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Analysis of the Areas and Factors Affecting the Land consumption in Oushan, Fasham, Meigoun City

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Abstract

Land is the ground for human activity and a place to meet all the resources man needs Whether we want it or not our cities transformed into metropolises and our villages with no supervision came out as cities through the years after the revolution lot of Village people become citizens and the population increased enormously since then the utopia expectations that we got did not appear Land consumption is related to territorial crises such as poverty in very fine agricultural lands, urban dispersion, spatial and ecological division, hydrogeological disturbance, etc. In other words, the geography of consumption plays a vital role in the development or non-development of modern cities. The current study is applied research in terms of objective and descriptive-analytical in terms of the nature and method. The data collection has been performed using documentary-based and library-based methods and interviews with the experts and the citizens' questionnaire (384 samples). The samples have been selected using snowball and random sampling methods. The mean land-use indicators have been investigated by the T-test in the SPSS. The findings indicate that among the components effective on the land consumption in Ousahn, Fasham, and Meigoun, the proximity with Tehran metropolis, water resources, and access to tourist attractions have been most effective with mean values of 8.42, 8.34, and 8.26, respectively. Also, among the indicators effective on the land consumption in Oushan, Fasham, and Meigoun, the economic policies of the government, accessibility, and climate have been the most effective with mean values of 7.84, 7.75, and 7.41, respectively. The results indicated that the changes in land-use patterns in Oushan, Fasham, and Meigoun could be explained in five periods. These changes are more affected by urban land consumption, natural factors, and infrastructural developments, especially in terms of accessibility, i.e., proximity with the Tehran metropolis, more than the increase in urban population. The 2000s have been the initiation point of the huge evolution in the area of land in the region. In this decade, with the initiation of construction of the second home for the tourists, the way for mass land consumption in the cities was paved, which was followed by the increase in inflation and land prices, and the formation of the grounds for land speculation in the region has led to a drastic increase in land consumption. Finally, we should add that the analysis of regions and factors affecting land use in the cities of Oshan, Fashm, Migun is done for the first time in the country.

Keywords: Thematic analysis, effective factors, land consumption, Oushan, Fasham, Meigoun.

1. Introduction

Urbanization, characterized by a floating population and urban land expansion, is the engine for supporting economic growth and social development (Luo et al., 2018:219; Sun & Zhao, 2018:302). Based on the report by the UN (2019), from 1950 to 2018, the global urbanization rate has increased from 30 to 55%. In addition, by 2050, the global urbanization rate will increase to 68% (Sulemana et al., 2019:104544). Such fast urbanization has been usually associated with excessive use of land resources (Diksha & Kumar, 2017:112; Gerundo & Grimaldi, 2011:1152), and thus, how to reduce the controversy between the hasty urbanization and the urban land resources limitations has become one of the important challenges of the urban management all over the world (Inostroza, 2014:10; Nuissl & Schroeter-Schlaack, 2009:271; Salvati & Carlucci, 2014:41; Zhang, Xu, & Li, 2013:153). After World War II, the extensive urbanization, industrialization, and development of the infrastructures have created many landscape changes in land consumption and land cover (Lambin & Geist, 2006:142). The increase in the urban population in the counties has created various problems for the cities, among which the spatial imbalances, sharp fluctuations in land and house prices, urban creep, social polarization (Williams et al., 2000:4), environmental pollution, higher energy use, unplanned development, increased infrastructure costs, construction in fine agricultural lands, etc. can be noted (Rahnama and Abbaszadeh, 2008, 93). Modern cities can be considered the outcomes of modernity (Fazeli, 2013, 258). The city is so connected to modernity that it is impossible to imagine modernity and its shaping processes and the modernist attitude without the city. The relationship between the use, modernity, and the modern manifests in rational organizations, planning, science, and scientific and technological progress (Mozaffari and

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Ghelich, 2017, 16). Land and space are considered as two general sources of life and public wealth and usable commodity, the use of which should be monitored and managed as much as possible to ensure the public interest, now and in the future. The land consumption phenomenon is related to territorial crises such as poverty in wonderful agricultural lands, urban dispersion, spatial and ecological division, hydrogeological disturbance, etc. In other words, the geography of consumption plays a vital role in developing modern cities (Gerundo and Grimaldi,2011:1152). The hasty land consumption can reduce the open space around the cities and endanger biodiversity and ecosystem sustainability since only one species can survive in the constructed lands (R.K. Briasolis, 2010, 21-22). As a result, now, negative effects such as declining food security, the social and economic vulnerability of human societies, declining safety levels, and factors affecting health have threatened the earth's habitat pattern as many forests, meadows, and fields have been used for other purposes, and ecological balance has been disturbed (Higgins and Bear, 2012, 37). Also, the physical environment, the plants and animals, water, climate, air quality, residence safety , biodiversity, and habitats should be considered. In the process of land consumption revision and stabilization, the concepts and attitudes of sustainable development such as urban sustainability, sustainable city, healthy city, green city.The ecological city should also be considered (Rahnama, 2008, 70-71). Land consumption can be introduced as a bridge that connects the individual to the urban environment. Land consumption, which can be approved or unapproved, is a function of the land consumption, not its subject. Therefore it is the discussion of land consumption that can explain the patterns of urban growth and development (Ghelich et al., 2019, 65). Recently, Oushan, Fasham, and Meigoun have always attracted the permanent and temporary populations due to the tourist attractions. During this period, the excessive consumption of land in the sloped areas of the region has been continued without considering the sustainable development basics, and now, some problems such as the land shortage for balanced development, environmental and climatic problems, soil and water pollution, and social problems have posed. These changes and transformation of the consumption pattern is a matter more complicated than merely addressing the land-use changes since the land consumption is the result. However, explaining the consumption pattern can include all the factors involved in land consumption changes (that finally has turned it into a commodity). Oushan, Fasham, and Meigoun are the best examples to evaluate such questions. Thus, the current study has aimed to investigate the trend of land consumption evolution from the introduction of modernity and modernization to the country's spatial-political structure. Therefore, it has sought to answer the question: What are the effective grounds and factors on land consumption in Oushan, Fasham, and Meigoun?

2. Research Background

In this section, the foreign and domestic practical literature in the area of land consumption has been addressed:

-Jingliang Hu et al. (2021), in a study entitled "Urban land consumption: A worldwide comparative study," have tried to prepare the data needed for investigation and analysis of the degree of urban land consumption by the use of remote sensing images. Their findings indicated that urban land consumption is very different worldwide. They have also used a specific indicator for supervision entitled "the ratio of land consumption to the population growth rate." This indicator is specially designed to supervise urban land consumption and, subsequently, measure the rate of effective use of space. However, the consistent supervision of the urban land intensity or development on a global scale is still a basic challenge.

-Pontarollo & Mendieta Muñoz (2020) conducted a study entitled "the land consumption and income in Ecuador." Using Bayesian comparison applied on a spatial plate, they attempted to analyze the existence of an inverse U-curve relationship between land consumption and economic development, i.e., the Kuznets environment curve, with data available from 2007 to 2015. Their results indicated that awareness of the spread of spatial leakage in the space and its functional form supports the planning of policies affecting land consumption.

-Longer and Kurzonovic (2018), in a study entitled "The Impact of Industrial and Commercial Land consumption on Municipal Tax Revenue: Evidence from Bavaria," emphasize that the tevenues are among the main causes of continuous land consumption by the municipalities. Some previous case studies indicate that these effects may not be significant enough, especially in the municipalities, and thus they may make the land development useless. The results indicated that the size of this effect would vary due to population densities. The total positive effects will be much smaller when the big cities are omitted from the sample. Based on these findings, the municipalities should discuss land consumption restriction policies.

-Rahimi (2020), in a study entitled "Urban land policies and its impact on the development of Tabriz," showed that changing the use of the lands around the city has not only expanded the scattered and spiral urban development and subsequently increased the costs of developing and supplying the urban facilities, but also these incorrect policies have led to the destruction of the surrounding gardens and the agricultural lands. His results showed that city development towards the east and northeastern areas that mainly include the gardens and agricultural lands and the urban macro-services also confirm this issue. Generally, the land and housing policy in Tabriz has not been appropriate and the unplanned development of the city or emphasis on the continuous development approach in the form of peripheral towns has created numerous challenges for the city and its future development will also be distorted.

-Zokaei and Omidi (2017), in a study entitled "Modernity, city, and consumption (Study of the phenomenon of consumption in the lifeworld of Tehran citizens)," besides

the emphasis on the position of consumption in the lifeworld of the citizens and its role in shaping the urban spaces in Tehran and the existing floating identities, have investigated the effects of consumption on the construct of the city and citizens' identity. Their results indicated that the irreducible plurality of the forces effective on the consumption and multiple identities and the relevant urban spaces, the sign of being consumed, and the relative independence of consuming practices of the consumption as well as the existence of the dialectic relationship between the consumption and the consuming mindsets and behaviors directing and restricting frameworks as well as simultaneity of stabilization and going beyond these frameworks in the form of consumption dialectic are among the findings.

-Aeini (2010), in a study entitled "Mehr Housing: Improving the pattern of urban land consumption and improving the quality of urban life," emphasizes that one of the most important strategies for the realization of the Document of Future Perspective's objectives is the promotion of the efficacy of all productive factors, reduction in consumption, and other words, modifying the consumption pattern in all areas. Until now, most of the researches related to the issues related to land, urban planning and the type of land use have been related, and the researches about land consumption are very few, so this research, which is about the factors of land consumption, has a special innovation. In housing and urbanization, the most used commodity is a very valuable commodity named "urban land." The city needs the urban land to survive and develop. The dissipation in urban land consumption paves the way for dissipation in other consumable items such as water, electricity, gas, and fuel. His results indicated that the Mehr Housing plan significantly increases the urban land efficacy and promotes the quality of urban life based on the urbanization standards. Now, if it can be completely directed within the city territory by some measures, and the existing capacities in the cities, especially the worn-out urban textures, are used, the mean urban land efficacy index would be more obviously promoted.

3. Theoretical Framework

The concept of land consumption is an important environmental subject developed in the urban hinterland. This concept includes objective knowledge and quantitative measurement of the urban dispersion phenomena. Thus, recently, the need for land consumption measurement has become important (Gerundo and Grimaldi, 2011: 1153). The land consumption and dynamism of the land cover changes have brought about important environmental consequences such as the loss of high-quality agricultural lands, increased risk of floods, and the loss of biodiversity and its effects on climate change (Jinglian, 2021, 105).

The disoriented use of the land promotes and encourages an economic and functionalist culture of the land, providing various phenomena such as social segregation and social and urban vulnerability in addition to promoting changes in the microclimate, landscape and other natural elements. Considering and articulating programs and policies inherent and related to the correct use of land are evidenced as powerful engines for the transformation of this reality. Promoting an adequate and orderly use of land is consistent with a strategic and adequate planning. Therefore, urban policies and planning become indispensable elements for the realization or achievement of sustainability. The global scenario, transformed and reformed daily, has and will continue to permeate challenges that precede the use of land and represent challenges that are the result of human actions according to their constant need. It is, however, from these precedents that programming can and should be articulated in the form of planning that is consistent with these needs and scarcity of natural resources. Based on the systematic review presented here, this study identified the multiple uses of land in addition to the priority they are assigned whilst simultaneously verifying the implications of these uses in urban planning. In this sense, it is concluded that land use is particularly related to the socioeconomic dimension, evidencing that the socio-environmental perspective is not always the main element to be visualized and brought into discussions related to land-use planning more efficiently and sustainably . In addition, the propositions and outlined in this study were met, as it is evident through this research that disordered uses of land promote environmental degradation and a disconnect between sustainable and socioeconomic planning.

Overall, it is concluded that the themes of this study are highly relevant to the current global scenario of environmental changes and that there is a dearth of research in these areas. It is also noteworthy that the quantitative number of studies on this theme evidences a gap and a deficit that still exists in discussions related to urban planning for sustainable and rational use of land today. In addition, the studies that are compiled in the research portfolio of this study are still incipient in the present response to the theme, thus indicating various gaps that exist within it. As evidenced from the results and discussions presented here, this study embodies the various theoretical elements and case studies examined here into a dimension of multiple strands. It is also important to highlight that the methods used were essential in ratifying the robustness of the methodology and in providing it a greater scientific confidence.

Finally, it is suggested that future research work in the area should consider widening the scope to examine the more innovative dynamics of the theme.

The term "urban land consumption" is generally defined as modified natural land for man-made structures for the living, social and economic development of urban dwellings (d'Amour et al., 2017). In other words, the contemporary city is defined by concepts such as contrast, social and spatial segregation, and demonstrative consumption. It is here that the land consumption emerges in land consumption which can be of a demonstrative type. Thus, consumption can be defined as a bridge that connects the individual to the urban environment. It is due to the consumption that the people's activities and daily

life and the physical organization of the city, as well as the political, social, and economic processes and procedures, are connected. Thus, the land consumption that can be either approved or unapproved is a function of the land consumption and not subject to it so that the land consumption can explain the urban development and growth patterns (Ghelich, 2017, 276). The term "land-use intensity" is usually an important quantitative measurement designed to reflect the status of land consumption. Since urban land consumption can be studied in different disciplines, land-use intensity has numerous consequences. Economically, it is defined as the amount of consumed urban land per the Gross Domestic Production (GDP) (Wang et al., 2020). In different countries such as Puerto Rico and the United States, population density is used as one indicator for identifying the rate of land-use intensity (Grekousis & Mountrakis, 2015). Various factors can affect the urban land consumption and lead to changes in urban use, the most important of which are the factors effective on the urban land consumption, population increase, culture, financial institutions, development of the transportation system, development of the IT, industries within the city, the urban lands political aspects, the urban and regional planning in the urban system, and the morphological-geographical issues (Ostovar, 2010).

governments should combine relevant national land policies, optimize urban land resource allocation, strengthen law enforcement and disposal of low-utility land, and improve the secondary land market to revitalize stock land resources and promote effective land transfer. Strengthen scientific technological innovation, explore the development and utilization of non-traditional agricultural land resources, efficient and intensive urban construction land utilization (such as the utilization of three-dimensional urban space), reuse technology of abandoned land resources, etc., and thus improve the efficiency of land resource utilization. Strengthen the linkage development between the BTH urban agglomerations, promote the flow of resource elements between cities in the east and west as well as between industries, so that the economic ties between cities can be gradually strengthened, drive the full utilization of limited land resources through the economy, and thus improve the efficiency of land resources while developing the economy. (Kuang et al. 2020) Land use and urban transportation are two inseparable components of the general urban structure system.

Land use is one of the primary and most important determining factors for movement and activity. The result of these activities is known as trip production and it is the determining factor of what transportation facilities such as roads and public transportation systems are needed to carry out the movement. When such additional facilities are provided, the accessibility of the system will naturally increase. will increase, in other words, any change in accessibility will cause a possible change in the value of the land, and this change can affect the current use of the land If such a change occurs (such as changing residential to commercial locations), the trip production track (for example, the number of trips per unit of land area) will change, and after the cycle is complete, another cycle will begin. In short, this relationship can be expressed as follows: there is a piece of land with a special type of use and production of a certain number of trips. These trips need transportation facilities to meet the travel demand, on the other hand, the new facilities or the improvements made provide better accessibility, as a result, the demand for land development is made, and this also increases the value of the land. In the meantime, the land use also changes (usually towards a higher density), which means more trips to the same land, and this cycle repeats itself. Of course, many variables affect the relationship between transportation and land use. Some of the most important of them are financial resources, industrial activities, cost and fuel consumption and supply, economic activities, job opportunities, and population growth. A lot of research has been done on the effect of these variables and has shown their value, although this value is different in different cities (Deputy of Transportation and Traffic, 2013). Our identities and lifestyles are determined by access to and use of an ever-increasing range of goods and services. It is said that the consequence of the above event is the formation of social distinction based on our consumption functions and not work and occupation. Basically, some theorists believe that nowadays, how to spend money is more important than how to earn it. Miles believes that consumption has acquired a "magical" quality, and as it has become an important aspect of our daily lives, is a completely cultural phenomenon; Therefore, social theorists are interested in all kinds of effects, experiences and social relations based on consumption in everyday life; Therefore, consumerism, not just an activity or hobby, is a "way of life"; Therefore, we are allowed to confirm that there are hidden features in consumption. Such interpretations clearly show that ideological dimensions are also involved in the growth of a consumer society and we can show that "the nature of consumption everywhere is reconstructed daily." (Miles, 1998: 4)

3.1. Sustainable development

The concept of sustainable development officially became common since 1987, after it was raised in the United Nations General Assembly and accepted by most of the member countries. The World Environment Commission defines sustainable development as follows: Development that meets the needs of Avoiding harming the ability of future generations to meet their needs (Jumapour, 1384:63)Sustainable development does not mean only the biological environment, but also the concept of economic growth. A growth that has chosen justice and life possibilities for all the world's people and not a few people. Economic, financial, commercial, energy, agricultural, industrial, etc. policies are designed in such a way that economic, social and environmental development continues and debt repayment is left to the future generations and ultimately sustainable development. It means not imposing economic, social and

environmental damages on future generations(Ezekia and Ghaffari, 1387:60).

3.2. Native architecture and sustainable development

Sustainability despite its basic and comprehensive slogans, which are universal and target the issue of preserving the earth.
To achieve realistic and workable solutions on the one hand and to support the diversity that exists in nature On the other hand, it recommends local approaches and the global slogan "Think but act regionally".
pays attention This approach has a lot of affinity with the definitions related to native architecture and urban planning. Architecture Native architecture is derived from environmental features to meet human needs in the environment This architecture of Economic, cultural, social, and climatic conditions are influenced by local architects to meet the needs of local communities15cultural and social diversity and differences in the climate zone in the form and construction technologies Native architecture has a direct impact. In general, native architecture includes the conditions and characteristics of each environment in relation It is with natural factors or spiritual desires of humans. All forms of native architecture to meet the specific needs, certain biological qualities, economy, and ways of life of the cultures that creathe ted theme (Falamaki, 2008) The traditional architecture and urban planning of Iran is not only not exempt from this rule, but also as one of the complete types conceptualism is known in the world. Cities, to sustain their life, in favorable natural conditions, Cultural and social communication and economic life are needed. These things are related to various environmental conditions Iran (climate and livelihood, culture and tradition) is wellintertwined connection with natural factors, The traditional cities of Iran have adapted themselves to the environment in a way as if it is the environment itself. This city has been planned for natural phenomena, both favorable and unfavorable. Although technical knowledge The ratio of time has its own special conditions, but the past urban planning has great techniques in the optimal use of Nature has provided. In traditional urban planning, people have an individual life and a collective life. Communication Social in a neighborhood (neighborhood) is one of the necessities of life in a traditional Iranian city. The most important factor In this urban development, the expansion and integration of the social and cultural environment and neighborhood relations The religion of the economy is also itself It depends on social and cultural conditions (Shia2000:84).

3.3.The influence of mother cities and megacities on villages

According to Douglass (Douglass, 1988:178) in developing countries, the metropolis, which is the result of centralist policies, has expanded limitlessly with its increasing growth and as a result, with the exportation of population and units and Economic enterprises have crawled towards the surrounding villages. The smaller the distance of the village from the metropolis and the more facilities and facilities there are, the greater the influence of the metropolis on them. Damage to agricultural production, water pollution, increase in runoff and flooding, and damage to ecosystems and biodiversity all over the world, has been the consequence of the creeping of the city towards the surrounding settlements (Mylot, 2016, 1999). In addition to the consumption of rural spaces by cities, has been a common phenomenon in most countries. For this reason, the need to measure land use has become important in recent years (Gerundo and Grimaldi, 2011: 1153). There are Various factors influence land use in the city and cause changes in urban uses, the most important of which are: population increase, culture, financial institutions, development of transportation system, development of information technology, industries in the city, aspects Urban land politics, urban and regional planning system in the urban system and geographic morphology issues In some of the areas around big cities, those nearby settlements that had maximum agricultural activities and the capacities of water and land resources, under the influence of demands and available facilities, have changed such as replacing the cultivation of fresh crops. Instead of traditional cultivation, there have been changes in cultivation patterns and more intensive cultivation of land (Setter Thwaite et al., 2010).
As the capital city of Tehran from the middle of the 1340s until now, enjoying a special position, it has expanded its undisputed control over cities and villages more and more (Ahlers, 1380: 121).
This metropolis, as the center of concentration of facilities, capital, wealth and power, has applied tremendous changes in the construction and structure of the villages around it. Residential areas, sometimes around metropolises, in recent decades, sometimes affected by the indiscriminate process of metropolitan growth and expansion, have faced the phenomenon of corrosiveness and transformed into the city body, and some have been exposed to structural-functional collapse and disintegration, and have received There have been changes in different dimensions A complex has emerged in social, cultural, and economic dimensions The physical-spatial face has transformed these spatial arenas. Some of these areas, such as the villages on the southern outskirts of Tehran, which were the destination of a huge number of immigrants and a part of the population of the capital city, have found a dormitory function, and some villages have turned into service-production areas. (Rizvani, 1381: 85).
The villages adjacent to the big cities have not only not lost their population in light of the effects of these big cities, but have also experienced growth beyond the average growth of the country. The city of Tehran has been the destination of two types of migration: one is migration to Tehran and the other is movement from within to the peri-urban environment, which is driven to the peri-urban environment due to the mismatch between the socio-economic conditions of the immigrant population and the residential characteristics of the city.

3.4. Urban planning

Urban planning, which is also called spatial planning of the city, in many countries, before The Second World War and especially after that has had a history, but the roots of the planning profession and application should be at the beginning of the century 20th AD and in response to widespread dissatisfaction with the results of entrusting the control mechanism of urban transformations to the market, in political corruption (and other than that)- which is facing the bad social, economic and physical conditions of industrial citiesIt showed growth - search (Abdi Danes pour, 2017).

3.5. Strategic structure planning

In the structural-strategic planning model, which is based on the system approach, user goals and policies The land has been upgraded to combine physical goals with economic and social goals and user planning tasks Land, from the preparation of the land use map and the per capita table, towards the strategic goals, that is, the spatial organization of the activity based on land use, sustainable development, public welfare, and quality of life (Mehdizadeh, 2016).

3.6. The perspective of sustainable development in land use

Paying attention to land as a main and non-renewable resource in sustainable urban development is necessary, because Urban land is considered one of the main sources of sustainable development of the city, and fair access and optimal use of it is one It is one of the components of sustainable development. (Kirimi, 1380). Therefore, sustainable land development is a type of land use that meets the needs of the present generation, but at the same time, preserves the opportunities to meet the needs of the future generation (Asgari et al., 2018).

Land use planning is not just determining the productive and material use of land, but a three-dimensional process It is related to the arrangement of space and the quality of the environment. In this sense, organizing the space, in addition to providing Functional needs should be related to qualitative human goals such as perception of beauty, sense of spatial identity and sense of belonging Respond to the environment Because of these considerations, nowadays the concept of land-space usage is usually used instead of usage land (Mehdizadeh, 2016).

4. Conclusion of Theoretical Framework

In this research, according to the opinions and collection of various studies, it was found that to investigate land use and its consumption pattern, first of all, attention should be paid to regional and urban planning and the impact of megacities and mother cities on other places that They are close to them, he studied, then using the obtained data and the obtained information, he thought about the type of land use or even changing its use.

The disoriented use of the land promotes and encourages an economic and function alist culture of the land, providing various phenomena such as social segregation and social and urban vulnerability in addition to promoting changes in the microclimate, land scape and other natural elements. Considering and articulating programs and policies inherent and related to the correct use of land are evidenced as powerful engines for the transformation of this reality. Promoting an adequate and orderly use of land is consistent with a strategic and adequate planning. Therefore, urban policies and planning become indispensable elements for the realization or achievement of sustainability.

5 . Research Methodology

The current study is descriptive-analytical in terms of the method and applied research in terms of the objective. The field and library-based methods have done the data collection in a way that in the field method, the ideas of 30 experts and specialists were obtained in the form of interviews besides the views of 384 citizens, which were obtained through a questionnaire. The sampling methods were snowball for the interviews and random sampling for the questionnaires. The sample size was obtained 384 by the use of Cochran's formula. The 9-point Likert scale was used in the current study, and a score five was used as the median in this scale. Also, the SPSS has been used to analyze the quantitative data. Cronbach's alpha was used to calculate the questionnaire's reliability, and the coefficient obtained for the questions in this questionnaire was 0.74, which is an acceptable value. The T-test was also used for data analysis in the current study. This research is of an applied type, and the research questions and the data collection method also have a user approach. Also, in the stage of analyzing the course of evolution, the historical interpretive method based on documents, documents, information from books and so on Available publications , as well as interviews, are used, and in the phase of contemporary reviews, quantitative and qualitative methods are used .It is used appropriately such as observation, interview, group focus, data mining, etc. The dimensions and indicators investigated in the study are presented in Figure 1.

Oushan, Fasham, Meigun is a garden city 25 km northeast of Tehran and is located in the middle of the Alborz mountain range. The city is generally mountainous with cold weather. The weather is mild in spring and summer and very cold and rainy in winter and autumn. This city has a mountainous texture and is located inside a valley surrounded by mountains with a height of 2500 to 3500 meters. Most houses and gardens are located on slopes up to 60 degrees. The heavy snowfall during the winters in the northern areas of this city has led to the creation of three ski resorts in Shemshak, Darbandsar, and Dizin. The river running in the middle of the city is a branch of the Jajrud River. Also, in terms of political coordinates, this city is located north of Shemiranat city and is one of the two cities under the governorship of Shemiranat city and a part of the Rudbar Qasran section. Oushan, Fasham, Meigun, with approximately 60 square kilometers, was recognized as a city in 1959 (Mohammad Meigoni, 2017: 35-40). According to the latest official census of the Statistics Center of Iran in 2016, Oushan, Fasham,

Meigun were 6945 people. Also, the number of households living in the city is 2294. Examining the population in the previous periods, we see a significant negative population growth rate in the city in 2016. The percentage of urban population growth rate in the last census was -2.774% indicating the declining trend of population growth in the city. All methods are effective and applicable.

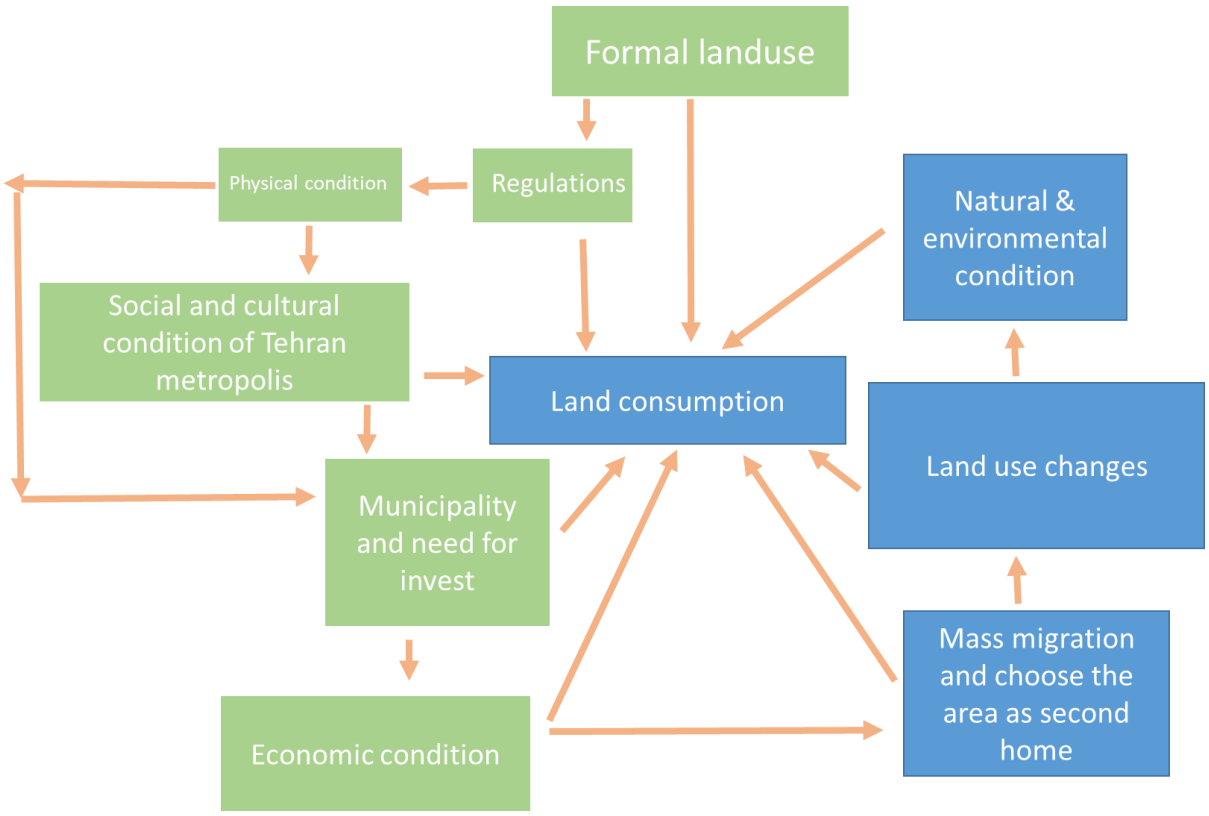

Fig.1.research model (source based on theoretical fundamentals:)

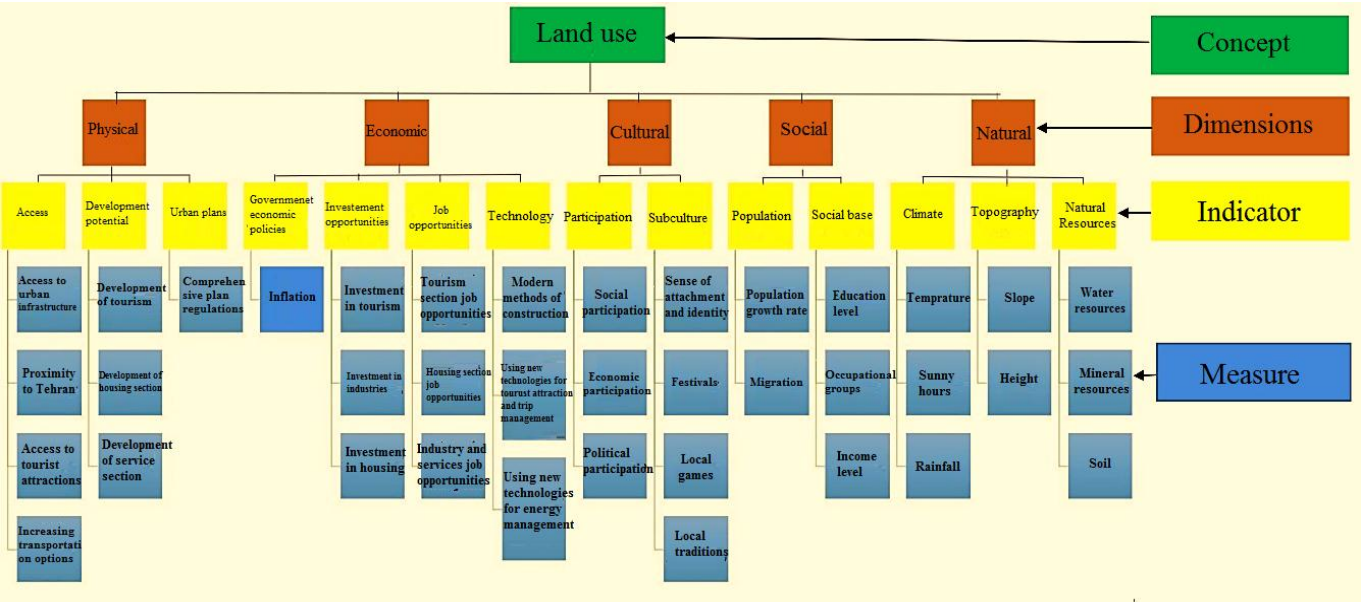

Fig.2. Dimensions, indicators, and measures of research (Source:ye, tien et al (2022))

Table 2
Population during 2006-2016 period

Year	Population	Number of households	Population growth percentage
2006	6895	2019	-
2011	7994	2509	3.002
2016	6945	2294	-2.774

(Source: Iran's Statistics Center (2006-2016))

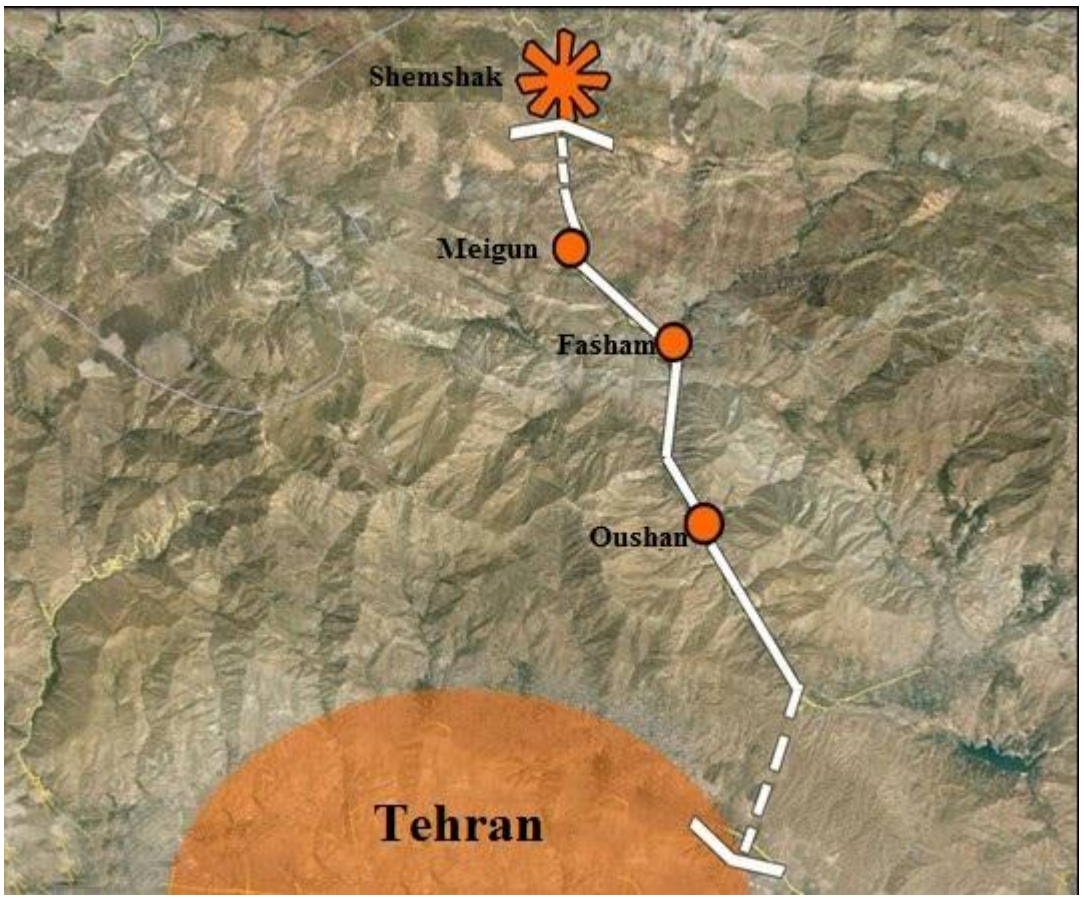

Fig.3. The geographical territory of Oushan, Fasham, Meigun City

6. Results and Discussion

6.1. Indicators Effective on Land consumption in Oushan, Fasham, Meigun City

The findings indicate that among the components effective on the land consumption in Ousahn, Fasham, and Meigun, the proximity with Tehran metropolis, water resources, and access to tourist attractions have been most effective with mean values 8.42, 8.34, and 8.26, respectively. Also, the investment in the industrial section, local games, and literacy level have been least effective on the land consumption in this city, with the mean values of 3.73, 4.19, and 4.28, respectively. Among the indicators effective on the land consumption in Oushan, Fasham, Meigun city, the economic policies of the government, accessibility, and climate have been the most effective with mean values of 7.84, 7.75, and 7.41, respectively, while in terms of the dimensions effective on the land consumption pattern, the physical, natural, and social dimensions were the most effective in Oushan, Fasham, Meigun city with mean values of 7.19, 6.75, and 6.63, respectively.

Table 3
One sample T-test for indicators and variables effective on the land consumption

Dimensions	Mean	Indicator	Mean	Measure	Mean	t-statistic	Significance level	The difference with the optimal value
Natural	6.75	Natural resources	6.47	Water resources	8.34	-12.765	0.005	3.34
				Mineral resources	4.96	-5.906	0.000	-0.04
				Soil	6.11	4.695	0.000	1.11
		Topographic	6.38	Slope	5.80	-2.596	0.003	0.80
				Height	6.96	7.853	0.033	1.96
		Climate	7.41	Temperature	8.19	2.395	0.005	3.19
				Sunny hours	6.42	-18.795	0.000	1.42
				Rainfall	7.61	-17.239	0.007	2.61
Social	6.63	Social base	6.02	Education level	4.38	-13.138	0.005	-0.62
				Occupational groups	5.65	-11.411	0.005	0.65
				Income level	8.03	-59.575	0.068	3.03
		Population	7.25	Population growth	6.80	-10.136	0.022	1.80
				Migration	7.69	-9.614	0.001	2.69
Cultural	5.03	Subculture	4.86	Sense of attachment	5.42	-5.684	0.012	0.42
				Festivals	5.38	-6.243	0.006	0.38
				Local games	4.19	-10.432	0.000	-0.81
				Local traditions	4.46	-8.993	0.003	0.54
		Participation	5.20	Social participation	4.80	-8.142	0.011	-0.20
				Economic participation	5.84	-5.637	0.005	0.84
				Social participation	4.96	-5.246	0.003	-0.040
		Technology	6.43	Modern construction methods	7.15	-4.937	0.000	2.85
				Modern technology for trip management	6.03	-4.146	0.018	1.03
				Modern technology for energy management	6.11	3.346	0.033	1.11
Economic	6.21	Job opportunities	5.74	Tourism section job opportunities	5.57	5.525	0.008	0.57
				Housing section job opportunities	6.69	-7.811	0.001	1.69
				Service section job opportunities	4.96	-4.024	0.013	-0.04
		Investment opportunities	4.83	Investment in tourism	5.42	-59.575	0.005	0.42
				Investment in industry	3.73	-10.136	0.022	-1.27
				Investment in housing	5.52	-9.614	0.001	0.52
		Government's economic policies	7.84	Inflation	7.84	-5.906	0.012	2.84
Physical	7.19	Urban plans	6.61	Urban plans	6.61	4.695	0.006	1.61

Development potentials	7.21	regulations				
		Development of tourism	7.19	-5.637	0.000	2.19
		Development of housing	7.73	-5.246	0.003	2.73
		Development of service section	6.73	-4.937	0.011	1.73
		Access to urban infrastructure	7.34	-5.684	0.033	2.34
Access	7.75	Proximity with Tehran metropolis	8.42	-6.243	0.005	3.42
		Access to tourist attractions	8.26	-10.432	0.000	3.26
		Increasing the transportation options	6.96	-8.993	0.007	1.96

6.2. Analysis based on the Interview with the Experts

6.2.1. Areas and Mechanisms of land consumption in Oushan, Fasham, Meigun

Since the urban management in our country has not a single form and is only a part of the authority of municipalities, and the planning is usually done in a top-down approach in the urban development areas, it has led to the inefficiency of urban development plans their main path. Oushan, Fasham, Meigun is also no exception.

6.2.2. Descriptive findings from field observations

Collection of field information including quantitative and qualitative questionnaires and interview letters for review The factors and the degree of influence of each of them are the main factors of land use in the city of Oshan, Fesham, Migun Based on the collected data: 97% of the respondents in the small respondents' section are women have given, And the remaining 38.2% are men. In total, all respondents answered by gender have given The findings show that the majority of the respondents were in the age group: 7 to 00 years; This age group is 1/8 The percentage of respondents to the questionnaire is small. Also in the next place, the group Age: 0 to 10 years, which accounts for 97.9 percent of the respondents. 17.6 percent of the respondents are people with a level of education Also, 70.6% and 0.1% of the respondents also have a bachelor's degree They have master's and doctoral studies. 17.6 percent of the respondents are people with a level of education also, 70.6% and 0.1% of the respondents also have a bachelor's degree they have master's and doctoral studies.

7. Conclusion of Observations

The evolution in land consumption patterns in Oushan, Fasham, Meigun was initiated by the Sazandegi Government. During this period, the grounds for land speculation were formed in the Lavasanat area, and it was worsened from the 2000s in a way that during this period, we could see the increase in land speculation, land consumption, and constructions on the one hand, and on the other hand, changing the land consumption from agricultural to residential. Therefore, since the 2000s, we have seen fundamental evolutions in land-use patterns within Oushan, Fasham, and Meigun city. These dominant evolutions have led to the attraction of the Tehrani tourists to the city due to its proximity to the Tehran metropolis and the fine weather in the area. Of course, inflation cannot be ignored. In recent years, especially in the last two decades, the government's economic policies have increased inflation in society, and this factor is quite prominent in changing the pattern of land consumption in Oushan, Fasham, and Meigun. The huge capital inflow to the land and housing market in the same decade gave a false value to such commodities and led to land speculation and changing the land and housing into a commodity. The course of the increase in the land and housing prices in Oushan, Fasham, and Meigun city during recent years has been such that the average land price per square meter in the city has increased to 15 million tomans. Perhaps, one of the effective factors in the land and housing price increase in this city is the fixed boundaries of Tehran City for development that has led the investors to invest in the land and housing section in the cities adjacent to Tehran due to the lack of capacity in the fine-weather northern areas of Tehran

7.1. Existing Urban Development Inconsistent with the Land Consumption Patterns in the Development Plans

Land consumption forecasting and density for urban areas in urban development plans have not been practical, and what has actually happened is following the existing land market trends has led to inefficient patterns of land development in cities. In Oushan, Fasham, Meigun city, the urban development has not been proportionate to the predicted land consumption in the urban development plan, especially in the Meigun area. Perhaps, one of the reasons behind this matter is that the previous development plans have not considered the role of city tourism and its demands in the short and long term, seriously. It has also led to the inconsistency of a great part of new developments with land consumption plans,

especially in the new textures such as New Meigun, Shemshak Road, and …. The laws and regulations are evidently ignored in these areas. The presence of high-rise buildings in the garden lands has created an improper view of these city areas . The staggering development of the residential areas in the city has led to the saturation of constructions in some areas such as New Meigun; if the current trend is to be continued, we would face more elimination of the gardens around the city and high consumption of the lands around the city and even the lands outside the city territory. Another notable point in this regard is the inconsistency of the existing urban developments with the region's climate. Since the region is mountainous and the slope is steep, sometimes, due to non-compliance with construction rules and regulations, we see human and financial losses to the people of the region.

7.2. Urban Development Plans Legally or Illegally Encouraging the Land consumption

It is one of the important tools to control and apply the rules and regulations of the urban development plans since, in the absence of such an effective control system, the violations will increase. The supervision of urban construction and directing urban development through the issuance of a building license, if done correctly and logically, can be an effective mechanism for preventing any kinds of illegal acts related to land consumption. Since land is key to all human activities, especially construction and urban development, planning for the way it is used is among the most important tasks of the municipalities. In Oushan, Fasham, and Meigun city, the urban development plans are not intrinsically encouraging illegal land consumption; however, the lack of executive mechanisms to control and prevent the violations has led to the ineffectiveness of such plans. The increase in land and housing prices and its following rise in violations in the cities besides the land speculation manifests the necessity of a serious revision of urban development plans more than ever. It may be possible to prevent some of these violations through greater coordination between land-related organizations and municipal services such as the water, electricity, gas, agriculture jihad, environment, and natural resources departments with the municipality. Also, by strengthening the executive power of the municipality by revising some regulations related to the use change, construction, and destruction, the preventive power of the municipality in creating a strong executive mechanism for the prevention of any violations can be increased. The municipality itself should view the violations as an urban problem and not a source of income.

Another point that can be noted is that currently, there is no proportionality between the fines issued by the various municipal commissions and the violations in terms of price for land or housing. This has led the profiteers to commit any violations in this area boldly. The presence of urban development plans proportionates to the realities of Oushan, Fasham, and Meigun city can lead to the realization of the urban development objectives and stabilization of the land and housing prices. Recently, regarding the saturation of the city's residential lands and profiteers' encroachment of horticultural and agricultural lands, this danger is completely felt by the city that the urban development in Oushan, Fasham, Meigun city is deviating from its balance and the necessity of paying attention to this subject in the urban development plans is well felt.

7.3. Density Status and Occupation Area and the Rate of Violation Committed in this Area in Oushan, Fasham, Meigun

Since the urban construction restrictions in the form of laws and regulations to control the physical development of the city are the results of the urban development plans and documents, in Oushan, Fasham, and Meigun, in line with the increase in the population, especially the tourists, and the high demand for the urban constructions during the recent years, especially since 2001, as well as the increasing trend of land and housing price, we can see the increase in the density, occupation area, and extensive violations by the owners and home builders. The statistics provided by the municipality from 2001 to 2020 indicate that these violations increase yearly. As seen in Table 4, in 2001, the rate of recorded violations by the municipality was 12,200m2, which has been added to since 2001 until now, as in the first half of 2020, the rate of violations has increased to 37125m2. Among the main reasons behind the violations in construction in Oushan, Fasham, and Meigun is the high prices of land and housing and the high demands in these cities. Due to the high prices of the lands and housing prices for the home builders, such violations are still economically viable despite the payment of fines to the municipality because the construction violators, knowing that most of the commission's votes lead to fines, commit construction violations and are sure that they will benefit many times more by paying the fine or even delaying the payment of the violation. Violators are sure that the municipalities will only impose fines on them, and only in a few cases will the municipalities order the building to be demolished. On the other hand, the municipality relies on these sources of revenue to compensate for its expenses.

7.4. Evolutions of Land consumption in Oushan, Fasham, and Meigun; Before the Revolution until Now

The evolutions in the land area in Oushan, Fasham, and Meigun can be investigated in several sections. Based on the information obtained from the interview with the experts, before the revolution, i.e., 1942 to early 1980s, land consumption was mainly agricultural. In the 60s and 70s, the lands were mainly used as gardens due to the mountainous weather in the region, and people made a living through these gardens. However, it should be noted that from the 60s to the early 80s, this region was a place for aristocrats and noblemen to spend their leisure time due to the existence of ski resorts. In the 80s, due to the Iran-Iraq war outbreak, it was mainly used as a shelter for

people; however, in the 90s, after the end of the war and the creation of the grounds for tourism and its development, some garden villas were created on the lands of this region. The 2000s initiated a huge transformation in land consumption in the region. In this decade, with the initiation of construction of the second home for the tourists, mass land consumption in the cities was paved. It coincided with the third development plan after the revolution in which some government authorities in terms of land management were entrusted to the municipalities. During this decade, the increase in inflation, the increase in the local population, the formation of tourism in the region, and changing of land into a commodity among the citizens led to important evolutions in land consumption in Oushan, Fasham, and Meigun. Among these evolutions was the significant increase in housing development and its proportionate increase in land consumption. Also, with the formation of tourism in the region, the tourists and investors bought the lands from the locals due to the lower prices of the land than Tehran and the proximity of the city to the Tehran metropolis, which paved the way for further evolution in the coming years. From the middle of this decade until the early 2010s, the uncontrollable and unplanned growth in the number of apartments and the land-use change created problems in land and housing in the region. From the early 2010s until now, changing the apartments into a luxury commodity has led to an increase in the apartment dwelling for the rich, especially in the New Meigun area which has led to violations outside the urban development plans both in the land consumption and the density.

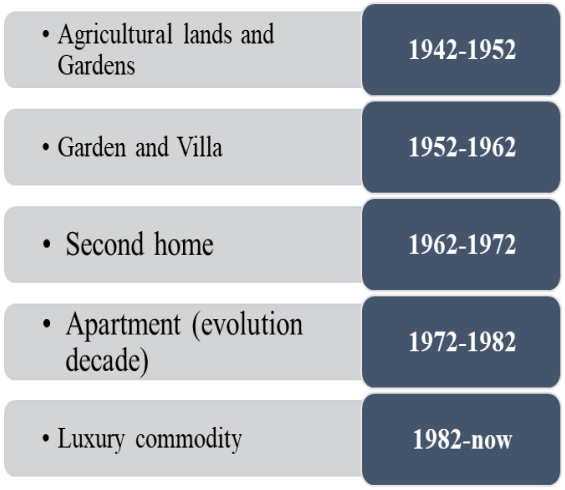

Fig.4. Land consumption evolutions in Oushan, Fasham, and Meigun cities over the past decades

Table 4
Status of violations committed from 2001 to 2020 in Oushan, Fasham, and Meigun City

Row	Year	License		No violation		Rate of violation	Frequency of violations	Completion certificate	
		Frequency	Area (m2)	Frequency	Area (m2)			Frequency	Area (m2)
1	2001	50	22115	5		12200	30	7	
2	2002	140	74200	14		13750	57	17	
3	2003	125	65196	12		17200	60	25	
4	2004	112	63270	17		25400	78	38	
5	2005	115	65200	50		29800	62	42	
6	2006	90	62275	52		34200	75	38	
7	2007	87	65200	39		37150	102	35	
8	2008	80	60170	40		44150	105	29	
9	2009	103	89250	54		57800	117	35	
10	2010	106	115200	71		47200	97	39	
11	2011	117	127150	52		45000	95	58	
12	2012	130	172	49		36000	87	54	
13	2013	154	94664	48	24569	47160	150	56	37783
14	2014	54	37218	37	35389	28897	104	44	35608
15	2015	60	34279	44	46601	39680	95	28	22083
16	2016	40	8150	31	16975	17120	72	17	12776
17	2017	45	17200	34	17200	25176	85	24	25315
18	2018	47	18950	37	18150	42150	112	25	28100

8. Conclusion

One of the fundamental challenges in urban development in developing countries is their staggering growth. If this growth is scattered and unplanned, the urban planning and management process will face various problems and issues. In recent decades, with the increase in the world's population and expansion of urbanism worldwide, a great portion of the urban lands have undergone the use change, and the relatively permeable natural surfaces have been replaced with impermeable hard surfaces, including the pavement, asphalt, and dense areas filled with buildings. The cities have always been formed and expanded under various forces and factors. They are transformed with the social evolutions, population movements, economic changes, and technological innovations. The activities and

investment also furiously develop with the population growth, and the physical organization of the cities undergoes drastic changes. Some of the important factors in urban planning and management, especially to achieve sustainable development in the urban areas, are the optimal use of the land, accessibility of timely and correct information about the use status, and the land cover in the urban areas. Paying attention to land consumption management is especially important due to its effects and outcomes for human life in different aspects. In the current study, the literature related to land consumption and use was first investigated. The researchers and scholars have investigated different views in terms of the discussion of land consumption patterns.

More recent authors such as Bodriar (1975), Zukin (1989), Federstone (1982), Bourdio (1984), and Harvey (1973) have also enriched the consumption literature and have addressed the subjects related to the history of the expansion of consumerism, consumption, and society. This emphasis on consumption studies was accelerated in the first works of Manuel Castells (1973 and 1977), David Harvey (1973), and later, in the works of Pierre Sanders (1981). These theoreticians sought to show the role and position of collective consumption. The subject of consumption was extensively ignored until the 90s. The revitalized attention to consumption is indicative of a view in which "the actions and expectations of people as the consumers play a very constructive role in the preservation of the social life and that the consumption can be no more a type of secondary approach for the production process" (Miles and Padison, 1998, 15). Such an approach contradicts the classical theory of sociology. In classical sociology, production is considered the pivotal element of social life, not consumption.

The concept of land consumption is an important environmental subject that is developed in the urban areas hinterland. This concept includes the need for objective knowledge and quantitative measurement of urban dispersion phenomena. That is why in recent years, the need for land consumption measurement has been highlighted (Gerundo and Grimaldi, 2011: 1153). Various factors affect land consumption in the city and lead to changes in urban use, the most important of which are population increase, culture, financial institutions, development of the transportation system, development of IT, industries within the city, the urban lands political aspects, the urban and regional planning in the urban system, and the morphological-geographical issues. The investigations in the current study also showed that the morphological issues and development of the transportation system are among the most important factors effective on urban land policies in Oushan, Fasham, and Meigun.

Regarding the importance of the subject, the current study has been tried to explore the areas and indicators effective on the land consumption pattern in Oushan, Fasham, and Meigun. The studies well indicated the course of land evolutions over the past decades. These evolutions can be explained in five periods. These changes are more affected by the urban land consumption, natural factors, and infrastructural developments, especially in terms of accessibility, i.e., proximity with the Tehran metropolis, more than the increase in urban population. The 2000s have been the initiation point of the huge evolution in the area of land in the region. In this decade, with the initiation of construction of the second home for the tourists, the way for mass land consumption in the cities was paved, which was followed by the increase in inflation and land prices, and the formation of the grounds for land speculation in the region has led to change of agricultural and horticultural use into the urban use for explosive constructions in the area of housing. During the 2010s, with the development of the infrastructures and services in the city, especially the development of highways leading to the city and the widening of roads that made it easier for Tehran citizens to reach the city of Oushan, Fasham, Meigun became the main grounds for the formation of a wave of aristocracy in the region, so that with the increase in the land consumption, we saw the formation of luxury apartments in New Meigun heights. It also led to the higher expansion of the city towards the peripheries and encroachment of the agricultural and horticultural lands in the area. It was tried in the current study explains the course of land consumption patterns and the factors that affect it by the use of quantitative and qualitative methods. Based on the results obtained, it was revealed that the most important factors effective on land consumption in Oushan, Fasham, and Meigun are proximity to the Tehran metropolis, water resources, and access to tourist attractions. As seen, the proximity to the Tehran metropolis has been the most important factor in the land consumption evolutions in the city. The increase in the city's monetization with the increase in the number of Tehrani tourists, infrastructure development with increasing income from the region's economic prosperity, prosperity and development of businesses in the field of land and housing, and increasing employment in the field of housing are among the positive effects, and increase in unprincipled growth and development outside the rules and regulations of city development plans, increasing construction river shore, the increase in violations in the field of land consumption and building density, the destruction of gardens and agricultural lands due to high demand for land consumption. Rising land and housing prices in the region have been among the negative effects of this factor. Overall, it can be said that in the last decades, especially during the 2000s and 2010s, the problems in the area of urban land consumption have been increased, and the violations and offenses are rising. Regarding the multiplicity of urban management in Iran, the necessity of integrated management in urban management is felt more than ever, especially in terms of land consumption. Preventing arbitrary decisions by various organizations and institutions in the area of land and the city managers' consideration for the goals and policies of urban development can be a priority so that the pattern of land consumption in the city reaches a point of balance and stability.

Suggestions

In line with the results of the study, the following suggestions are provided:

1. Creation of a database for more precise recognition of the land consumption pattern in Oushan, Fasham, Meigun cities.
2. Changing the existing laws and regulations for land-use change and land consumption.
3. Adopting some executive mechanisms based on the reality and feasibility to prevent excessive and unlawful land consumption.
4. Preparing an urban development plan based on the urban needs and realities in Oushan, Fasham, and Meigun.
5. Changing the approach of city managers in dealing flexibly with existing violations by understanding the consequences of mass land consumption for the city.
6. Preventing the preferences of various organizations and institutions in making land decisions and the attention of city managers to the goals and policies of urban development can be a priority so that the pattern of land consumption at the city level reaches a point of balance and stability.
7. The integrity of the land management in the city and avoiding arbitrary decisions by different organizations in land consumption.
8. Urban managers' consideration for the upstream plans and the defined role of the city in regional planning.
9. Organizing document resources of the region and organizing software will control land consumption

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