

# Environmental Impacts of Second Home Development on Damash Village in Gilan Province, Iran

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*Abstract One of the most important issues which have received particular attention from geographers is examining the effects of spending times on taking vacation and tourism. This issue has led to development of second homes in rural and urban areas. Emphasizing the environmental effects of second home expansion, this research is aimed at studying the impact of such holiday homes on rural areas of Damash Village in Gilan Province, Iran. Present applied study was conducted based on descriptive- analytical methodology; also, the required data were gathered through two questionnaires, one designed for rural people (170 families) and the other for nonnative owners of second homes (60 families). The findings showed that second home development had by far much more negative impacts on rural communities were than the positive ones.*

**Index Terms:** Environmental Impact, Second home, Damash, Gilan,

## I. INTRODUCTION

Some factors like expansion in urban communication and transportation along with increase in vacation times and welfare levels have led to development of tourism in rural areas. Most people spend their vacations in rural areas and select tents, second homes, rental houses, motels, hotels and so on for their residential purposes. Second homes are considered as one of the most popular forms of residency in villages and suburbs which have resulted in noticeable impacts on tourism industry in rural communities [1]. Second homes have developed across Europe since 1940s but today their growth have been accelerated due to factors such as peoples' having enough income, time and getting accustomed to spending time on vacation in many countries. In fact, increase in income and leisure times in addition to improvement in transportation have encouraged people to dwell in second homes. As a result, people had been convinced to employ more recreation and vacation nowadays and tried to invest most of their money in real estate and housing [2].

Urban development in Iran has persuaded people to construct rural second homes for their vacation. Second home,

generally, have undergone acceleration in growth recently which requires geographers to examine the probable impact they would have on Iranian rural communities.

It seems that development in tourism and second homes have affected the numbers of tourists in rural areas; thus, it is of crucial importance to study the attitudes of local people and the factors affecting their perceptions of such communities if we expect to have rural environment and tourism industry supported. Aligholizade et al. (2010) state that we are to review sustainable tourism plans in rural area and adjust them to suit local people's needs because some locals might attribute the socio-environmental changes and damages to tourism development, which affects the locals-tourists interaction (p. 36) [3]. Other researchers have suggested that development in local tourism would be completely dependent on locals' permission.

It is worth mentioning that sustainable development necessitates the optimal exploitation of tourism facilities. Although the process of obtaining sustainable development is of great complexities [4]. There are so many solutions to reaching this purpose. May (1991) enumerates six factors which direct towards sustainable tourism development as following:

- Understanding environmental values and potentials more properly.
- Possessing comprehensive information on environment, its values, local potentials and external impacts.
- Paying closer attention to regional outcomes of development plan.
- Making environmental exploitation on the basis of Development Plan Assessment.
- Enhancing environmental indices to control environmental phenomena.
- Creating development plan with regard to the highest environmental qualities and future predictions [5].

Fennel (1999) believes that the effects of regional tourism depends on many factors such as the degree of regional development, infrastructures, the level of management and planning, destination, scale, types of tourism activities and tourists purposes [6].

Rural tourism is defined as all activities related to tourism in villages which includes rural traditions, handcrafts, and customs. In addition, it involves agritourism, green tourism, farming tourism, ecotourism, food (or culinary) tourism and hunting tourism [7].

"Second home" is literally composed of 'home' which means the 'place where we live and 'second' which means 'a fraction or unit of time' and 'after the first in order' (Kraelly, 2000).

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Geographically, second homes are defined as rural dwellings used by its owners for leisure or holiday purposes or even for rent and business which are not the usual or permanent place of residence for the owner [8]. (Salehinasab, 2005). These sorts of luxury and expensive homes afford good view of natural scenes which makes them more attractable (ibid).

Since second home tourism is considered as one of the resources for construction and building, it is expected that agricultural land uses are regarded as one of the most significant outcomes of tourism development of second homes in rural areas. Accordingly, ownership of such dwellings can be divided into two categories of 'rented for a long time (temporary)' or 'owned second homes (permanent)'. In addition to urban people, immigrants from villages who have settled down in cities sometimes spend their leisure and vacations in second homes inherited from owners. Therefore, it can be claimed that second homes refers to homes that are constructed by temporary rural dwellers (town-dwellers including immigrants living in towns) who spend their leisure and vacations for a short period of time in villages or suburbs.

Second homes are defined in dictionary of human geography as residences which are rent or bought by a household. These dwellings called weekend or vacation homes are built in rural and peripheral areas and used for leisure and vacation purposes.

Second homes are to be examined with regard to relevant academic majors. Different academic majors have different perspectives on second homes although there are many similarities among attitudes towards this phenomenon. For example architects, geographers and sociologists are of different attitudes towards second homes. An architect regards items related to the form and construction of second homes like building materials, extent of building strength, infrastructure, building map and so on. A geographer, due to this fact that they keep relevant issues in perspective, tries to expound matters like distribution, impacts, the intensity of building zone and spatial modeling of second homes. Economists, on the other hand, take into account problems like the economic impacts of second homes, change in land price, change in incomes of rural people, and change in the taxes they pay on second homes. Finally, sociologists mostly discuss the matters related to the cultural change in rural areas, change in the rural population, the impact of such residences on locals' behaviors and so on.

Second homes have been expanding during recent years all around the world but their growth is more considerable in Europe and North America. Benjamin (2004) states the number of second homes in US has increased by 3.1 % (from 1652546 (1.87 %)). This number increases when we consider the number in Canada where second homes grew from 4449000 in 1973 to 605000 in 1992 [9]. The situation in England is the same as the number of second homes has increased from 229186 in 2005 to 245384 in 2009, which means a rise by 2.6 per cent (Bayle, 2010). Switzerland has 185000 second homes; however, this country has 419000 units [10].

Regarding the growth of second homes in rural areas, it can be claimed that Iran has experienced the same situation. The exact number of these residences is not determined yet but studies and observations estimated that there would be an increase in the number of second homes built, especially in the regions with good climate and appropriate tourism opportunities like northern regions and Alborz or Zagros

mountains slopes. These areas possess a moderate climate and provide great view of forest, mountains, and the sea. Evidences proved that second homes distribution was more observable in northern regions compared to those of other regions. Moreover, second homes in the West and Northwest have the second distribution in Iran. It is of worth mentioning that tourism and second home development have influenced many aspects of rural communities. These impacts could be divided in three categories related to the sustainable development including economy, society and environment. However, there are positive and negative effects for tourism development in rural communities.

Evidences have represented that unplanned development in second homes have caused so many problems that finally culminated in economic, social, environmental and cultural damages to rural communities[8]. Furthermore, findings have shown that second homes would have leading importance in academic researches due to their widely spread across the cities. Therefore, present research aims at examining the impacts of second home development on rural community of Damash Village.

Damash village is one of the environs of Roodbar Township which is located at the Northeast of Amarlo and 7 km far from Jirende in Gilan Province in Iran. Second homes have been widely spread in Damash recently and consequently have had profound impact on environmental, economic and social aspects of this vacation resort. Regarding the issues aforementioned, the question arising is that whether or not such holiday homes impact negative or positively on rural communities.

## II. MATERIAL AND METHOD

This research which was conducted on the basis of a descriptive-analytical methodology examined the outcomes and impacts of second home development in rural areas. Doing so, the research framework was firstly designed through appropriate sources and then the environmental impacts of such dwellings were studied by the use of field researches.

The district of study Damash village is one of the environs of Roodbar Township which is located at the Northeast of Amarlo and 7 km far from Jirende in Gilan Province. Research population included all permanent residents of village. At the time of the fieldwork, there were roughly 336 people in Damash village, of which 374 female applicants and 52 male applicants were selected randomly (Table 1). Questionnaire and interview were employed, also, as fieldwork to gather data. It is to be mentioned that as the unit of research analysis included village and father of family (who resided in Damash and owned a second home), two questionnaires were utilized for collecting data: the questionnaire of resident family and the questionnaire of second home owners. Depending on the type of data, scale of variables and work purposes, the researchers employed inferential statistics like One-sample T-test and Friedman Test in addition to descriptive statistics such as mean in analyzing the data.

Table (1) frequency distribution of samples based on gender categorization

Gender	Sampling Number	Frequency
Female	274	81.5 %
Male	52	15.5%
Unanswered	10	3 %
Total answers	336	100%

Table 1 shows the distribution frequency of applicants which is categorized based on gender factor. It shows that women form 81.5 % of applicants while men include just 15.5 %. In addition, 3 per cent of applicants didn't mention their gender intentionally.

III. FINDING

Regarding table 2 and t-test results, it can be claimed that there was significant difference (significance level of  $\alpha = 0.01$ ) between theoretical and observed means. Considering this fact that observed mean was higher than the theoretical one, it could be concluded that applicants confirmed all items related to the environmental impacts of second homes; also, Friedman test (as stated in table 3) showed that there was significant difference between the prioritization of environmental factors of second homes, namely Chi-square (28.938) at 0.05 significance level implied different prioritization for environmental impacts. Therefore, factors like 'second home development, horizontal and skeletal development at mountain districts, change in land uses, damages to natural views like mountains or jungles through garbage fallen out by tourists, rubbish dumping in the environment, change in vegetation, much more regional noise, unorganized construction, damage to farms and jungles and finally water contamination are of top priorities in environmental issues. Other factors are represented in the table respectively.

Table (2) One-sample T-test for environmental impacts of second homes

Items index	Theoretical mean = 3					
	F	M	SD	T-value	df	Sig.
Land use	336	4.0298	1.02171	18.475	335	.000
damages to mountain views by garbage	336	4.0238	.96477	19.452	335	.000
Damage to farms and jungles	336	3.9137	.96273	17.397	335	.000
water contamination	336	3.8929	1.01355	16.147	335	.000
change in vegetation	336	3.9643	.97057	18.212	335	.000
Much more regional noise	336	3.9256	1.09971	15.428	335	.000
Damage to mountain views	336	3.9435	.96495	17.922	335	.000
rubbish dump in the environment	336	3.9821	1.01906	17.666	335	.000
unorganized construction	336	3.9256	1.06664	15.906	335	.000

Table (3) results of Friedman Test for periodization of Environmental Impacts in second homes

Variable	Mean Rank	
Land use	5.16	First
damages to mountain views by garbage	5.16	First
Damage to farms and jungles	4.83	Seventh
water contamination	4.78	Eighth
change in vegetation	5.04	Third
Much more regional noise	5.01	Fourth
Damage to mountain views	4.98	Fifth
rubbish dump in the environment	5.09	Second
unorganized construction	4.96	Sixth
horizontal development at mountain districts	5.16	First
Chi- Square		28.938
Asymp. Sig.		.000
a. Friedman Test		

As it is seen in table 4, negative impacts of second homes in environment could be categorized as second home development, horizontal and skeletal development at mountain districts, change in land uses, damages to natural views like mountains or jungles through garbage fallen out by tourists, rubbish dumping in the environment, change in vegetation, much more regional noise, unorganized construction, damage to farms and jungles and finally water contamination. Furthermore, it was revealed that second home development had no positive impact on environment in research district.

Table (4) Environmental disadvantages of second home development

Domain	Disadvantages
Environmental Outcomes	Land use
	Damages to mountain views by garbage
	Damage to farms and jungles
	Water contamination
	Change in vegetation
	Much more regional noise
	Damage to mountain views
	Rubbish dumping in the environment
	Unorganized construction

IV. CONCLUSION

Being prone to environmental damages, rural areas had been negatively impacted by environmental issues as second home development and unplanned tourism for a long time. Therefore, second homes and tourism can influence on environment and rural communities in different ways but this issue mostly depends on tourism types and the interactions of tourism with economic, social and cultural activities. However, it should be noted that second homes would not have naturally any positive impact on rural communities, rather effective management is required to facilitate the tourism in second homes.



In addition, it seems that we need “management of tourism impacts” to ensure that this sustainable industry would positively influence on environmental, social and cultural aspects of local people in rural areas. Thus, sustainable development and management of tourism phenomenon can both maximize the positive effects and minimize the negative effects of this phenomenon. Some factors are influential on measuring sustainable development of tourism, of which we can name local people’s satisfaction, security of tourists, employment, social pressures, tourism attraction, local cooperation, diversity of economic activities, the level of social welfare, local supervision and environment preservation. It is practically possible to represent a model which both get benefits from developing tourism by deriving tourists’ satisfaction and prevent environmental, cultural and social damages to this widespread industry. Based on the findings of this research, recommendations to the local community are proposed in the following section.

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