



Munich Personal RePEc Archive

## **Local Residents' Preferences for Second Home Tourism Development Policies: A Choice Experiment analysis**

Asgary, Ali and Rezvani, Mohammad Reza and Mehregan, Nader

York University, University of Tehran, Bu-Ali Sina University

15 April 2011

Online at <https://mpra.ub.uni-muenchen.de/29703/>  
MPRA Paper No. 29703, posted 22 Mar 2011 13:49 UTC

## LOCAL RESIDENTS' PREFERENCES FOR SECOND HOME TOURISM DEVELOPMENT POLICIES: A CHOICE EXPERIMENT ANALYSIS

**Ali Asgary**  
*York University*

**Mohammad Reza Rezvani**  
*University of Tehran*

**Nader Mehregan**  
*Bu-Ali Sina University*

---

*This paper is concerned with the preferences of the rural residents living in areas subject to rapid second home tourism development in Iran. Since second home development could have positive and negative social, cultural, economical and environmental impacts for local residents, planning policies should take into consideration public opinions and preferences for future planning and developments. Using a choice experiment method, we attempt to estimate the values that the rural households in Tehran province would place on different impacts of second home development policies.*

---

**Key words:** *second home, tourism, choice experiment method, Tehran.*

JEL Classification: *L83, M1, O1*

### INTRODUCTION

Second home tourism has been a subject of study by researchers from different fields such as geography, tourism, planning, economics, and sociology over the past three decades (Coppock, 1977; Williams and Hall, 2000; Williams and Hall, 2002). Increasing accessibility and mobility and elevated levels of leisure associated with second homes have significantly contributed to the growing interests and importance of this type of tourism and line of research. In developing countries where big cities are facing major socio-economic and environmental problems,



second homes play a key role in more affluent residents' decision to build or purchase second homes in rural areas for weekends, holidays, and summer vacations. While this seems a rational and reasonable choice for the second home owners and users, second home development and associated uses have various impacts on local and rural communities that need to be understood and addressed (O'Reilley, 1995, Williams *et al*, 1997; Hall *et al.*, 2003). Although a few studies have tried to examine the local impacts of second homes to native residents, there are needs for further analysis of such impacts especially in developing countries (Williams and Hall, 2000; Muller *et al*, 2004). These impacts and other related issues have not been fully explored and addressed, especially within the developing countries context like Iran where there has been a huge expansion in the second home ownership in the past two decades with limited development controls in place. Most studies suggest that a great deal of empirical investigation is required to elucidate the nature and impact of second homes on host communities, not only in the predictable second home hot-spots such as lakes and sea coasts but also in the rural areas, where growing number of second homes are being developed (Visser, 2003).

Although a large number of towns and villages along the Caspian Sea coastlines, and increasingly in its interiors, have grown significantly as a result of second home development, very little research have been done concerning this phenomenon in Iran. Recognition of the impact that second homes create for host communities has recently started to draw attention at the highest levels in planning and policy making in Iran. There is a growing interest from planners and policy makers to control and manage this growth by imposing various development controls. This study aims to measure local residents' preferences for alternative second home development policies and contribute to the existing research in this field. The rest of this paper is organized as follows. Section two provides some backgrounds to the second home concepts and their local impacts. Section three introduces the study area. Section four explains the choice experiment design and the survey instrument. Findings are presented in section five and, finally section six concludes the paper with some policy recommendations.

## **SECOND HOME IMPACTS AND DEVELOPMENT POLICIES**

Marsden (1977) has classified second homes into four categories: private homes often visited at the weekend and on holidays by the family and non-paying guests; commercial holiday homes, which are used as private holiday homes but are let at high season to defray costs; intermittently comprised private holiday homes, often purchased for retirement but meanwhile let out as commercial holiday homes, apart from occasional family use; commercial holiday homes, owned as an investment and usually let and managed by an agent. Studies show that most of second homes are used by owners. While second home development is not limited to rural areas and it might include homes in urban areas (Muller et al, 2004; Akal, 2010), most of the second homes have been developed and used in rural areas.

Impacts and issues related to second homes were first discussed in the literature during the 1970s by Coppock (1977), Marsden (1977), Crofts (1977) and developed further by Nijkamp et al (1993) and Muller et al. (2004) among others. Second home developments could have significant positive and negative economic, socio-cultural, and environmental impacts on local communities. Various factors such as the second home users and forms of use, the extent and type of development, and the local capacities determine the size and types of the impacts.

As has been demonstrated at length over more than two decades of detailed research second home development has had wide impacts (Sharpley and Telfer, 2002; Gronau, & Kaufmann, 2009). The past decade has seen the impacts of second homes to host regions in overwhelmingly negative terms (Gallant and Tewdwr-Jones, 2001; Mihalic 2002; Richins and Scarinci, 2009). Important here is that these negative impacts are seen as near-generic in terms of second home development. Most of the studies have argued that second home development holds significant implications for the host or local communities, not only in terms of job and income generation and capital transfer, but also the distortion of land, house and other prices in local markets (Williams and Hall, 2002; Visser, 2003). For example, Gartner (1987) and Riebsame et al (1996) demonstrated that the price of agricultural land, and that of rural towns and hamlets, may be inflated by second home development.

Second home development could also have particular socio-cultural impacts on the destination communities. For example, it has been noted in

the literature that many of the second home owners and users have different perceptions of rural life, and that these perceptions may conflict with everyday practices in, and the values of, local communities. This conflict may be limited to personal disputes between neighbors or may spill over into community-wide political conflicts over such issues as development permissions and landscape management (Phillips, 1998). The impacts of second home tourism on local communities' culture and social structures are very complicated and depend very much on the type and users of second homes. The influx of more affluent urban residents can lead to resentment within the local community and to a dilution of local culture. In some areas, second home developments can cause displacement of local residents due to increases in property taxation and increasing consumer price levels (Nordin, 1993). Moreover, the local population may also feel displaced by the second homeowners in respect of the time-space use of social services and recreational areas (Aronsson, 2000). Displacement risks are lower in areas where second homes are mainly converted former permanent houses. Depopulation provides the space for newcomers (Muller, 1999).

On positive socio-cultural impacts side it is argued that second home owners regularly visit their homes and care about the area especially when they have family links (Kaltenborn, 1997). This means that second home owners adapt to local culture and traditions and make efforts to integrate with local communities. Place attachment of second home owners is a long term process as it takes years for a second home owner to be considered a legitimate part of the local community (Wall, 1997). Once accepted second home ownership contributes to the protection of local culture by simply upholding settlement structures and the landscape (Grahn, 1991).

Second home development has its own positive and negative economic impacts for local population. Second home development entails economic benefits for the local population by diversification of the economy, income and job creation. Recently second home development in rural areas has been considered as an alternative to agriculture and an approach to diversify the rural economy (Fleischer and Tchetchik, 2005). Second home development could enhance infrastructure development, consequently benefiting the agricultural sector (Fox and Cox 1992). However, studies have shown that the two sectors compete over labor and land (Hermans, 1981). Second home is not stimulating the development of those businesses usually considered part of the tourism industry.

Instead enterprises providing building material, furniture, household equipment and everyday commodities benefit primarily from second home tourism. Therefore, second home tourism might not contribute significantly in creating new jobs, but does maintain and secure already existing jobs. Even tourism enterprises may profit, due to the additional demand formed by second homeowners and often their accompanying visitors. Hence, second home contributes to maintaining the service supply in remote rural areas by maintaining local markets without necessarily stimulating new business development. Second home development, however, is not able to compensate for the spending power of permanent residents lost through rural depopulation. Furthermore, as homeowners are closely attached to the area surrounding their second home, trips occur without further marketing and promotion.

Second home development could reduce the availability of housing for local people due to increasing land and property values and development restrictions. It is argued that the demand for second homes in popular rural areas raises the cost of housing to the extent that local people are no longer able to afford to buy houses (Cho et al. 2003; Kayat, 2010).

This mix of positive and negative socio-cultural, environmental, and economic impacts of second home developments, makes planning and policy making a rather difficult task. In order to maintain a balance between the conflicting impacts of second homes on rural areas, planners and policy makers need to take into consideration the rural residents preferences. Therefore, the challenge facing planners is the need to design policies that can balance between the demands of wealthier urban residents wishing to develop or buy second homes in the rural areas and the preferences of local communities. Obviously, local residents understand and appreciate the positive impacts of second homes and do not prefer planning policies that eliminate such opportunities. Finally, as compared to other forms of tourism, second home tourism may be seen as a valuable contribution to sustainable tourism development in rural areas.

With all these impacts second home development has been a challenging concept in tourism and development planning (Wolfe, 1970; Paniagua, 2002; Muller et al, 2004). Some consider second home development as a result of fundamental changes in industrial societies (Coppock, 1977) that led to higher incomes, fewer working hours and longer leisure times (Sharpley and Telfer, 2002). These changes have caused significant growth in second home development (Williams and

Hall, 2000). Moreover, there have been economic incentives behind second home developments since many second home buyers look at them as an investment. A wide variety of land development policies and planning strategies have been designed for achieving sustainable and responsible tourism and second home development. These include implementing a range of innovative zoning practices, growth management programs, environmentally friendly building design and construction standards, development impact fees, and property taxes (Inskeep, 1987; Sweeting, Bruner, and Rosenfeld, 1999, Hoogendoorn and Visser, 2004; Kelly et al., 2007). In combination, these strategies are designed to minimize the negative impacts of second home tourism on local natural, built and socio-cultural environments. These policy options could limit growth of second homes and subdivisions in certain areas and encourage the creation of more compact and mixed development patterns of second homes that minimize travel distances, facilitate walking and cycling, and reduce the demand for energy, water services and building materials (Inskeep, 1987, 1991; Quilici, 1998). For instance, by increasing the set back rules from sensitive environmental elements such as rivers, streams and landscapes, significant decreases in the levels of environmental impacts may be possible. The main challenge especially in developing countries is that development and planning rules are not established and fully implemented. However, it has been argued in the literature that such forms of developments are potentially more feasible in second home tourism than in other urban settings because second home owners and local residents may be more aware of and concerned with the quality of the environmental amenities they experience in such places (Bauer and Chan, 2001).

In this context, the main aim of this paper is to make a contribution towards addressing the impacts of second home development through the lens of local residents' preferences for various development alternatives. The analysis of rural residents' preferences for second home development policy options will use the random utility theory developed to estimate non-market values for environmental goods and policies (Adamowicz et al., 1998). Specially, this study will present the use of choice experiments as a mechanism to analyze preferences of local residents of rural areas impacted by second home developments.

## **THE STUDY AREA**

Rudbar Ghasran County with an area of about 373 square kilometers is situated in the northern periphery of Tehran and in the foot of Alborz Mountains. It consists of 22 villages and one town. In total these villages have 3304 households with a population of 11732. There is a range of 30 to 90 kilometers of distance between these villages and Tehran. Jajrud River passes through the region and Latian Dam supplies more than 800,000 cubic meter water everyday for Tehran (35% of the total water consumption in Tehran). Due to its mountainous and attractive landscape, clean air, moderate summer and snow covered peaks; it attracts tourists, especially in the summer months. Second home ownership is becoming the dominant forms of tourism in the area (Rezvani, 2003). Out of 14787 homes, 71% (10540) belongs to the second home owners. Total number of second home dwellings has increased from 1050 in 1983 to 3162 in 1993 and to 10540 in 2004. Massive physical expansion of Tehran and increase in the environmental pollution has played significant roles in second home growth in this rural setup. On average, second home owners stay around 65 days in their homes each year. Around 10% of the second homes are within the existing villages, 76.7% adjacent to the existing villages and 13.3% are in the surrounding areas of the villages. Owners of the second homes are normally the high income families of Tehran, majority of them come from the high income districts of the city.

## **CHOICE EXPERIMENT DESIGN**

The choice experiment method (CEM) is a multi-attribute preference elicitation technique first used under the conjoint analysis name by market researchers to evaluate potential new products and new markets for existing products (Louviere, 1998,). The CEM is considered as a preferred method when socio-cultural and environmental attributes are involved (Baarsma, 2003). The CEM is an easy, flexible, reliable and useful method and as such has attracted more researchers and decision makers (Powe et al., 2005) and it is often regarded as the most feasible method in valuation of multi-attribute services and decisions (Johnson and Desvousges, 1997). The CEM enables researchers to estimate the value and impact of several attributes on decisions in one study. This is useful because many policies are more concerned with changing attribute levels (Hanley et al., 1998). The CEM allows respondents to



systematically evaluate trade-offs among multiple or different types of attributes (environmental and non-environmental) that may encourage respondent introspection and facilitate consistency checks on response patterns (Johnson and Desvousges, 1997). Finally, studies show that the results of this method are very close to individuals' real world choices and preferences (Louviere et al., 2000; Hanley et al., 2003). There has been significant progress in the use of CEM in tourism context in recent years such as recreational destination choices (Louviere and Timmermans, 1990; Claveria and Datzira, 2009), tourism packages (Dellaert et al., 1995), rock climbing (Hanley et al., 2001), recreation demand (Hanley et al., 2002), ecotourism development (Hearne et al., 2002).

Theoretically, the CEM is based on the Lancaster demand theory and the random utility theory (RUT) (McFadden, 1974; Luce, 1999). According to the Lancaster theory individuals' decision to choose between different goods, services or alternative policies depend on the services that good or option provide to them (Lancaster, 1966). In other words Lancaster argues that the utilities that individuals obtain from goods or alternative options are not because of the goods or options themselves but because of their attributes (Karousakis and Birol, 2007; Dodds and Butler, 2010). The RUT is based on the hypothesis that individuals will make choices based on the characteristics of the good as objective components along with some degree of randomness as random component (Snowball and Willis, 2006). Accordingly, the choice among two or more alternatives can be modeled using a random utility model (Peters et al., 1995; 2000; Carlsson and Martinsson, 2001).

According to Hanley et al. (1998) researchers can infer four pieces of information from choice experiment method. First, which attributes significantly influence choice; second, the implied ranking of these attributes; third, the marginal willingness to pay (WTP) for an increase in any significant attributes; and forth, implied WTP for a program which changes more than one attribute simultaneously.

The choice experiment method was implemented in this study to elicit local residents' preferences for various planning and policy options with different potential environmental, social, cultural, economic, and housing and land prices attributes. A typical choice experiment design consists of three main components (Louviere et al., 2000; Green and Srinivasan, 1990): 1) defining attributes and their levels, 2) creating scenarios, 3) determining choice sets and obtaining preference data.

To define the attributes first a list of desired policy impacts was developed on the basis of a literature review of the impacts of second homes and consultation with experts and preliminary interviews with residents in the study area. In order to keep the total number of attributes as low as possible to reduce the complexity of choices 4 impacts or attributes and a price attribute were considered: (1) impacts on local environmental conditions (air, noise, waste), (2) impacts on local social conditions, (3) impacts on local economic conditions, (4) impacts on local cultural conditions, and (5) impacts on land and property values. All attributes were specified at 5 levels, where the mid level of each attribute represented the current condition and the other 2 levels showed the states of incremental improvement or deterioration of conditions. These levels, except for the impacts on land and property values, were described in qualitative terms due to uncertainty over the precise impacts of policies. The land and property value attribute comprised of 5 levels from no change to 50 or 100 percent increases and 50 to 70 percent decreases.

The third step in CEM involves creating choice scenarios. If the number of attributes and levels is small, all possible combinations could be used in the experiment. When the number of attributes and/or the number of levels increases the number of possible different profiles increases exponentially (Van-Poll, 1997; Curtis and Kokotos, 2009; Brida et al., 2010). Five attributes each with 5 levels provide a large combination of policy alternatives. Therefore, an orthogonal design technique was used to reduce the total number of choices to a practical number (Louviere, et al., 2000). This technique selects a subset of all possible factorial combinations, which will have proper representation of the full set (Aas et al., 2000). After using this technique and removing some of the unreal choices 24 alternatives were derived and used in the questionnaire.

After scenarios are extracted CEM researcher should prepare multiple choice sets that comprise two or more options to be presented to the responders. In this study, there were three options in each choice set. The choice sets were constructed from the design and they were randomly divided into 8 blocks. Each respondent was thus presented with 4 choice cards, each containing three alternatives. The respondent then indicated their preferred choice on each card. An example choice scenario and attributes is shown in Figure 1.

The survey questionnaire consisted of three parts. The first part included some questions to measure respondent's general attitudes toward

the economic, social, cultural, and environmental impacts of second homes and their life satisfaction. The second part dealt with socio-economic characteristics of respondents (e.g. age, sex, income and so on). The third part contained the choice experiment questions designed to elicit respondents' preferences for alternative second home policies. The data collected for this study are drawn from a sample of local residents (150) randomly selected from different villages in the study area.

Direct interviews by trained interviewers were carried out in the fall 2007. Interviewers explained the choices for the respondents to make sure that they understand each policy option clearly. Prior to the main survey, questionnaire was pre-tested to discuss respondents' understanding of the questions. This was very important since majority of the respondents had low level of education. Sample consisted of 150 rural residents that were randomly selected from 8 villages in the County from a local list of households provided by the village counties. Table 1 shows the demographic characteristics of the sample.

**Figure 1** Sample choice card

| <p><i>“Consider that the government intends to set some planning rules and construction policies for second home tourism development in this area. Some of these policies would probably increase development and construction of second homes and some other policies would probably decrease them. In the following cards you are given three different second home policies and their potential impacts on local environmental conditions, local social conditions, local cultural conditions, and local land prices. Please carefully compare these three alternative policies and choose one that best meets your preferences”</i></p> |   |   |  |
|---|---|---|--|
| <b>Attributes and impacts</b>   | <b>Second Home Policy 1</b>                     | <b>Second Home Policy 2</b>                     | <b>Second Home Policy 3</b>                |
| <b>Local environmental conditions (such as noise, air, and water pollution)</b>   | Worse than now                                  | Much worse than now                             | Much better than now                       |
| <b>Local Social Conditions (such as social services )</b>   | Much better than now                            | Better than now                                 | Much worse than now                        |
| <b>Local Economic Conditions (such as income and employment,)</b>   | No change                                       | Better than now                                 | No change                                  |
| <b>Local Cultural Conditions (such as local traditions and values)</b>  | Better than now                                 | Better than now                                 | Worse than now                             |
| <b>Local housing and Land Values</b>  | 70 % reduction in local housing and land prices | 100 % increase in local housing and land prices | No change in local housing and land prices |
| <b>I will choose</b>  |   |   |  |

**Table 1** Selected demographic characteristics of the sample population

| <b>Variables</b>  | <b>Mean or percentage</b>      |
|---|--------------------------------|
| Years living in the area (Mean)   | 39.24                          |
| Age (Mean)  | 41.9                           |
| Gender (per cent men)   | 89.3                           |
| Household size (Mean)   | 4.55                           |
| Employment status (employed full time, employed part time, unemployed, retired, other- %) | 40.3%, 38.3%, 1.3%, 9.9%, 5.7% |
| Education (less than high school, high school diploma, more than high school)             | 57.7 %, 30.3%, 10%             |
| Monthly income (Mean)   | US \$ 400                      |

## ANALYSIS AND RESULTS

As mentioned earlier individual's preferences for various alternatives goods, services, and policy options could be modeled and estimated using the Lancaster demand theory and the random utility theory (RUT). The utility function of individual  $i$  and its relevant indirect utility model for second home development policies can be denoted as:

$$\begin{aligned}
 U_{ij} &= V_{ij} + \varepsilon_{ij} \\
 &= V_i(\mathbf{x}_j, T_j) + \varepsilon_{ij},
 \end{aligned}
 \tag{1}$$

where  $U_{ij}$  indicates individual  $i$ 's total utility derived from second home policy alternative  $j$ ;  $V_{ij}$  indicates the objective component of the individual utility;  $\varepsilon_{ij}$  is the random component that includes households characteristics;  $\mathbf{x}_j$  is a vector of attributes in policy alternative  $j$ ; and  $T_j$  is the change in land and property prices for alternative  $j$ . The probability that individual  $i$  will choose second home development policy  $j$  in choice set  $C$  can be expressed as:

$$\begin{aligned}
 P_{ij} &= \Pr(U_{ij} \geq U_{ik}; \forall k \in C) \\
 &= \Pr(V_{ij} - V_{ik} \geq \varepsilon_{ik} - \varepsilon_{ij}; \forall k \in C),
 \end{aligned}
 \tag{2}$$

and the log-likelihood function is as follows:

$$\ln L = \sum_i \sum_j d_{ij} \ln P_{ij},$$

where  $d_{ij}$  is the dummy variable of choosing (choosing policy alternative  $j$ : 1, choosing any other: 0). Assuming that the error term  $\epsilon_{ij}$  are independently and identically distributed with an extreme-value distribution, implies that the probability of any particular policy alternative  $j$  being chosen as the most preferred can be expressed in terms of the logistic distribution (McFadden, 1974). This probability can then be expressed as:

$$P_{ij} = \frac{\exp(\sigma V_{ij})}{\sum_j \exp(\sigma V_{ij})}, \quad (3)$$

Sigma is a scale factor for the extreme value distribution of the errors.

The objective component of the utility can be assumed, for example, to be:

$$V(x, T) = \sum \beta_p x_p + \beta_T T \quad (4)$$

where  $x_p$  is the attribute of the second home policy alternatives;  $\beta_p$  and  $\beta_T$  are coefficients.

The coefficients are estimated by the maximum-likelihood optimization model using Equations (2)–(4). Equation (4) is differentiated into Equation 5:

$$\sum_p \frac{\partial V}{\partial x_p} dx_p + \frac{\partial V}{\partial T} dT = dV. \quad (5)$$

When the utility is fixed at the present level ( $dV = 0$ ), and the attributes other than  $x_p$  are fixed at the present level ( $dx_k = 0; \forall k \neq p$ ) in Equation (6), marginal willingness to pay (MWTP) for attribute  $x_p$  is described by Equation (6).

$$MWTP_p = \frac{dT}{dx_p} = -\frac{\partial V}{\partial x_p} / \frac{\partial V}{\partial T} = -\frac{\beta_p}{\beta_T}. \tag{6}$$

**Table 2** Binary logit regression results

| Variable                       | Coefficient | Z-statistic | Significant level |
|--------------------------------|-------------|-------------|-------------------|
| Constant                       | -2.493005   | -9.140052   | 0.0000            |
| Local Cultural Conditions      | -0.078678   | -1.940572   | 0.0523            |
| Local Environmental Conditions | 0.126637    | 3.072114    | 0.0021            |
| Local Social Conditions        | 0.064428    | 1.574207    | 0.1154            |
| Local Land Prices              | 0.471772    | 11.01314    | 0.0000            |
| Log likelihood                 | -919.4896   |             |                   |
| Restr. log likelihood          | -989.4603   |             |                   |
| LR statistic (4 df)            | 139.9412    |             |                   |
| Probability(LR stat)           | 0.000000    |             |                   |
| Sample (adjusted):             | 1 1871      |             |                   |
| Included observations:         | 1560        |             |                   |

Respondents' preferences for different second home policy options were estimated using a logit regression. It has to be noted that we removed the impacts on local economic conditions from this models because of its close correlations with land and property value. The results are presented in Table 2. All regression coefficients are significant. The signs of all the attributes except for the "local cultural impacts" are positive. The results suggest that respondents prefer choices that increase local land and property values, local environmental quality, and local social conditions. It was found that respondents did not prefer policies

that improve local cultural conditions. The significance of the local land prices as well as local environmental quality reveal that respondents care, to a great extent, about the second home policy options that increase the local land values and protect the environmental quality. Policies that improve social conditions are also important in respondents' choices, but not as important as the other two attributes. This means that these attributes significantly affect respondents' decisions.

Table 3 presents the MWTP values for each attribute based on the per cent changes in the local land and property values. These marginal values could be used to rank the importance of other attributes relative to the land and property values. It also shows respondents' willingness to pay for each attribute. According to these findings respondents are willing to pay more for positive changes in the local environmental quality and local social conditions, but are not willing to pay for improvement in cultural improvements. This might be due to the fact that they might consider the current amount of cultural situation satisfactory.

**Table 3** Marginal effects

| <b>Variable</b>                | <b>Marginal effects</b> |
|--------------------------------|-------------------------|
| Constant                       | -5.28434                |
| Local Cultural Conditions      | -0.16677                |
| Local Environmental Conditions | 0.268428                |
| Local Social Conditions        | 0.136566                |
| Local Land Prices              | 1                       |

## **CONCLUSION**

This paper examined rural residents' preferences for hypothetical second home development policy measures using a choice experiment method. The main conclusions of this study are as follows: (1) sample rural residents if given the chance to give their voices on second home development policies, would choose policies that have the highest impacts on their property values; (2) people also care very much about the state of natural environment and highly prefer policies that improve or protect the environment; (3) With less but still significant values, local residents also prefer second home policies that take care of social aspects of local residents; (4) cultural factors are not only important for rural



residents preferences for second home policies; (5) the MWTP values show that rural residents are willing to pay for protecting the nature and social conditions by choosing second home development policies that less positive impacts on residents' property values.

These conclusions could have implications for the design and implementation of second home development policies and plans. For example, a policy with lots of emphasis on protecting local cultures is less preferred than one which has little emphasis on local culture. A policy which emphasises on environmental protection is more preferred as policies that put more emphasis on improving social conditions.

## REFERENCES

- Aas, O., Haider, W. & Hunt, L. (2000). Angler Responses to Potential Harvest Regulations in a Norwegian Sport Fishery: A Conjoint-Based Choice Modeling Approach. *North American Journal of Fisheries Management*, Vol. 20, pp.940-950.
- Adamowicz, W., Boxall, P., Williams, M. & Louviere, J. (1998). Stated Preference Approaches for Measuring Passive Use Values: Choice Experiments and Contingent Valuation. *American Journal of Agricultural Economic*, Vol. 80, pp.64-75.
- Akal, M. (2010). Economic implications of international tourism on Turkish economy. *Tourismos*, Vol. 5, No.2, pp.131-152
- Aronsson, L. (2000). *The Development of Sustainable Tourism*. London, Continuum.
- Baarsma, B.E. (2003). The Valuation of the Ijmeer Reserve Using Conjoint Analysis. *Environmental and Resource Economics*, Vol. 25, pp.343-356.
- Brida, J.G., Barquet, A. & Risso, W.A. (2010). Causality between economic growth and tourism expansion: Empirical evidence from Trentino-Alto Adige. *Tourismos*, Vol. 5, No.2, pp.87-98.
- Carlsson, F. & Martinsson, P. (2001). Do hypothetical and actual marginal willingness to pay differ in choice experiments? Application to the valuation of the environment. *Journal of Environmental Economics and Management*, Vol. 41, pp.179-192.
- Chhaplin, D. (1999). Consuming work/productive leisure: the consumption patterns of second home environments. *Leisure Studies*, Vol. 18, pp.41-45.
- Cho, S., Newman, D.H. & Wear, D.N. (2003). Impacts of Second Home Development on Housing Prices in the Southern Appalachian Highlands. *RURDS*, Vol. 15, No.3, pp.208-225.
- Claveria, O. & Datzira, J. (2009). Tourism demand in Catalonia: Detecting external economic factors. *Tourismos*, Vol. 4, No.1, pp.13-28.

- Coppock, J.T. (1977). Second homes in perspective In J.T. Coppock (Eds.) *Second homes: curse or blessing?* London: Pergamon.
- Crofts, R.S. (1977). Caravans and second homes: rural planning problems in Argyll. In J.T. Coppock (Eds.) *Second homes: curse or blessing?* London: Pergamon.
- Curtis, P.G. & Kokotos, D.X. (2009). A decision tree application in tourism based regional economic development, *Tourismos*, Vol. 4, No.2, pp.169-178.
- Dellaert, B., Borgers, A. & Timmermans, H. (1995). A day in the city: Using conjoint choice experiments to model urban tourists' choice of activity. *Tourism Management*, Vol. 16, No.5, pp.347-353.
- Dodds, R. & Butler, R. (2010). Barriers to implementing sustainable tourism policy in mass tourism destinations. *Tourismos*, Vol. 5, No.1, pp.35-54.
- Fleischer, A. & Tchetchik, A. (2005). Does rural tourism benefit from agriculture? *Tourism Management*, Vol. 26, pp.493-528.
- Fox, M. & Cox, L.J. (1992). Linkage between agriculture and tourism. In M.A. Khan, M.D. Olsen and T. Var. (Eds.) *VNR's encyclopedia of hospitality and tourism*, New York: Van Nostrand Reinhold.
- Gallant, N. & Tewdwr-Jones, M. (2001). Second homes and the UK Planning System. *Planning Practice and Research*, Vol. 16, No.1, pp.59-69.
- Gartner, W. (1987). Environmental impacts of recreational home developments. *Annals of Tourism Research*. Vol. 14, No.1, pp.38-57.
- Grahn, P. (1991). Using tourism to protect existing culture: a project in Swedish Lapland. *Leisure Studies*, Vol. 10, pp.33-47.
- Green, P.E. & Srinivasan, V. (1990). Conjoint Analysis in Marketing: New Developments with Implications for Research and Practice. *Journal of Marketing*, Vol. 54, pp.3-19.
- Gronau, W. & Kaufmann, R. (2009). Tourism as a stimulus for sustainable development in rural areas: A Cypriot perspective. *Tourismos*, Vol. 4, No.1, pp.83-96.
- Hall, C.M, Keen, D. & Muller, D. (2003). *Second homes – curse or blessing? Twenty-Five years on*. Paper presented at IGU 2002 Regional Conference of the International Geographical Union, Durban 4-7 August 2002.
- Hanley, N., MacMillan, D., Patterson, I. & Wright, R. (2003). Economics and the Design of Nature Conservation Policy: A Case Study of Wild Geese Conservation in Scotland Using Choice Experiments. *Animal Conservation*, Vol. 6, pp.123-129.
- Hanley, N., Koop, G., Wright, R. & Alvarez-Farizo, B. (2001). Go Climb a Mountain: An Application of Recreation Demand Models to Rock Climbing in Scotland. *Journal of Agricultural Economics*, Vol. 52, No.1, pp.36-52.
- Hanley, N., Wright, R.E. & Koop, G. (2002). Modelling Recreation Demand Using Choice Experiments: Climbing in Scotland. *Environmental and Resource Economics*, Vol. 22, pp.449-466.

- Hanley, N., Wright, R. & Adamowicz, V. (1998). Using choice experiments to value the environment. *Environment and Resource Economics*, Vol. 11, pp.413-428.
- Hearne, R.R., Zenia, M. & Salinas, A. (2002). The use of choice experiments in the analysis of tourist preferences for ecotourism development in Costa Rica. *Journal of Environmental Management*, Vol. 65, pp.153-163.
- Hoogendoorn, G. & Visser, G. (2004). Second homes and small-town (re)development: the case of Clarens. *Journal of Family Ecology and Consumer Sciences*, Vol. 32, pp.105-115.
- Inskip, E. (1987). Environmental planning for tourism. *Annals of Tourism Research*, Vol. 14, No.1, pp.118-135.
- Inskip, E. (1991). *Tourism planning: An integrated and sustainable development approach*. New York, Van Nostrand Reinhold.
- Johnson, F.R. & Desvousges, W.H. (1997). Estimating stated preferences with related-pair data: Environmental, health, and employment effects of energy programs. *Journal of Environmental Economics and Management*, Vol. 34, pp.79-99.
- Kaltenborn, B.P. (1997). Nature of place attachment: a study among recreation homeowners in Southern Norway. *Leisure Sciences*, Vol. 19, pp.175-189.
- Karousakis, K. & Birol, E. (2007). Investigating Household Preference for Curbside Recycling Services in London: A Choice Experiment Approach. *Journal of Environmental Management*, Vol. 88, pp.1099-1108.
- Kayat, K. (2010). The nature of cultural contribution of a community-based homestay programme. *Tourismos*, Vol. 5, No.2, pp.145-159.
- Kelly, J., Haider W., Williams, P.W. & Englund, K. (2007). Stated preferences of tourists for eco-efficient destination planning options. *Tourism Management*, Vol. 28, pp.377-390.
- Lancaster, K. (1966). A New Approach to Consumer Theory. *Journal of Political Economy*, Vol. 74, pp.132-157.
- Louviere, J. (1992). Experimental choice analysis: introduction and overview. *Journal of Business Research*, Vol. 24, pp.89-96.
- Louviere, J. (1988). Conjoint Analysis Modeling of Stated Preferences: A Review of Theory, methods, Recent Developments and External Validity. *Journal of Transport Economics and Policy*, Vol. 10, pp.93-119.
- Louviere, J.J., Hensher, D.A. & Swait, J.D. (2000). *Stated choice methods: Analysis and applications*. Cambridge, UK, Cambridge University Press.
- Louviere, J.J. & Timmermans, H. (1990). Stated preferences and choice models applied to recreation research: A review. *Leisure Sciences*, Vol. 12, pp.9-32.
- Louviere, J., Street, D., Carson, R., Ainslie, A., DeShazo, J.R., Cameron, T., Hensher, D., Kohn, R. & Marley, T. (2002). Dissecting the Random Component of Utility. *Marketing letters*, Vol. 13, pp.177-194.
- Luce, D. (1999). *Individual Choice Behaviour*. New York, Wiley.

- Marsden, B. (1977). Holiday homescapes of Queensland. In J. Coppock (Eds.) *Second homes: curse or blessing?* London: Pergamon Press.
- McFadden, D. (1974). Conditional Logit Analysis of Qualitative Choice Behaviour. In P. Zarembka (Eds.) *Frontiers in Econometric*, New York: Academic Press.
- Mihalic, T. (2002). Tourism and economic development issues. In R. Sharpley and D.J. Telfer (Eds.) *Tourism and development: Concepts and issues*, Clevedon: Channelview Publications.
- Müller, D.K. (1999). *German Second Home Owners in the Swedish Countryside: On the Internationalization of the Leisure Space*. Umeå, Department of Social and Economic Geography.
- Muller, D., Hall, C.M. & Keen, D. (2004). Second home tourism impact, planning and management. In C.M. Hall and D.K. Muller (Eds.) *Tourism, mobility and second homes: between elite landscapes and common ground*, Clevedon: Channel view Publications.
- Nijkamp, P., Vanwissen, L. & Rima, A. (1993). A household life-cycle model for residential relocation behavior. *Socio-economic Planning Science*, Vol. 27, No.1, pp.35-53.
- Nordin, U. (1993). Second homes. In H. Aldskogius (Eds.) *Recreation, cultural life and tourism, National Atlas of Sweden* (pp. 72-79), Stockholm: SNA.
- O'Reilley, K. (1995). A new trend in European migration: contemporary British migration to Fuengirola. *Costa del Sol. Geographical Viewpoint*, Vol. 23, pp.25-36.
- Paniagua, A. (2002). Urban-rural migration, tourism entrepreneurs and rural restructuring in Spain. *Tourism Geographies*, Vol. 4, No.4, pp.349-371.
- Peters, T., Adamowicz, W.L. & Boxall, P.C. (1995). Influence of choice set consideration in modeling the benefits from improved water quality. *Water Resources Research*, Vol. 31, pp.1781-1787.
- Phillips, M. (1998). Investigations of the British rural middle class: part 2, fragmentation, identity, morality and contestation. *Journal of Rural Studies*, Vol. 14, No.4, pp.427-443.
- Powe, N.A., Garrod, G.D. & McMahon, P.L. (2005). Mixing Methods Within Stated Preference Environmental Valuation: Choice Experiments and Post-Questionnaire Qualitative Analysis. *Ecological Economics*, Vol. 52, pp.513-526.
- Quilici, A. (1998). A tourist resort on the island of Porto Santo, Portugal: Attempting a natural development. *Urban Design International*, Vol. 3, No.1, pp.53-64.
- Rezvani, M. (2003). An analysis of second home tourism in rural areas, a case study on Tehran province. *Geographic Research*, Vol. 35, No.45, pp.59-73. (Persian)
- Richins, H. & Scarinci, J. (2009) Climate change and sustainable practices: A case study of the resort industry in Florida. *Tourismos*, Vol. 4, No.2, pp.107-128.

- Riebsame, W., Gosnell, H. & Theobald, D. (1996). Land use and landscape change in the Colorado Mountains 1: theory, scale and pattern. *Mountain research and development*, Vol. 16, No.4, pp.395-405.
- Sharpley, R. & Telfer, D.J. (2002). Introduction. In R. Sharpley and D.J. Telfer (Eds.) *Tourism and development: concepts and issues*, Clevedon: Channelview Publishing.
- Snowball, J.D. & Willis, K.G. (2006). Building Cultural Capital: Transforming The South African National Arts Festival. *South African Journal of Economics*, Vol. 74, pp.20-33.
- Sweeting, J.E.N., Bruner, A.G. & Rosenfeld, A.B. (1999). *The green host effect: An integrated approach to sustainable tourism and resort development*. Washington, DC, Conservation International.
- Visser, G. (2003). Visible, yet unknown: reflections on second-home development in South Africa. *Urban Forum*, Vol. 14, No.4, pp.379-407.
- Wall, G. (1997). Rethinking impacts of tourism. In C. Cooper and S. Wanhill (Eds.) *Tourism Development: Environmental and Community Issues* (pp. 1-10), Chichester: Wiley.
- Williams, A.M. & Hall, C.M. (2000). Tourism and migration: new relationships between production and consumption. *Tourism Geographies*, Vol. 2, No.1, pp.5-27.
- Williams, A.M. & Hall, C.M. (2002). Tourism, migration, circulation and mobility: the contingencies of time and place. In C.M. Hall and A.M. Williams (Eds.) *Tourism and migration: new relationships between production and consumption*, Dordrecht: Kluwer.
- Williams, A.M. & Hall, C.M. (2003). *Tourism, mobility and second homes: between elite landscape and common ground*. Clevedon, Channel View Publications.
- Williams, A.M., King, R. & Warens, A. (1997). A place in the sun: international retirement migration from northern to southern Europe. *European Urban and Regional Studies*, Vol. 4, No.1, pp.15-34.
- Wolfe, R. (1970). Discussion of vacation homes, environmental preferences and spatial behaviour. *Journal of Leisure Research*, Vol. 2, No.1, pp.85-87.

*SUBMITTED: NOVEMBER 2009*

*REVISION SUBMITTED: FEBRUARY 2010*

*ACCEPTED: MARCH 2010*

*REFEREED ANONYMOUSLY*

**Ali Asgary** (Asgary@yorku.ca) is an Associate Professor at the York University, School of Administrative Studies, Faculty of Liberal and Professional Studies, Toronto, Ontario, Canada, M3J 1P3.

**Mohammad Reza Rezvani** (mrrezvani5122@yahoo.com) is an Assistant Professor at the University of Tehran, Department of Human Geography, Faculty of Geography, Tehran, Iran.

**Nader Mehregan** (mehregannader@yahoo.com) is an Assistant Professor at the Bu-Ali Sina University, Department of Economics, Faculty of Humanities and Social Sciences, Hamadan, Iran.