

The measurement of comments from rural managers regarding evaluation of tourism matrix-physical effects of second homes in rural areas (Case study: Baraghan County)

Hamid Zamani¹, Fazileh Dadvarkhani², Majid Rahmani Seryasat³, Shahram Samadi Khadem⁴

^{1&3}. Ms.c Student, Faculty of Geography, Department of Tourism Planning, University of Tehran, Tehran, Iran

². Associate Professor, Faculty of Geography, University of Tehran, Tehran, Iran

⁴. Ms.c Student, Environmental Engineering, Lahijan Branch, Islamic Azad University, Lahijan, Iran

hamid_yas30@yahoo.com

Abstract: Post- Second World War urban development caused spreading rural tourism and thus second homes in many countries in the world. Second homes tourism is one of the important tourist models in rural areas, which may be followed by several positive and negative effects and consequences on rural areas within various matrix, physical, economic, social, and ecologic dimensions. In this regard, the current article is intended to evaluate matrix, physical, economic, social, and ecologic dimensions of second homes tourism in Baraghan County in Savojbolagh Town. The present research is of applied type in terms of objective and it is descriptive- analytic in terms of method. Data collection is a type of field survey based on questionnaire. The main tools for gathering research qualitative data in the studied zone include librarian study and also quantitative data comprised of the standard questionnaire that was filled out among population of managers. To determine reliability of questionnaire, Cronbach alpha coefficient was also utilized where this value was calculated 0.80 for group of officials and experts. The sampled statistical population includes a group of experts and officials in this region that was chosen 30 participants as sample size with referring to several organizations and rural councils in this area. The studied variables consisted of evaluation of matrix- physical effects of second homes including texture, selection of location (topology), structure, and investment in these homes. In order to analyze inferential findings, some statistical analytic techniques were employed like simple linear regression, Wilcoxon rank sum test, and for generalization of the comments to total statistical population, statistical single t-tests have been used within the environment of SPSS software. The results indicate this point that the most important changes in occupation of rural lands included destruction of farming lands and gardens, change and or omission of living places for rural people, heterogeneity and conflict with rural traditional texture, selling of gardens and farming lands by rural people, changing number of employed farmers from rural people, and employment for touristic activities. According to viewpoint of rural directors, the analytical evaluation of second homes tourism effects, which have been measured by simple linear regression, may suggest this fact that prediction variable of rural texture in villages of Baraghan County (0.889) may interpret the major part of variance in the studied zone and it is consistent with what it has emerged in Baraghan County.

[Hamid Zamani, Fazileh Dadvarkhani, Majid Rahmani Seryasat, Shahram Samadi Khadem. **The measurement of comments from rural managers regarding evaluation of tourism matrix-physical effects of second homes in rural areas (Case study: Baraghan County)**. *Nat Sci* 2014;12(7):88-101]. (ISSN: 1545-0740). <http://www.sciencepub.net/nature>. 14

Keywords: Rural tourism, Second Homes Tourism, Evaluation of matrix-physical effects, rural zones, Baraghan County

Introduction:

Interpretation of subject and necessity of research:

The tourism may serve as an efficient catalyst for reconstruction and development of rural areas so that during recent years this issue has been noticed to alleviate economic and social challenges from outskirts rural zones and or villages, which are exposed to reduced traditional agricultural activities throughout the Europe (Sharply; 2002:233). The rural tourism is one of the important elements in this industry that is considered as one of the most popular forms of tourism in the today world and it serves as a factor for improvement and economic growth in villages (Ghadiri et al, 2010:1). Development of rural tourism may be assumed as a secured and

endogenous strategy for rural sustainability since it may be effective in expansion of the needed basic rural infrastructures rather than introducing new fields for business (Ardestani; 2008:127). Rural tourism includes several major forms such as nature-based tourism, historical- cultural tourism, ecotourism, farming tourism, and green tourism. Each of these types may spread based on quality and period of tourists' residence (shorter or longer than 24 hours) within two frameworks of second homes (construction and purchase of villa) and in daily form (outdoor camping and rental of house or villa) (Akbar Roonizi; 2011:36). Developing of second homes is one of the important rural tourism forms. The second homes spread after World War II and today roots of

developing second homes should be tracked in 20th century (Gallent et al, 2005:10). Also in Iran since 1950s and particularly after Islamic Revolution, second homes tourism has been developed by aiming at spending leisure times in the adjacent mountainous zones to metropolises as well as on the beaches of Caspian Sea (Rezvani; 2003:59). The hibernal villages of Baraghan County from Savojbolagh Town, the premium condition has formed for tourism and recreational area in the rural zones because of its pleasant climate, the existing river, and beautiful nature that may in fact meet the urbanism requirements. With improvement in economic status and increasing leisure times and introducing regional attractions, the number of referent visitors to this region was increased and following to this trend, they construct and or purchased housing in this region. Expansion of second homes tourism without planning and efficient management may result in negative consequences within several dimensions, especially matrix- physical dimension in this region and if this model continues with this trend, it will be definitively problematic. The current study is aimed at evaluation of matrix- physical effects with respect to experts' views by considering touristic conditions and features of second homes, which incorporate several effects and consequences in the favorable touristic rural areas.

Research literature :

Rural tourism and second homes :

The rural tourism is considered as primary motive and outdoor visit and the places outside the cities like spending vacations, business trips, and for visiting friends and relatives and at the same time enjoyment the city outskirts (Dadvarkhani; 2012:259). The investigations from Hall and Roberts about rural tourism may show that tourism in rural areas may include 10-20% of total world tourism activities (Roberts and Hall; 2001:55-56). The rural tourism is accompanied with residence and nightly settlement in rural areas (Khani and Niksirat; 2010). Such a presence forms with residence in tent, travelling wagons, second homes, rental private houses, guesthouses and hotels in rural areas. But residence in the second homes is the most prevalent form of activity in rural tourism and today the formation and expansion of second homes may be assumed as the foremost outcome for developing tourism in rural areas for this reason (Johnson; 1988:423).

The second homes are expressed with many other titles like resting houses, recreational houses, hibernal homes, rural homes, and weekend houses

among these terms (Hall and Muller; 2004:4). The main core of definition for the second homes is in that the original settlement of the owners of second homes should be located in other place i.e. the place where they spend their time at maximum level (Baghiyani; 2009:31). Typology and or quartile classification of second homes can be purposed in Diagram (1) as follows.

➤ It is used as commercial vacation houses and also an investment and it is typically employed by an agency.

➤ It is a private house that is utilized frequently as commercial vacation houses during holidays and its cost is incurred.

➤ It is a private house that is often used at weekend and during holidays by families and guests.

➤ It is frequently employed as private houses in holidays and often purchased for retirement period but at the same time it is used as business home (Hoogendoorn et al, 2005:113).

Among several definitions which have been suggested for second houses, the following definition is more accepted by many researchers, who act in this field: "The second home is a property, which is purchased and or rented for certain period as a transient residence for the people, who usually live in another place" (Gijsbert, Hoogendoorn, Robyn Mellet & Gustav Visser, 2005). Of course, the geographical long distance among second and first homes may be assumed as one of the paramount factors in determination of second location. The second homes are the dynamic integrated element of tourism, which often purchased for retirement period and sometimes for investment and they result in increasing in wealth and leisure time and at the same time the second homes are considered as symbol of the accumulated wealth in cities or by the migrant rural people to the city and although they are built in rural natural environment, they follow up urban model of house- construction (Jason & Muller, 2003; Wolfe, 1951). The foremost grounds and attractive and motivational and or repulsive factors in developing second homes in rural areas of the country may be expressed as follows:

✓ Environmental pollution and overpopulation in cities and the problems caused by living in cities;

✓ Improvement in access routes and possession of private vehicle;

✓ Urban phobia

✓ Rural- urban migrations;

✓ Climatic and geographical differences (Rezvani; 2008:307)

Table (1): The results of conducted researches regarding second homes tourism

Author	Title of research	Result of research	Year
Seyedeh Sedigheh Hassani Mehr, Hamideh Shahvar	Consequences of developing tourism in Heyran County with focus on changing lands use	The major change in lands uses and increase in number of second homes have been related to the early period of the studied decade and Heyran village includes the maximum number of such changes. The geographical factors and the existing Astara road to Ardebil are some of the foremost reasons for this people for selection of this county to construct second homes so that the inhabitants in Ardebil, Astara, and Tabriz cities are owners for more than 80% of second homes.	2010
Mohammadreza Rezvani	Analysis on trend of creation and developing second homes in rural zones	Nature, dimensions, and trend of developing of second homes have been examined in this areas and the results suggests that this phenomenon has been developed endogenously and without control in these areas, which have been followed by positive outcomes and negative consequences as well.	2003
Samira Nozari	The role of second homes in changing lands use and economic development of Kurdan village	Formation of second homes has been developed mainly since decade of 1986 after Islamic Revolution there and intensified during recent years. The negative consequences of this model include emerging change in rate of rural water supply and changing natural landscape and destruction and change in use of gardens and fields while its positive economic outcomes consisted of employment, creation of job in village, rising income for inhabitants, and improving public welfare for rural people.	2007
Muller	Tourism in second homes and sustainable development in the countries surrounding northern Europe	In this investigation, he deals with the relationship among sustainable tourism with second homes in northern areas in Europe especially Sweden and concludes that these homes may serve as a factor to expand sustainable development in rural zones.	2000
Hoogendoorn et al	The second homes tourism in Africa: Implications in experience at south Africa	This survey has examined the historical development of second homes in Africa and some of the public tendencies to the second homes.	2005
Marjavaara	The path toward destruction? The second homes tourism in Islet communities	The current study has been carried out in three various isles in Sweden archipelago and the results indicate that migration from these isles has improved further people's economic status compared to the past times with important events such as occupational opportunities and formation of family.	2008
Rye	Conflicts and competitions: Outlooks for rural population in the second homes phenomenon	It deals with the reviews on views of local inhabitants regarding formation and expansion of second homes and social and cultural effects of this phenomenon.	2011

Source: Findings from authors

Matrix- physical effects of second homes tourism :

Muller et al express the effects of second homes tourism in this way that several outlooks of second homes may vary depending on their local situation and from one place to another. In areas where second

homes prevail and these homes are created from conversion of permanent homes the local community may show different reaction to their conditions and effects in comparison with those areas, which have been planned by aiming at construction of second

homes in attractive urban outskirts (Marjavaara; 2008:12). With respect to nature of second homes tourism and their relation with several economic and social activities, emerging environmental changes and transformations and economic, social, cultural, and matrix- physical effects are inevitable. Of its negative consequences one can refer to phenomenon of sending immigrants, disruption in homogeneity of rural landscape that is followed by tarnishing natural landscapes in villages, construction constraints for the host environment, and the spectrum, which ranges from positive outcomes to negative consequences. For instance, it is possible not to consider adequately their coordination and balance with rural matrix identity and as a result the rural spatial sense may be damaged by disturbance of visual aestheticism and destruction of flora (Wall & Smith, 1982:136). As a

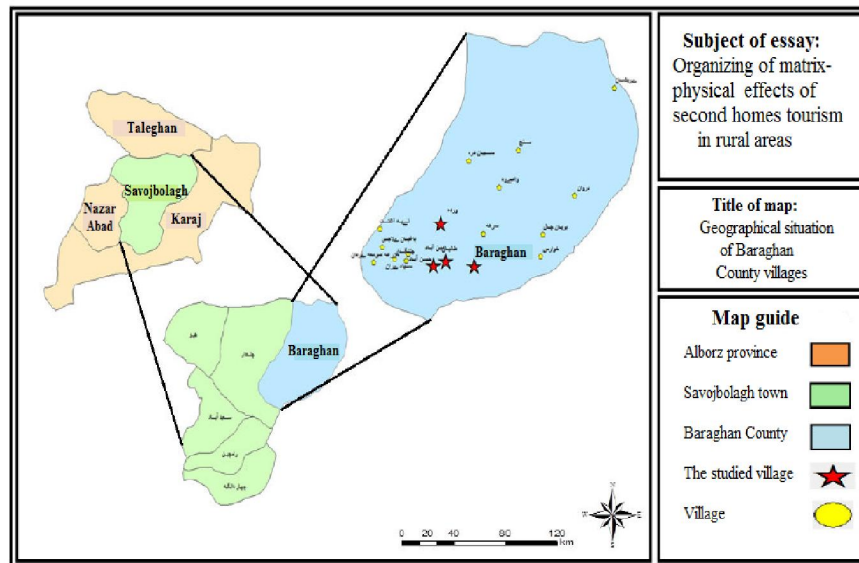
result, it may reduce beauty of natural environment and due to inappropriate plan and or ad hoc situation of second homes, the paramount criterion of evaluation of rural matrix entity i.e. distinction from others and similarity with the related areas may be damaged (Edington; 1995:87). Of positive outcomes for developing the second homes one can refer to strengthening construction of traditional texture and reconstruction of these settlements and or converting them to new housings so that they may also provide the ground for transient and or permanent employment for local people rather than change in rural landscape and it may increase income in local stores and at the same time prepare the grounds for attraction of other services and facilities in the village. Table (2) indicates a summary of positive and negative effects for developing second homes.

Table (2): Matrix- physical effects and consequences of tourism in second homes

Negative effects	Positive effects
Change in rural landscape and urbanization of habitat, disruption of traditional structures and homogeneity of construction (Statistics center; 2006:68), change in outlook, change in lands use, circumscription of water beaches, connection of villages, creation of dichotomy in the built environment (Salehinasab; 2005:60), change in residential and commercial units, changes in workshop units and employees from local people (Baghiyani, 2009:64)	Reconstruction of buildings and improving rural matrix, enhancement in installations and equipments, improvement in communication networks and rising interspatial communications, internalization of appropriate environmental model especially regarding wastes healthy landfill, change in type of architectural materials and style (Statistics center; 2007:68), physical development of the constructed environment in villages (Sepahvand; 2007:54), Reduction of arid lands and utilization from them to construct second homes (Salehinasab; 2005:60)

Landscape Source: Various sources

Introducing the studied zone:



Map (1): The situation of the studied zone
(Source: authors)

With Baraghan village as a center, Baraghan County comprises of 17 villages. Baraghan County is limited from the north to Alborz range and Taleghan town, from the west to Karaj town, from the south to Kamalabad, and from the east to Savojbolagh. The studies zone is situated among geographical longitude (East: 49°,5') and latitude (North: 36°,57'). According to the latest census by Statistical center of Iran in 2006, the population of this county was 1424 with 518 families out of them 721 were males and

703 females (Statistical Center of Iran SCI, 2006). Due to several capabilities, natural landscapes, appropriate climatic conditions, ease of access, proximity to surrounding cities especially Karaj and Tehran province and introducing four typical villages for tourism in this county, the given county is considered as one of the paramount and most attractive areas for tourism in Alborz province. The situation of this county can be seen in Map no (1).

Table (3): Number of population, family, and quantity of second homes in the studied zone

Village	Number of population	Number of local owners of second homes	Number of non- local owners of second homes	Sum of second homes
Baraghan	378	60	30	90
Talian	61	20	40	60
Aminabad	37	5	20	25
Vardeh	74	46	20	66
Total	550	126	115	241

Source: Authors

Table (4): Variables and questions for evaluation of tourism effects in second homes

Variable	Question
Selection of location	Destruction of farming lands and gardens
	Possession of ranches and national lands
	Reduced access of rural inhabitants
	Distribution of rural texture
	Reduced arid and bare lands
	Leveling piedmonts
	Indivisibility of rural certain borders due to connection of villages together
	Occupation of rural lands
Texture	Improvement the quality of local housings (strengthening the construction of rural homes)
	Encouragement of rural people to reconstruction of homes (housings) of rural inhabitants
	Change in traditional texture of housings for rural inhabitants
	Change and or omission of living places of rural inhabitants (e.g. rooms, storeroom, place of drying horticulture products etc.)
	Destruction of rural valuable textures
	Encouragement of rural people to construction of housing and their rental
	Internal renovation of village and finally improving the quality of life in village
	Conservation, coordination, and homogeneity with rural natural environment and rural housings
	Increase in number of residential and commercial units
	It causes heterogeneity and conflict with rural traditional texture
	It disrupts and destroys rural outlook and landscape
The limited access to river banks and elimination and difficult observation	
Structure	Encouragement of rural people to sell gardens and farming lands by rural people
	Change in lands use (conversion of farming lands, gardens, ranches into villa construction and building areas)
	Construction of access routes
	Increase in establishment of welfare, medical, educational, healthcare, and servicing facilities and installations
	Increased establishment of healthcare facilities
	It causes congestion and traffic and finally disruption in rural comfort
	Improved quality in access routes and transport
Improved communications (mail, telecommunication, telephone)	
Investment	Increased number of small- and big- size industrial workshops
	Increased number of livestock and aviculture units
	Increased demand for selling gardens and farming lands
	Rising of lands price
	Change in number of employed farmers from rural people and employment for touristic activities

Source: Authors

Research methodology:

The present research is of applied type in terms of goal and it is of descriptive- analytical type in terms of method. Data were gathered by means of field survey based on questionnaire. The main tool for research data collection in the studied zones is librarian tool with standard questionnaire that was filled out among expert community. Also Cronbach alpha coefficient was used to determine reliability of questionnaire where this value was calculated 80% for group of officials and experts. The sampled statistical population includes rural managers comprising of members of Islamic Council and county office executives in this region so with referring to several organizations in rural councils in this zone, 30 participants were chosen as sample size by means of census. With respect to research theory, the studied variables in evaluation of effects of second homes include texture, location (topology), investment, and structure of these homes. In order to

analyze inferential findings, the statistic analytical techniques were employed such as simple linear regression and Wilcoxon rank sum test and to generalize the comments to total statistical population single T-test statistical methods were utilized in SPSS software environment. In Table (3), there are mainly the greater number of second homes and population in Baraghan village that is center of this county. Similarly, quantity of second homes and local and non- local ownership of second homes has been characterized.

The resultant descriptive findings from respondents

The research descriptive findings have been expressed in two parts of descriptive questions regarding demographic traits of respondents and descriptive analysis from research main questions and the studied variables within the framework of descriptive statistic (percentage, frequency, mean) and they have been briefly implied in Table (5).

Table (5): Demographic traits of respondents

	Marital status		Gender		Age (year)					Education					Occupation	
	Single	Married	Male	Female	20-30	30-40	40-50	50 & older	Illiterate	Primary school	Secondary school	Diploma	AA	MA	Public	Free job
Frequency	30	0	105	45	6	19	5	0	0	0	0	12	15	3	13	17
Frequency percentage	100	0	70	30	20	63.3	1703	0	0	0	0	40	50	10	43.3	56.7

Source: Authors

Table (6): The results of component of selection of location in village and its variables from experts' view

Variable of selection of location		Likert spectrum percentage					Mean
		Very low	low	Average	High	Very high	
Destruction of farming lands and gardens	At present	0	0	43.3	56.7	0	3.56
	In future	0	0	0	43.3	56.7	4.56
Possession of ranches and national lands	At present	0	0	70	30	0	3.30
	In future	0	0	43.3	43.3	13.3	3.70
Reduced access of rural inhabitants	At present	0	56.7	26.7	16.7	0	2.60
	In future	0	0	16.7	83.3	0	3.83
Distribution of rural texture	At present	0	0	73.3	26.7	0	3.26
	In future	0	0	13.3	43.3	43.3	4.30
Reduced arid and bare lands	At present	0	13.3	56.7	30	0	3.16
	In future	0	0	26.7	30	43.3	4.16
Leveling piedmonts	At present	0	43.3	43.3	13.3	0	2.70
	In future	0	0	13.3	43.3	43.3	4.30
Indivisibility of rural certain borders due to connection of villages together	At present	0	0	13.3	56.7	30	3.16
	In future	0	0	40	30	30	3.90
Occupation of rural lands	At present	0	13.3	43.3	43.3	0	3.30
	In future	0	0	40	30	30	4.60

Source: Research findings

The resultant findings from research main questions have been gathered within four variables and 33 questions for experts and researchers where their overall results have been utilized for inferential analysis and the aforesaid variables were tested to evaluate the effects of second homes as follows.

Variance in selection of location (topology)

The selection of location is examined as the first variable in experts' questionnaire including 8 bifaceted (bivariate) variables. For example, the respondents were asked about effects of construction and development of villa houses on destruction of farming lands and gardens in status quo and in the future as a result their intensity has been interpreted in both periods.

As it given in Table (6) about variable of selection of rural location in Baraghan County, the maximum change is seen in condition among the existing situation and the predicted future in variable of occupation of rural lands. In other words, total mean value of this variable in the present situation is 3.30 and this value is 4.60 for the next situation so we observe the maximum variance among two present and future conditions. It may be noted that about this variable that increased number of second homes in villages of Baraghan County may automatically increase demand for rural lands and we were exposed to the same condition in analysis of the given questions for the questionnaire of local people as well so this means that occupation of rural lands has taken place further not only at present than other variables but also it has been exposed to incremental trend in the future. At the second order, variable of effects of second homes on destruction of farming lands and gardens has shown destruction of farming lands at present and its prediction in the future. Destruction of under-cultivation farming lands is one of the paramount negative impacts on development of these homes so that due to the farming low yield in small and dispersed plots compared to price of these lands, the farmers primarily assign their lands to the urban inhabitants for construction of second homes and they migrate to the cities and or prefer a servicing job of their resultant investment from sale of farming lands, which are sometime in the course of the touristic related activities. Likewise, the sampled population was asked that according to their opinion to what extent construction of villa houses might reduce access of rural inhabitants to the residential lands at present. With mean value of 2.6 for the existing situation and 3.83 for the future condition may indicate the incremental trend of negative effects in the future and it is expected that in the future the host population and everyday tourists not only lose the major part of regional landscapes and nature but also given that on some occasions

these non-local persons have also purchased some other plots for uncertain reasons rather than the land plot on which they have constructed their home and or they have bought a land in order to build second homes for their own relatives and or family in the future. Thus, these factors can be assumed as effective variables in reduced access of rural people to residential land in the future.

Changes in rural texture

It is one of the studied subjects in evaluation of the exerted changes in rural texture and it is composed of 13 variables. These variables have been also tested in bivariate form to measure the present and future conditions. In this component, some variables have been taken into consideration such as quality of local housings, encouragement of rural people to second homes, change in rural traditional texture and the like. The results of Likert spectrum and total mean of this spectrum are shown in Table (7).

With respect to the table (7), among 13 variables of rural texture, the variable of effect of developing second homes on change and or omission of living places for rural inhabitants is at the highest level so that it shows total mean of 3.43 at present condition. Similarly, this mean value also indicates mean value of 4.86 for the future condition in village from experts' view that is the highest mean among all variables in future condition. It seems that the experts express more sensitivity toward this variable and emphasized on change and or omission of rural living places in Baraghan County. They have acknowledged that construction of rural homes have been increased in Baraghan County since the previous decade and the rural living places have been extremely changed while some of these living places were either entirely omitted and or they have been exposed to many changes. Moreover, the respondents were asked regarding the effects of developing second homes in destruction of rural outlook and landscape. The given answers with total mean value of 3.30 indicated that under existing conditions, the construction and expansion of second homes has caused extremely destruction and distortion of rural outlook and landscape and they have tarnished image of village including that emerging of dispersed residential houses along with farming lands can be assumed as expressing sale of farming lands and change their use. Expansion of newly-built houses with style of urban houses along with rural traditional homes has caused heterogeneity in rural total landscape and perspective. Likewise, concerning to the effects of these homes on rising of heterogeneity and conflict with rural classic texture the mean values in received answers are 2.83 for the present condition and 4 in future condition that denotes the intensity of these

effects. The research findings indicate that continuance of the existing trend in the future may create further homogeneity and uglier and worse image for them. It was asked about the effects of these homes on destruction of rural valuable texture and mean value of 3.13 was acquired for this variable. In other words, developing of new constructions has been considered as a threat for survival of classic valuable textures from managers’

point of view and it is typically linked with identity and culture of rural communities. For instance, the oldest Iranian *Hosseiniyeh* (Place of mourning for Imam Hossein) and or at least one of the oldest Iranian *Hosseiniyeh* is placed in this county. Recently, it has been threatened for destruction by a decision that was made by rural people to replace it with a modern and equipped *Hosseiniyeh* building.

Table (7): The results of component of texture in village and its variables according to experts’ comment

Variable of rural texture		Likert spectrum percentage					Mean
		Very low	low	Average	High	Very high	
Improvement the quality of local housings (strengthening the construction of rural homes)	At present	0	56.7	26.7	16.7	0	2.60
	In future	0	13.3	30	13.3	43.3	3.86
Encouragement of rural people to reconstruction of homes (housings) of rural inhabitants	At present	0	0	86.7	13.3	0	3.13
	In future	0	13.3	13.3	46.7	26.7	3.86
Change in traditional texture of housings for rural inhabitants	At present	0	13.3	43.3	43.3	0	3.30
	In future	0	0	13.3	0	86.7	4.73
Change and or omission of living places of rural inhabitants (e.g. rooms, storeroom, place of drying tanned products etc)	At present	0	0	56.7	43.3	0	3.43
	In future	0	0	0	13.3	86.7	4.86
Destruction of rural valuable textures	At present	0	13.3	60	26.7	0	3.13
	In future	0	0	13.3	56.7	30	4.16
Encouragement of rural people to construction of housing and their rental	At present	0	43.3	26.7	30	0	2.86
	In future	13.3	13.3	43.3	0	30	3.20
Internal renovation of village and finally improving the quality of life in village	At present	13.3	40	0	46.7	0	2.80
	In future	1.3	26.7	30	0	30	3.06
Conservation, coordination, and homogeneity with rural natural environment and rural housings	At present	0	0	40	60	0	3.60
Increase in number of residential and commercial units	In future	0	0	0	26.7	73.3	4.73
It causes heterogeneity and conflict with rural traditional texture	At present	0	0	43.3	43.3	13.3	3.70
	In future	0	0	0	43.3	56.7	4.56
It disrupts and destroys rural outlook and landscape	At present	0	43.3	30	26.7	0	2.83
	In future	0	0	43.3	13.3	43.3	4
It causes distortion and destruction of rural outlook and landscape	At present	0	0	70	30	0	3.30
	In future	0	0	26.7	43.3	30	4.03
Change and improvement in buildings and using durable materials	At present	0	0	73.3	26.7	0	3.26
	In future	0	0	0	56.7	43.3	4.43
The limited access to river banks and elimination and difficult observation	At present	0	0	73.3	26.7	0	3.26
	In future	0	0	0	56.7	343	4.43

Source: Research findings

Changes in rural structure

The effects of developing the second homes are also one of the other subjects for it evaluation 8 variables have been employed so among these variables one could refer to encouragement of rural people to sell gardens and farming lands, change in

lands use, construction of access routes, establishment of welfare, medical, and educational facilities and installations, and disruption rural comfort. The results of each of these variables of rural structure have been examined based on experts’ view in Table (8).

Table (8): The results of component of rural structure and its variables according to experts' comment

Variable of rural structure		Likert spectrum percentage					Mean
		Very low	low	Average	High	Very high	
Encouragement of rural people to sell gardens and farming lands by rural people	At present	0	0	26.7	73.3	0	3.73
	In future	0	0	0	13.3	86.7	4.86
Change in lands use (conversion of farming lands, gardens, ranches into villa construction and building areas)	At present	0	0	83.3	16.7	0	3.16
	In future	0	0	13.3	86.7	0	4.73
Construction of access routes	At present	0	16.7	83.3	0	0	2.83
	In future	0	0	30	13.3	56.7	4.26
Increase in establishment of welfare, medical, educational, healthcare, and servicing facilities and installations	At present	0	0	40	60	0	2.60
	In future	0	0	40	60	0	4.20
Increased establishment of healthcare facilities	At present	0	0	86.7	13.3	0	3.13
	In future	0	0	0	0	30	5
It causes congestion and traffic and finally disruption in rural comfort	At present	0	13.3	86.7	0	0	2.86
	In future	0	0	13.3	13.3	73.3	4.60
Improved quality in access routes and transport	At present	0	0	86.7	13.3	0	3.13
	In future	0	0	13.3	0	86.7	4.73
Improved communications (mail, telecommunication, telephone)	At present	0	70	30	0	0	2.30
	In future	0	13.3	0	56.7	30	4.03

Source: Research findings

Concerning to Table (8) that shows variables of rural structure component, the effects of rising demand for construction of second homes in selling gardens and framing lands by rural people with total mean value of 3.73 has the highest mean value under present condition. In other words, with offer of suitable price given by non- local buyers to purchase their lands, the rural people are highly interested in selling their lands. Also the mean value has been acquired 4.86 in evaluation of this trend in future condition. Hence, it seems that the experts are assured with duration of this trend in the future and rising demand for lands of rural people. Among the given questions for component of rural structure, the variable of effects of construction of second homes on improvement of communications (mail/ post, telecommunication, and telephone) with mean value of 2.30 has the lowest mean value among the variables at present conditions so that it seems that increased number of villa houses on the one hand and also increased transport of several tourists for spending their vacations in the given zone could not highly affect on improvement of communications in

this region. Regarding this condition it can be inferred that despite of spending high costs for these homes and due to their short-term residence in this region, owners of second homes could not highly affect on improvement of mass media and communication devices but at the same time the existing facilities have been adequate for their needs. Concerning to the condition of these facilities in future, the experts have expressed their hope that with rising needs of local people to communications as well as being aware of their requirements on the one hand and drawing more attention from officials toward this county in the future to improve level of utilization from these facilities. For this reason, the experts have evaluated the mean value for this variable as 4.03 and appropriate in the future condition.

Changes in investment in village

Investment in village is one of the main studied components for measurement the impact of developing second homes. Several questions are raised in two forms of existing and future conditions and their results are given in Table (9).

Table (9): Measurement of effects of second homes in investment in developing of second homes based on experts' views

Variable of rural investment		Likert spectrum percentage					Mean
		Very low	low	Average	High	Very high	
Increased number of small- and big- size industrial workshops	At present	0	70	30	0	0	2.30
	In future	0	13.3	43.3	13.3	30	3.60
Increased number of livestock and aviculture units	At present	0	43.3	30	26.7	0	2.83
	In future	0	0	0	43.3	56.7	4.56
Increased demand for selling gardens and farming lands	At present	0	0	73.3	26.7	0	3.26
	In future	0	0	0	0	30	5
Rising of lands price	At present	0	0	83.3	16.7	0	3.16
	In future	0	0	13.3	13.3	73.3	4.60
Change in number of employed farmers from rural people and employment for touristic activities	At present	0	0	56.7	43.3	0	3.43
	In future	0	0	0	40	60	4.60

Source: Research findings

In this section, we studied the effects of construction and developing second homes on establishment of production workshops due to entering the investments. With total mean of 3.43, this variable had the maximum affecting, which is due to attraction of investment for construction of rural small-size workshops and also according to managers' opinion, there is also a possibility for attraction of more investments to establish rural small-size workshops. Additionally, in response to this question that how much construction of second homes might cause change in number of employed farmers in village and employment for touristic activities, the respondents gave high score (3.26) to measure its existing condition. Based on experts' comment, it is hoped that such a trend is increased in the future so that according to experts' view the mean score is 5 for the future condition. In other words, experts argue that many of rural people will assign their own farming lands to applicants for construction of second homes because of small size of these plots and their less efficiency in the future and they deal with activities concerning to tourism. Whereas

tourism activities are often related to servicing affairs thus they need to consuming less energy compared to farming work and/ or this reason those rural people, who have acquired the necessary capital by selling their lands, may primarily invest them in touristic related activities. For example, rural small-size workshops, which deal with preparation of handicrafts and or namely souvenir and or construct guesthouses and restaurants for entertainment of tourists, have the needed capital at their disposal. In another example, one can refer to construction of food stores. In addition, the effect of construction of second homes on price of lands was also investigated. The results indicate that the respondents have considered 3.16 for the existing condition and the probability of change with mean value of 4.6 in average in the future. In other words, experts assume a very high rate for this rising price. In fact, it is the rising price caused by increased demand for rural lands by owners of second homes. These are really the experts, who believe in that such a trend will probably increase in the future.

Table (10): Wilcoxon test for measurement of relationship among developing second homes and variable of selection of location

Variables of component of selection of location	Ordinal mean		Z-value	Significance
	Negative	Positive		
Destruction of farming lands and gardens	0	15.50	5.47	0.000
Possession of ranches and national lands	11.50	11.50	2.55	0.000
Reduced access of rural inhabitants	7	17.20	4.19	0.000
Distribution of rural texture	0	11.50	4.24	0.000
Reduced arid and bare lands	0	13.50	4.81	0.000
Leveling piedmonts	0	13.50	4.54	0.000
Indivisibility of rural certain borders due to connection of villages together	0	11.50	4.69	0.000
Occupation of rural lands	0	13.50	4.59	0.000

Source: Authors

As it mentioned, component of selection of location (topology) in fact refers to establishment and construction of second homes in arid and farming lands and quality of their development. Based on view of experts and researchers it was seen in measurement of difference among status quo and future condition for variables of component of selection of location in relation to developing second homes there is a significant difference among the present condition from the future condition in these variables (Table-10) ($P = 0.000$). According to Wilcoxon test, the calculated p-value is 0.000 at alpha level. Since this computed value is smaller than allowed error level (0.001) thus it can be implied at 99% level of confidence that there is significant

difference in the existing and future conditions among variables of selection of location so the related hypothesis to this component is confirmed. In other words, it is expected that in future we may observe further changes in this regard. As a result, it is seen that the maximum variance in future includes variable of destruction of farming lands and gardens (value = 5.47) since as demand is increased for construction and developing second homes and with rising prices for selling the lands by local people eventually it will be followed by destruction of farming lands and gardens. Likewise, way of selection of location for second homes in the arid and bare lands (value = 4.81) reflects the maximum variance for the future in this zone.

Table (11): Wilcoxon test for measurement of relationship between developing of second homes with component of rural texture

Variables of rural texture	Ordinal mean		Z-value	Significance
	Negative	Positive		
Improvement the quality of local housings (strengthening the construction of rural homes)	7	15.05	3.64	0.000
Encouragement of rural people to reconstruction of homes (housings) of rural inhabitants	11.50	13.86	3.55	0.000
Change in traditional texture of housings for rural inhabitants	0	15.50	4.93	0.000
Change and or omission of living places of rural inhabitants (e.g. rooms, storeroom, place of drying tanned products etc.)	0	15.50	4.93	0.000
Destruction of rural valuable textures	0	11.50	4.24	0.000
Encouragement of rural people to construction of housing and their rental	9.50	9.50	2.35	0.018
Internal renovation of village and finally improving the quality of life in village	9.50	12.88	1.42	0.154
Conservation, coordination, and homogeneity with rural natural environment and rural housings	0	15.50	5.20	0.000
Increase in number of residential and commercial units	0	13.50	5.09	0.000
It causes heterogeneity and conflict with rural traditional texture	0	13.50	4.63	0.000
It disrupts and destroys rural outlook and landscape	0	11.50	4.69	0.000
It causes distortion and destruction of rural outlook and landscape	0	13.50	4.63	0.000
Change and improvement in buildings and using durable materials	0	13.50	4.63	0.000
The limited access to river banks and elimination and difficult observation	0	15.50	4.93	0.000

Source: Authors

In this investigation, the component of rural texture expresses the quality of construction, changes in housing textures, conservation and or destruction of rural valuable textures, changes in number of residential units etc. the highest variances in this component are related to items of conservation, coordination, homogeneity with rural natural environment and housings of rural people (value = 5.20) increase in number of residential and commercial units in this zone (value = 5.09). Similarly, changes in living places within villages such as rooms, storeroom, place of drying

horticulture crops (value = 4.93), and the exerted changes in traditional texture of settlements (value = 4.93) are some of main and important changes in tourism model. The review on differences among the changes on existing condition with future condition in variable of rural texture component versus developing the second homes based on experts and researchers' view may suggest the existing significant difference among the existing and future conditions for these variables. Since this calculated value is smaller than the allowed error level (0.0001) thus it can be expressed with 99% level of confidence

that there is a significant difference among variables in component of rural texture in both existing and future conditions. Of course, it should be noted that among them this difference is not significant among variables of internal renovation in village and finally

improvement the rural quality of life with significance level 0.154 and higher error value than alpha level (0.05). In other words, it seems that there is no significant relationship among this variable and developing the second homes.

Table (12): Wilcoxon test for measurement the relationship among developing the second homes and component of rural structure

Component of rural structure	Ordinal mean		Z-value	Significance
	Negative	Positive		
Encouragement of rural people to sell gardens and farming lands by rural people	0	13.50	4.66	0.000
Change in lands use (conversion of farming lands, gardens, ranches into villa construction and building areas)	0	13.50	4.76	0.000
Construction of access routes	0	13.50	4.63	0.000
Increase in establishment of welfare, medical, educational, healthcare, and servicing facilities and installations	0	15.50	4.94	0.000
Increased establishment of healthcare facilities	0	15.50	4.94	0.000
It causes congestion and traffic and finally disruption in rural comfort	0	15.50	5.20	0.000
Improved quality in access routes and transport	0	13.50	4.81	0.000
Improved communications (mail, telecommunication, telephone)	0	13.50	5.09	0.000

Source: Authors

Concerning to effect of second homes on rural structure some factors like rising of establishment of medical facilities (5.20), improvement of communications (mail, telecommunication, and telephone) (5.09), congestion and traffic and eventually disruption of rural comfort (5.09) included the highest resultant changes. According to views from experts and specialists in measurement of difference among the present and future conditions of

these variables, a significant difference was acquired among the status quo and future condition for these variables (Table-12) ($P = 0.000$). Based on Wilcoxon test, the calculated p-value is 0.000 at alpha level. Whereas this computed value is lesser than the allowed error level (0.001) thus it can be mentioned at 995 level of confidence that we will see more changes in these components in the future.

Table (13): Wilcoxon test for measurement the relationship among developing the second homes with component of rural investment

Variables of component of rural investment	Ordinal mean		z-value	Significance
	Negative	Positive		
Increased number of small- and big- size industrial workshops	0	13.50	4.59	0.000
Increased number of livestock and aviculture units	0	15.50	5.05	0.000
Increased demand for selling gardens and farming lands	0	15.50	5.03	0.000
Rising of lands price	0	13.50	4.63	0.000
Change in number of employed farmers from rural people and employment for touristic activities	0	13.50	4.63	0.000

Source: Authors

Measurement of variance of investment in village indicates the changes in price of rural lands, number of livestock units, industrial workshops, and change in employment for the local people from farming to touristic activities. The highest resultant variance is seen in variable of increase in number of livestock units and aviculture (5.05) and rising of demand for selling gardens and farming lands (5.03). The results of research suggest this fact that it is more likely that in the future the local people leave working in farming workshops and lands and tend to some jobs regarding tourism. The existing significant difference among the present and future conditions in

these variables ($P = 0.000$) indicates further change in this regard in the future. Based on Wilcoxon test, the calculated P-value is at alpha level (0.000). Thus, it may be implied at 99% level of confidence that there is a significant difference among variables of rural structure component in both existing and future conditions. Overall, it should be admitted regarding third hypothesis that with respect to Wilcoxon test and the calculated P-value, there is a significant difference among variables of components of evaluation of rural effects in Baraghan County in both existing and future conditions. In other words, the results not only emphasize on these effects but

also it evaluates trend of these changes relatively intensive and severe in the future (Table-13) and for this reason it necessitates especially considering the given components i.e. selection of location, texture, structure, and investment. Thus, the most efficient

component of evaluation of effects is explained in Table (14) by means of simple linear regression and also the most effective variables of this component has been identified in descriptive part of this table.

Table (14): Simple linear regression test to recognize the most effective matrix-physical components in developing the second homes

Effects evaluation components	B-value	Beta- value	T-value	Significance level
Rural texture	1.804	0.889	19.370	0.000
Architectural style	1.57	0.511	14.268	0.000
Selection of location	0.824	0.232	10.079	0.000
Rural investment	1	0.143	7.07	0.000

Source: Authors

As it already mentioned as well in Table (14), we analyzed the components after evaluation of rural effects by means of linear stepwise regression test and acquired the following results: According to viewpoint from experts and researchers, analysis of component of effects evaluation suggests this fact that component of rural texture with value of 0.889 in villages at Baraghan County interprets the major part of variance caused by developing second homes in the studied zone. The significance test shows that this value of the interpreted variance is significant at error level (0.001). As it seen in this table, Beta coefficient is 0.889 (that is used to predict variance); namely, 0.889 unit of variance may be created per one unit change in the independent variable i.e. developing the second homes with dependent variable of rural texture. The result of linear regression indicates that developing second homes affects of texture of the studied villages and also it will be effective in the future ($t = 19.37$, $\beta = 0.889$). Rather than what it mentioned about the studied components and their affecting by developing the second homes in the table here it is briefly referred to variables, which had the maximum and minimum affecting by developing the second homes. In component of selection of location, variable of "Reduction in arid and bare lands" ($\beta = 0.949$) and significance at error level (0.001) had the maximum affecting in this component ($t = 15.87$, $\beta = 0.949$) and variable "reduced access for rural inhabitants" ($\beta = 0.103$) at error level (0.05) possessed the minimum affecting among variables in this component ($t = 2.88$, $\beta = 0.103$). In component of rural texture, the most affected variable "Conservation, coordination, and homogeneity with rural natural environment and settlements of rural people" with value of 0.936 and at error level 0.001 ($t = 14.12$, $\beta = 0.936$) and variable of "Encouragement of rural people for construction of settlement and their rental" with value 0 and at error level 0.001 was affected at the minimum level ($t = 4.61$, $\beta = 0$). Also in component of rural structure, the most affected

variable was "change in lands use" with value of 0.984 at error level 0.001 ($t = 17.42$, $\beta = 0.984$) and variable of "Increased establishment of welfare, medical, educational, healthcare, and servicing facilities and utilities" with zero- value has the minimum affecting at error level 0.001 ($t = 0.168$, $\beta = 0$). In component of investment in village, the most affected variable was "Increased number of livestock units and aviculture" with value of 0.957 at error level 0.001 ($t = 17.42$, $\beta = 0.957$) and variable of "Rising demand for purchase of gardens and farming lands" was affected at minimum level with value of 0.270 at error level 0.001 ($t = 9.83$, $\beta = 0.270$).

Conclusion and suggestions:

Tourism in the second homes at rural areas has been exposed to types of matrix- physical problems like change and destruction of farming lands, disruption, and destruction of rural outlook and landscape, and change in lands use in the villages. The expanded and uncontrolled possession in natural environment and some measure like converting the fruitful gardens into villa buildings, change in traditional texture of settlements for rural people, reduced access of rural inhabitants to residential lands, application of heterogeneous architectural materials and model in environment, distortion and destruction of rural outlook and landscape are some of consequences in this tourism model. What it should be taken further into consideration in evaluation of effects based on views of experts and researchers in the future comprise of conservation of farming lands and gardens and keeping homogeneity and coordination of rural traditional texture with the new texture that is created by second homes. The higher mean values for the related responses to variables of destruction of farming lands and gardens (5.47) and conservation, coordination, homogeneity with rural natural environment and settlement of rural people (5.20) with highest variances may indicate intensity of these changes. Using simple linear

regression test for identifying the most affected matrix- physical parameters in developing second homes signifies this fact that component of rural texture in villages of Baraghan County may interpret 0.889 of this variance as the major part of changes due to developing second homes in the studied zone and this shows that eventually the rural texture should be noticed especially for organizing matrix-physical effects of tourism in the second homes since if rural texture is not organized expertly we will observe destruction of rural perspective and as a result destruction of its touristic attractions in the future.

Suggestions:

At the end, we have purposed some suggestions for organizing the effects of second homes tourism and in other words reduction in its negative consequences in the following:

- ✓ Taking some strategies for sustainability of profit that is acquired from selling the lands by rural people in the villages and converting it in to circulating investment to create employment and income and improvement the quality of routes and especially in widening intra- and extra- rural passages to facilitate in transport and reduction of road accidents;

- ✓ Prevention from abnormal development in residential constructions in gardens and farming lands and their organization;

- ✓ The presence and continuance of supervision by public organizations as direct sponsor for tourism in the region;

- ✓ Avoidance from construction in traditional texture at villages to conserve traditional and valuable texture in the village;

- ✓ Planning and design in the course of land speculation in order to lower the land price; leveling the arid lands and the planned partitioning of them in the regions with high rate of confidence and assigning them to applicants to create second homes in villages;

- ✓ Developing the communication infrastructures and removal of the existing deficiencies in transport networks;

- ✓ Organizing and systematization of constructions (constructions inside and outside the texture of the studied villages) in order to create coordination and homogeneity with environment;

- ✓ Further control in issuance of construction license for houses and exertion some constraint in lands substructures due to shortage of land in villages

References:

1. Ardestani, Mohsen (2008), "Fundamentals of rural tourism", Publication of Ministry of Culture and Islamic Guidance.
2. Amar, Teymour (2006), "The review and analysis on developing the rural homes in the rural areas (Case study: Khorgam County from Roodbar Town", Quarterly of geographic perspective, vol. 1.
3. Baghiyani, Hamidreza (2009), "The analysis on matrix- spatial consequences of developing tourism in the second homes in rural zones (Case study: Shirkooh County- Taft Town", MA thesis, Tehran University.
4. Dadvarkhani, Fazileh & Niksirat, Masoud (2011), "Strategic planning of tourism in villages at desert areas (Case study: Kharanagh village- Ardakan town, Yazd province)", Quarterly of rural studies, vol. 4, winter 2011, p 43.
5. Edington, Jame, (2009), "Ecotourism (Ecology, recreational activities and tourism industry)", Transl. Kahrom, Ismail, Publication of Environmental Protection Organization (EPO).
6. Ghadiri Masoum, Mojtaba & Estelaji, Alireza, & Pazoki, Masoumeh (2010), "Sustainable tourism (rural & nomads)", Publication of Tehran University
7. Rezvani, Mohammadreza, Akbarian Mohammadreza, Eftekhari Rokneddin, Abdul Reza & Badri, Eyed Ali (2011), "The comparative analysis of economic effects of second homes tourism with everyday tourism on rural areas with sustainable development approach (Case study: ", Shemiranat town, Tehran University), Journal of Rural researches, vol. 4, pp 35-62.
8. Rezvani, Mohammadreza (2003), "The analysis on trend of creation and developing second homes in rural areas at northern Tehran", Journal of geographic researches, vol. 45, pp 37-59.
9. Rezvani, Mohammadreza (2008), "Developing rural tourism with taking sustainable tourism", Publication of Tehran University.
10. Sepahvand, Farkhondeh (2010), "The role of tourism in second homes for improvement of quality of life among local inhabitants (Case study: Villages from Roodbar Ghasran County- Shemiranat town)", MA thesis, Tehran University.
11. Sharpley, Julia & Richard (2001), "Rural tourism", Transl. Monshizadeh Rahmatollah & Nasirzadeh, Fatemeh, Monshi Publication.
12. Salehinasab, Zahra (2005), "The second homes tourism and its effects on rural areas (Case study: Roodbar Ghasran County- Shemiranat town)", MA thesis, Tehran university.
13. Statistical center of Iran CSI (2006), "Public census of people and housing", the general results in Tehran province.