, rural technical system, improvement and repair facilities, and training of local builders. The findings also indicate that these variables are weak in Oramanat and require more work.

The concerns over the lack of rural development and the village evacuation problems have caused paying attention to the quality of rural housing as one of the aspects of rural vitality in the form of various development and construction plans, economic, social and cultural programs, etc. These findings are similar to those of Parasuraman (1994). The results of the study showed that the management indicators had the least impact on improving the quality of housing, and this can make authorities more aware in this respect, as the lack of proper implementation of projects performed in the villages as well as the lack of sufficient funding can be effective in utilizing the spaces to which every settlement really needs. This is similar to the study conducted by Seidaei et al. (2010) in which their results emphasized the importance of credits. Consistent with Seifoddini (2012), this study shows that the poor management of the authorities is not without

effect in this regard, and that no expert and skilled man is found that truly wants to have an impact on the quality of life and housing. This perhaps has made the management role in housing quality less prominent. However, the physical, economic and social factors had the most impact, respectively. This is also consistent with the findings of Etuck (2012).

The physical development and the improvement of related indices such as the quality of buildings and the per capita existing space of homes are of great importance to the quality of housing. These findings are consistent with the studies of Feghhi Farahmand (2009). He believed that among other effective indices in improving the quality of rural housing are improving the quality of durable buildings, improving the main indices, improving the existing per capita ratio, and directing the housing production to the smaller floor area with a better quality.

The results of this study show that the quality of housing in rural areas is not suitable. This is due to the failure to comply with the housing standards and the poor supervision. This is the case in the rural areas outside of Iran. For example, Mastern (2014) and Husar (2011) stated that the housing status in the mentioned studies is of poor quality and the required standards in terms of tectonic properties, architecture, building materials, population densities, and extent of physical environment, role and function of area, network of roads, etc. should be considered in the housing design to prevent natural disasters and improve the rural housing status.

Based on the results, the following is suggested:
1. The credits allocated to rural housing improvement are limited and should be increased. Besides, more lending resources can also be provided.
2. Training of local builders to design local facades along with modern and durable buildings.
3. The findings show that social factors play an important role in housing improvement. The emphasis on education and raising awareness has a significant role in improving the housing quality.
4. Providing the improvement facilities and monitoring the quality of rural materials are of paramount importance. Sometimes, people criticize the quality of materials, and it is important that we pay attention to the quality.
5. The individual characteristics of village administrator are also important in the housing quality and improvement. Therefore, supporting and assisting the village administrators along with training the village administrator can be effective in improving the housing.
6. Improving the quality of rural housing is a multilateral component that should be addressed concurrent with the economic, social, physical and management dimensions. Unfortunately, most institutions and organizations consider the economic dimension, which makes the housing quality not to be realized as it is needed.

References
1. Afrakhteh, H. & Havasi, N. (1390/2011). Analysis of role of mortage in rural development (Case study: Seyed Ebrahim, Dehloran District). *Iranian Geographical association*, 9(3), 55-76. [In Persian].
2. Anabestani, A. & Mahmoudi, H. (1395/2016). Investigation of impact of quality of life on rural housing improvement (Case study: Shandiz District, Binalood County). *Journal of Spatial Planning*, 5(1), 1-20. [In Persian].
3. Arjmandnia, A. (1380/2001). Population and housing. *Environmental Studies*, 16(16), 25-38. [In Persian].
4. Bayat, M. (1396/2017). *Analysis of impact of housing poverty on quality of life in rural households (Case study: Mojezat Zanjan County). MSc Thesis*, Zanjan university. [In Persian].
5. Dehdari, T. (2001). The affect of health education on quality of life of open-heart surgery patients, *A thesis Presented for the Master of Since Degree*, University of Tarbiat Modares. [In Persian].
6. Eben, S., & Mohammad, A. (2001). Environmental cognition in the vernacular landscape: assessing the aesthetic quality of Al-Alkhalaf Village. *Southwestern Saudi Arabia Building and Environment*, 36(8), 965-979.

7. Ebrahimzadeh, A., & Ghadermarzi, J. (1394/2015). Analytical study on housing quality of urban neighborhoods, a strategy to improve quality of life citizens (Case study: Dehgolan neighborhoods). *Geography and Development Quality*, 13(40), 156-189.

8. Edwards, B., & Turret, D. (2002). *Sustainable housing: Principles and practice*. London: Taylor & Francis.

9. Etuck, L. (2012). Baseline assessment of rural community validity, Rural studies program. http://ruralstudies.oregonstate.edu.p.3

10. Feghhi Farahmand, N. (1388/2009). Economic and social priorities of key factors of housing quality. Knowledge and Development, 16(26), 170-189. [In Persian].

11. Habibi, S. M., & Ahari, Z. (1383/2004). Study Plan report (Investigation of Qualitative Dimensions of Housing in Iran). *Ministry of Housing and Urban Development*, Tehran. [In Persian].

12. Husar, J. M. (2011.A). Rural community validity, the Cases of Fort Montana and Watford city, North Dakota. *M.A Thesis in Architecture,* McGill University, Montral, Canada.

13. Husar, J.M. (2011.B). Rural community validity, the cases of Fort Beneton, Montana and Waterford City, *North Dakota. Official Graduation Semester, U.S.A*.

14. Liabnda, M. (2001). The passing traditional society: Moderning the Middle East. *American Psychological Association*.

15. Lotfi, H., Ahmadi, A., & Hoseinzadeh Farjood, D. (1388/2009). Essential indicators and components in rural housing planning and policy making in Iran. *Regional Planning*, 2(7), 89-109. [In Persian].

16. Majidi, F.A. (1391/2012). Case study of housing to improve quality of life of handicapped and physically-motor disbled people, *Journal of Handicapped*, 4(15), 12-19. [In Persian].

17. Maleki, S. (1390/2011). Assessment of status of social housing indicators in rural areas of Ahvaz, *Housing and Rural Environment*, 29(129), 32-49. [In Persian].

18. Maleki, S., & Sheikhi, H. (1388/2009). Investigation of role of spcial housing indicators in provinces of Iran using combined index of human development, *Journal of Housing and Rural Environment*, 28(127), 99-107. [In Persian].

19. Malian, V.N. (2008). Sustainable housing, hiqualityhousing: A key issue in delivering sustainable communities, *Building and Environment, 44(2), 426-430*.

20. Mastern, F. (2014). Practice of community architecture: A Case study of zone of opportunity housing co-operative, Montreal, *M.A Thesis in Architecture, McGill University*, Montral, Canada.

21. Mohammadi Yeganeh, B., Cheraghi, M., & Velaei, M. (1392/2013). Role of tourism in rural development with emphasis on quality of life, social capital (Case study: Qapachaq, Miandoab County), *Applied Research in Geographical Sciences*, 13(30), 7-25. [In Persian].

22. Mohammadi Yeganeh, B., Cheraghi, M., Abbasi, J., & Samadi, F. (1395/2016). *Evaluation of impact of housing quality on validity od rural settlements of Khavmirabad, Marivan County*, *Journal of Applied Geographical Sciences*, 16(43), 107-124. [In Persian].

23. Mohammadi Yeganeh, B., Cheraghi, M., Abbasi, J., & Tarasi, Z. (1391/2012). Investigation of role of housing improvement credits on improving quality of life in rural areas of Zanjan, *Journal of Housing and Rural Environment*, 32(141), 99-107. [In Persian].

24. Moini, M. (1387/2008). Study the process of forming house in new tribal villages, Case Study: Goafshan New Village Semirom Esfahan*, Journal of Fine Arts*, 33(12), 46-56. [In Persian].

25. Oddershede, A., & Canciano, H. (2000), Rural development decision support using the Analytical Hierarchy Process, *Mathematical and Computer Modeling*, 44(77),1107-1114.

26. Parasuraman, A., Zeithami, V.A., & Berry, L.L. (1994). Alternative scales for measuring services quality: a comparative assessment based on psychometric and diagnostic criteria, *Journal of Retailing*, 70(3), 201-230.

27. Rangwala. S.C. (1998). Town Planning, Chartar, *Publishing Housing*, India.

28. Saeedi, A., & Amini, F. (2010). Instability of settlement and functional evolution of rural housing, *Journal of Geography*, 8(21), 29-43.

29. Sartipipour, M. (1386/2007). Analytical study of rural housing in Iran, *Soffeh*, 19(49), 11-41. [In Persian].

30. Seidaei, S.A., Kiani Salmi., & Soltani, Z. (2010). Spatial analysis of rural housing status in Kohgiluyeh and Boyerahmad Province, *Rural Research*, 1(2), 49-72. [In Persian].

31. Seifoddini, F., Ziari, K. A., & Azimi, A. (1392/2013). Analysis of geographical gap of housing quality in 77 districts of Tehran, *Geography*, 8(3), 212-233. [In Persian].

32. Shakouri, A., & Asgari, N. (1391/2012). Performance evaluation of rural housing programs and its impact on quality of rural construction in fourth development plan (Case study: Hormozgan Province), *Rural Research*, 3(2), 119-152. [In Persian].

33. Tress, B., & Tress, G. (2003). Scenario visualization for participatory landscape planning: A Case Study from Denmark, Land Scape and Urban Planning, 64(3), 161:178.

بررسی علل و عوامل موثر در بهبود کیفیت مساکن روستایی
(مطالعه موردی: بخش اورامان شهرستان سروآباد)

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۲. روش تحقیق

روش تحقیق حاضر از لحاظ ماهیت توصیفی تحلیلی، از لحاظ هدف کاربردی و از لحاظ روش گردآوری اطلاعات ترکیبی از اسنادی – پیمایشی می باشد. در تحقیق حاضر به منظور بررسی علل و عوامل موثر در بهبود کیفیت مسکن روستایی با استفاده از شاخص های مرتبط به ارزیابی وضعیت کیفیت مسکن روستایی پرداخته شده است. جامعه آماری بخش اورامان با ۲۴۶۸ خانوار است که انتخاب نمونه ها در این تحقیق با استفاده از روش تصادفی ساده و طبقه ای می باشد و با بهره گیری از فرمول نمونه گیری کوکران حجم نمونه برابر ۱۱۳۵ خانوار بدست آمده است؛ به طوریکه به تعداد مساوی در هر دهستان پرسشنامه ها توزیع شدند. روش جمع آوری اطلاعات کتابخانه‌ای و میدانی و ابزار گردآوری اطلاعات مصاحبه و پرسش نامه می باشد. پرسشنامه اساساً از سوالات بسته و با پاسخ هایی در طیف لیکرت پنج مقیاس تشکیل شده است. جهت تجزیه و تحلیل داده های حاصل از پرسش نامه با استفاده از نرم افزارSPSS دو روش آمار توصیفی (میانگین و انحراف معیار) و استنباطی (تحلیل عاملی آزمون کای دو و آماره فریدمن) استفاده شده است. همچنین جهت سنجش پایایی ابزار تحقیق از آلفای کرونباخ استفاده شده که مقادیر آن برای بعد اقتصادی ۰/۸۴، بعد کالبدی۰/۷۲ ، بعد اجتماعی۰/۷۴ و بعد مدیریتی ۰/۷۷ بدست آمده است.

۱. مقدمه

زلزله ای که در غرب ایران اتفاق افتاد، موجب تخریب بسیاری از منازل و درگذشت افراد زیادی شد که اهمیت مسکن و کیفیت آن را دوچندان کرد. با توجه به اینکه در این منطقه تاکنون تحقیقی درباره مسکن و به ویژه کیفیت آن انجام نشده است؛ بررسی عوامل موثر در بهبود کیفیت مسکن می تواند در آینده از بسیاری از خسارات مالی و جانی بکاهد. توجه به توسعه سکونتگاه های روستایی از ضرورت های محوری و انکار ناپذیر توسعه منطقه‌ای و ملی در هر کشوری به شمار می رود؛ زیرا بین توسعه روستایی و شهری یک پیوستگی اساسی برقرار است که بدون داشتن نگاه ویژه به این پیوستگی، توسعه منطقه‌ای و ملی موفقیت آمیز نخواهد بود. توسعه سکونتگاه های روستایی فرآیندی پویا و همیشگی است که در آن علاوه بر جنبه های اقتصادی (درآمد، تولید، مصرف، اشتغال و).. بر جنبه های غیراقتصادی آن از طرف کارشناسان و صاحب نظران سفارش و تأکید فراوان شده است. از جمله مهمترین این تأکیدها، شناخت قابلیت های سکونتگاه های روستایی با توجه به نحوه برخورد با محیط طبیعی و توجه جدّی به ابعاد اصلی و کامل محیط روستا در مطالعات و برنامه ریزی ها قابل بیان هستند. هدف از تحقیق حاضر بررسی علل و عوامل موثر در بهبود کیفیت مساکن روستایی مطالعه موردی: بخش اورامان شهرستان سروآباد است.

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۴. بحث و نتیجه گیری

نتایج این تحقیق نشـــان می دهد که کیفیت مسـکن در نواحی روسـتایی مناسـب نیسـت. این به دلیل عدم رعایت اسـتانداردهای ساخت مسکن و نظارت ضعیف است. این مساله در نواحی روستایی خارج از ایران صـ دق می کند. همچنین نگرانی های ناشـی از عدم توسـعه روسـتایی و مشـکلات و مسائل ناشی از تخلیه روستاها، توجه به کیفیت مسـکن روسـتایی را به عنوان یکی از ابعاد سـرزندگی روسـتایی را در قالب انواع برنامه ها و طرح های توسـعه و عمران و برنامه های اقتصـادی، اجتماعی و فرهنگی و ... سـبب شـده اسـت. پایین بودن ابعاد بهداشت، تسهیلات و رفاه مربوط به فقر مسکن می توانند در بهبود کیفیت مسـکن تاثیر گذار باشـند. ضـعف مدیریت مسئولان هم در این امر بی نصیب نیست و در این امر هیچ نیروی متخصص و ماهری که واقعا بخواهد در مسئله کیفیت زندگی و مسکن تاثیر گذار باشد، یافت نمی شود و شاید همین امر هم نقش مدیریت را در کیفیت مسـکن کم رنگ تر کرده اسـت. هرچند که عوامل کالبدی و اقتصـادی و اجتماعی هر کدام به ترتیب بیشـترین تاثیرگذاری را داشته اند. در نهایت وضـعیت مسـکن در مطالعات یادشـده، کیفیت مطلوبی ندارد و باید اسـتانداردهای لازم از نظر ویژگی های تکتونیکی، معماری، مصـــالح سـاختمانی، تراکم های جمعیت و گستردگی محیط فیزیکی، نقش و عملکرد ناحیه، شـبکه راههـا و ... در طراحـی مسکن برای پیشـگیری از بلایای طبیعی و بهبود وضع مسکن روستایی در نظر گرفته شوند.

کلمات کلیدی: کیفیت مسکن، مسکن روستایی، مشارکت اجتماعی، روستاهای اورامان.

۳. یافته‌های تحقیق

نتایج یافته ها نشـان داد که ابعاد اقتصـادی، کالبدی، اجتماعی و عوامل مدیریتی(P<0/000) در بهبود کیفیت مسـکن روسـتاهای اورامان تاثیر گذار می باشـند. همچنین با توجه به سـطح رتبه بندی این شـاخص ها بعد کالبدی با میانگین رتبه (۳/۹۱) دارای بیشـترین تاثیر و بعد مدیریتی با میانگین رتبه(۱/۰۰) دارای کمترین تاثیر می باشـد. بعد اجتماعی کیفیت مسـکن زیاد بوده اسـت. در این بعد با توجه به شـاخص های مشـارکت اجتماعی سـاکنین، بالا رفتن سـطح سـواد خانوارها تاثیر زادی بر کیفیت مسـکن دارد و در روسـتا اگر مشارکت اهالی گسترش یابد، مسکن باکیفیت تری ساخته می شود و همچنین با توجه به میانگین بعداجتماعی(۳۴/۷۹) می توان گفت که وضـعیت بعد اجتماعی نسـبت بعد اقتصـادی و کالبدی در حد متوسـط اسـت. این بعد شـامل متغیرهای اثرگذاری همچون سـطح سـواد و تعداد خانوار است. خانواده هایی که از سـطح سواد بیشـتری برخوردار بودند مسـکن با کیفیت تری داشـته اند که این نشـان می دهد سواد عامل مهمی در افزایش کیفیت مسکن است؛ چراکه اهالی به اهمیت مسـکن با کیفیت پی برده اند. همچنین مهاجرت معکوس نیز از جمله افزایش بهبود کیفیت مسـکن اسـت. مهاجرانی که به روسـتا بازگشـته اند، تمایـل بیشـتری به ساخت خانه های با کیفیت دارند و خانه های آن ها از وضـعیت مناسب تری برخوردار است که این امر می تواند ناشـی از تاثیرگذاری زندگی ان ها در شـهر باشـد. چشـم و هم چشـمی ها سـبب می شـود تا در روسـتا افراد به دنبال بازسـازی مسـکن و در نتیجه افزایش کیفیت مسـکن بروند. رشـد جمعیت نیز بر کیفیت مسکن اثر می گذارد و سـبب افزایش کیفیت مسـکن می شـود. در روسـتاهایی که رشـد جمعیت بیشـتر دارند و جمعیتشان بیشتر است، مساکن کیفیت بهتری دارند.

ارجاع: عزمی، آ.، رحمانی، ح. و صالحی، س. (۱۳۹۸). بررسی علل و عوامل موثر در بهبود کیفیت مساکن روسـتایی (مطالعه موردی: بخش اورامان شهرستان سروآباد). *مجله پژوهش و برنامه‌ریزی روستایی*، ۸(۴)، ۴۹-۶۸.
http://dx.doi.org/10.22067/jrrp.v5i4.76363