Visitors’ Satisfaction of Visit and the Economic Impacts of Perceptions of Ecotourism Development Support in Alamout Area, Iran

Azita Asadi1*, Abdullah Mohd1 and Majid Fathizahraei2

1Department of Recreation and Ecotourism, Faculty of Forestry, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia
2University of Applied Science and Technology, Iran

ABSTRACT
Economic impacts are the main factor in developing sustainable ecotourism. They provide alternatives for the local community to support their lives in addition to traditional farming. Several research studies have focused on local perceptions upon tourism development impacts, but visitors’ opinions have received less consideration. This study, therefore, is focused on visitors’ perceptions and their intention to support ecotourism development in the Alamout area in Iran. A survey was conducted to assess the visitors’ perception, intention to revisit and their support for ecotourism development. The structural equation modelling was developed by using AMOS to analyse the data. The result of the study indicates that “Create jobs”, “Economic benefits to residents” and “Employment opportunity” were the high agreed positive economic impacts while “Increase the real estate prices”, “Attract non-local investors” and “Increase in the price of goods” were the high negative perceived impacts from visitors’ view. Results of the confirmatory factor analysis confirmed that visitors who perceived negative economic impacts were less likely to revisit or recommend the area.

Keywords: Ecotourism sustainable development, visitors’ perception, Alamout, Structural Equation Modelling (SEM)

INTRODUCTION
The last barometer of the United Nation World Tourism Organization (UNWTO) expressed that international tourist arrivals had grown by 5% in 2013, which is the fourth year running from 2010
The tourism industry is one of the fastest growing, with reference to commercialisation of human need for leisure.

Tourism, as a temporary short-term movement of people to destinations outside the places where they normally live and work, would not successfully develop unless it was considered a main pillar of sustainability. The World Tourism Organization describes sustainable tourism as an industry that meets the needs of current tourists and host populations, while enhancing opportunities for the future (WTO, 2010). As Mr. Ban Ki-moon, UN secretary general said on World Tourism Day 2012:

“One of the world’s largest economic sectors, tourism, is especially well-placed to promote environmental sustainability, green growth and our struggle against climate change through its relationship with energy.”

Some researchers explained ecotourism as a sustainable tourism model that generates acceptable incomes and employment opportunities for local communities, while providing the tangible economic aspect of conservation by general decline in farming activities, offering educational awareness of nature and providing diverse cultural experiences (Wunder, 2000; Palmer, 2006; Fung & Wong, 2007; Stronza, 2007; Libosada Jr, 2009; Pfueller et al., 2011).

Resource, community and tourism are three elements of ecotourism. The relationship between these elements causes ecotourism success or failure (Ross & Wall, 1999). Each component has a stakeholder.

Visitors are considered one of the main stakeholders in the area of ecotourism (Tsaur et al., 2006), with an effective role in the industry growth and improvement. Their satisfaction resulting from visitation of ecotourism sited and later revisiting the area and recommending the site to others are tools for the sustainable development of ecotourism in an area. Recent studies found that ecotourism developers and entrepreneurs need innovativeness and creativity as it is a fast growing industry that supports different visitors (Asadi & Kohan, 2011; Selby et al., 2011).

The economic impacts of tourism development were investigated in several studies (Jurowski et al., 1997; Yoon et al., 2001; Gursoy et al., 2002; Sirakaya et al., 2002; Andereck et al., 2005; Nunkoo & Ramkissoon, 2011a; Nunkoo & Gursoy, 2012). Most of these studies explored the perception of local or host communities towards tourism or ecotourism development, but a few researchers consider visitor attitudes (Arabatzis & Grigoroudis, 2010; López-Mosquera & Sánchez, 2011) or include both visitors and locals in the study (Hearne & Santos, 2005). Byrd et al. (2009) suggested that community planners and management organisations need to communicate with the visitors as well as local communities to deal with different perceptions and needs of each group. From another point of view, studies mostly focused on the impacts effect on the quality of life rather than intention to support ecotourism development.

Many researchers have focused on the beliefs or perception of local people
towards ecotourism development (Harrill, 2004; Lepp, 2007; Zamani-Farahani & Musa, 2008; Gursoy et al., 2010). Dyer et al. (2007) in their proposed model of residents’ perception of a coast in Australia, indicated that the perceived positive economic impact factor had the largest influence on residents’ support for further tourism development. However, very little research involves visitors attitudes (Buckley, 2004; Arabatzis & Grigoroudis, 2010).

Iran, as one of the earliest civilisations of the world, has lots of natural, historical and environmental potential for ecotourism development. Many people from cities spend their holidays in natural areas just to enjoy the landscape.

Based on the Strategic Development Plan, Alamout area is considered one of the priorities for the development of tourism in the Qazvin province (Qazvin Government, 2010). In the cultural sector of this plan, heritage conservation is emphasised by improvement in Alamout native celebrations such as harvesting of horticultural crops (hazelnuts, cherries and blueberries). There are also discussions for strengthening of the Alamout Cultural Heritage Base (ACHB), registration of Cultural Landscape of Alamout in the United Nations Educational, Scientific and Cultural Organization (UNESCO) and promotion of local industries such as weaving rugs through education and investment support (Qazvin Government, 2013).

However, there are some limitations and barriers to developing ecotourism. One of the most critical problems is lack of information on visitors’ attitude, their behaviour and needs. This kind of information could create better understanding for the managers of an area to develop ecotourism in a sustainable way. In the case of Iran, there is a dearth of adequate data to show visitor perceptions of ecotourism impacts, their intention to revisit and their support for ecotourism development.

This study focused on visitor support of ecotourism development by investigating two main questions. The first was whether there was a relationship between visitor perception of the economic impact of ecotourism development and their intention to revisit the area and their satisfaction of visit. The second was the extent of visitor perceptions of economic impacts that could affect their support for ecotourism development. The detailed hypothesis model of this study is illustrated in Fig.1.

![Hypothesis model](image-url)
LITERATURE REVIEW

Economic Impacts

Economic impacts are directly related to the life of the local people and provide great effect on ecotourism growth or decay in the area. Many researchers have attempted to find these impacts and lots of items have been derived from the literature. A description of positive and negative perceptions of ecotourism development and its economic impacts are expressed in the following paragraphs.

Ecotourism development could bring more positive economic impacts to an area. These impacts are mostly related to economic benefits from visitors to the residents of the local community (Yoon et al., 2001; Tsaur et al., 2006; Byrd et al., 2009; Andereck & Nyaupane, 2011). However, there are some negative impacts such as increase in prices of goods, services and real estate (Pizam, 1978; Perdue et al., 1990; Yoon et al., 2001; Haley et al., 2005; Nunkoo & Ramkissoon, 2011a, 2011b; Nunkoo & Gursoy, 2012).

Several studies have attempted to explain how ecotourism development affects new job creation (Pizam, 1978; Yoon et al., 2001; Huh & Vogt, 2007; Byrd et al., 2009; Andereck & Nyaupane, 2011). For instance, Nunkoo and Gursoy (2012) found that tourism development produces new occupations that are different from traditional resource-based industries of locals. From another point of view, the presence of visitors in the area can increase employment opportunity in both existing and newly created jobs (Pizam, 1978; Haley et al., 2005; Choi & Sirakaya, 2006; Lai & Nepal, 2006; Tsaur et al., 2006; Byrd et al., 2009; Nunkoo & Ramkissoon, 2011a; Nunkoo & Gursoy, 2012). In their study, Andereck and Nyaupane (2011) confirmed that employment had a strong effect on personal benefits from tourism for the residents of Arizona.

Some researchers have confirmed that ecotourism development can raise the income level of residents (Pizam, 1978; Tsaur et al., 2006; Byrd et al., 2009; Nunkoo & Gursoy, 2012). These studies explained that tourism activities generated more profits for the local communities. Other studies also have found that ecotourism development directly affected the local life and increased the host community standard of living (Pizam, 1978; Yoon et al., 2001; Andereck & Nyaupane, 2011; Nunkoo & Ramkissoon, 2011a, 2011b; Nunkoo & Gursoy, 2012).

Some other studies emphasised that tourism development could induce more economic investment (Nunkoo & Gursoy, 2012; Nunkoo & Ramkissoon, 2011a; Yoon et al., 2001). Dyer et al. (2007) pointed out that 88.6% of respondents in the Sunshine Coast, Queensland, Australia agreed tourism would attract more investment in the community. However, if only non-local investors are attracted to the area it can cause negative impacts on the local communities (Choi & Sirakaya, 2006; Nunkoo & Ramkissoon, 2011a).

Discussions with top managers of the area emphasised local natural products which could affect the economic impacts of
ecotourism development. These products consisted of a wide range of goods from natural honey to felting (Choobak, 2011). Similarly, local products and services were considered in Wood’s (2002) study as some of the improvement efforts made for community entrepreneurial involvement in ecotourism. Therefore, a new item, “improves the local natural products” was introduced and added to the questionnaire.

**Intention and Support**

As explained by Fishbein and Ajzen (1975), intention to perform a behaviour is a result of positive perception or attitude towards it. In other words, attitude has an influence on the intention to perform behaviour and in the end, influences actual behaviour. The theory of reasoned action (RA) and the theory of planned behaviour (TBH) define the relation between intention and action. Based on these theories, the degree of intention to involve in activity is an index for taking an action directly (Montano & Kasprzyk, 2008).

However, the social exchange theory (SET) explains why people are willing to take an action. Andereck et al. (2005) proposed that SET could describe resident support of tourism development based on their investigation of the advantages and disadvantages. Other researchers found that local communities express a more positive attitude towards tourism when they receive some kind of benefits from it (Harrill, 2004; Byrd et al., 2009; Nunkoo & Ramkissoon, 2011a). Visitors’ behavioural attitudes are crucial to the sustainable tourism destination as they provide the main source of income to the local community by using local products and services (Sievänen et al., 2011).

From the other point of view, visitor satisfaction is a critical aspect of sustainable ecotourism. Satisfied visitors are the engine of ecotourism development (Ayotte, 2009; Arabatzis & Grigoroudis, 2010). Satisfaction implies the feelings of a person in a particular situation or attitude towards various factors that affect the situation (Wixom & Todd, 2005). Taplin (2013) explained that visitors’ overall satisfaction is typically measured with Likert scale measures that express their agreement through “satisfied” or “pleased” statements. He suggested that the response to this overall satisfaction is made by making virtual comparisons between visitors’ expectations. Brida et al. (2012) argued that visitors’ intention to return and recommend are positively affected by visitors’ overall satisfaction in the cruise sector. In a case study of a heritage site in Taiwan, “I enjoyed my visit” and “I will recommend the site” were identified as critical features for predicting visitors’ intention to revisit the site (Wang et al., 2010). Meanwhile, a study on rural areas in North Dakota by Phillips et al. (2013) applied “intent to return” and “make recommendations to others” in order to derive visitors’ behaviours in relation with destination image and overall satisfaction.

Several studies have been carried out to find support for tourism development. They used variables such as facilities (for
example; access road, camping area) social and cultural attractions (such as handicrafts museum, local festivals) (Jurowski et al., 1997; Yoon et al., 2001). Others focused on necessity of community organisations’ role in future planning for tourism growth (McGehee & Andereck, 2004; Choi & Murray, 2010). However, these studies were focused on the point of view of local communities rather than on that of visitors. A summary of intention and support items are presented in Table 1.

TABLE 1
Items for Intention and Support

<table>
<thead>
<tr>
<th>Items for visitor satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>I intend to revisit the Alamout area.</td>
</tr>
<tr>
<td>I will travel to Alamout during the next year.</td>
</tr>
<tr>
<td>I will recommend visiting the Alamout area to my friends and relatives.</td>
</tr>
<tr>
<td>I am satisfied with my trip to this area.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Items for visitor support of ecotourism development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourism organisations of Iran should plan and manage the growth of ecotourism in the area.</td>
</tr>
<tr>
<td>I support establishing a museum, handicraft exhibitions and traditional festivals for ecotourism</td>
</tr>
<tr>
<td>development in the area.</td>
</tr>
<tr>
<td>Ecotourism development has a vital role in the future of the community.</td>
</tr>
<tr>
<td>I support establishing and supplying infrastructure (road, drinking water,..) for ecotourism</td>
</tr>
<tr>
<td>development in the area.</td>
</tr>
</tbody>
</table>

Adapted from (Arabatzis & Grigoroudis, 2010; Jurowski & Gursoy, 2004; McGehee & Andereck, 2004; Weaver & Lawton, 2011)

METHODOLOGY

In this study, the economic impacts items were derived from the literature in order to find appropriate items for the area (Pizam, 1978; Tsaur et al., 2006; Dyer et al., 2007; Byrd et al., 2009; Andereck & Nyaupane, 2011; Nunkoo & Gursoy, 2012). Then, discussion sessions were conducted with top managers of organisations dealing with ecotourism development both directly or indirectly. Finally, those impacts that were more suitable for the area were selected and involved in the survey. Later, a questionnaire was designed in three parts for the data collection: (i) the visitors’ perceptions of economic impacts of ecotourism development in the area, (ii) the intention to revisit and visitors’ support for ecotourism development, and (iii) to collect demographic data. A summary of the methodology is depicted in Fig.2.

Structural equation modelling (SEM) was used to find the relationships between the items and their high level latent variables using the AMOS statistical package.
Sampling Method

To select a reasonable sample size Hair et al. (1995; 2006) claimed that the acceptable ratio of respondents to the estimated parameter should be 1:5. In the main study, which this paper was a part of that, there were 42 variables, so the minimum number of samples was 210. A total of 250 questionnaires were distributed to the visitors in order to ensure adequacy of the completed survey. The survey was conducted during June to September 2011, which included the peak tourist season in the area. In order to collect normal random data, the sampling method was designed as below.

The average numbers of total visitors to Alamout castle were 99,373 people per year, with most of them visiting the area during the first six months of the year (ACHB, 2010). Therefore, on the first and third Friday and fourth Tuesday of each summer month, questionnaires were given randomly to each fifth visitor at the entrances of Alamout castle and Ovan Lake. The completed forms were collected at the exit.

Study Area

Alamout is located in the north east part of Qazvin province, Iran. The area is well-known for historical castles and beautiful natural landscapes. This study focused on four famous sites: Alamout castle, Ovan lake, Zarabad bleeding tree and Andej valley.
RESULTS AND DISCUSSION

Response Distribution

Nearly one third of the 236 visitors who filled up the questionnaire were female (31.4%) while 68.6% were male. The mean of respondents’ age was 36, while the youngest was 11 and the oldest was 87 years old. The majority of the respondents were married (68.8%) while 31.2% were single.

The economic impacts of ecotourism development that were included in this study involved 12 items: seven positive and 5 negative impacts. Descriptive results indicated that the respondents were almost equally agreed with regards to ecotourism’s economic positive impacts and its negative impacts. However, for a few items such as “Encourage the import of non-local products” visitors who responded to this question were more likely to choose neutral, due to uncertainty or lack of information about the item.

Among positive impacts, the majority of respondents perceived that ecotourism development created more jobs, brought economic benefits and generated employment opportunity for the residents. A total of 96.2%, 95.3% and 93.6% of the respondents agreed with these three items, respectively. These items had a direct effect on the economy of local community. Visitors considered new job opportunities, such as providing accommodation and food for tourists or tour guide services, as most important impacts of ecotourism development in the area. However, the current occupation of locals, such as farming and gardening would also improve and bring more benefits during tourist high seasons when they intended to buy local products.

Most respondents agreed or strongly agreed that ecotourism development had a positive economic impact based on “Attract economic investment”, “Raise the resident income level” and “Increase the level of resident’s living” with a total of 92.4%, 87.7% and 82.2%, respectively. The statement related to “Improve natural local products”, which was confirmed during the expert managers’ discussion, also had the support of 78.4% of the respondents.

Negative economic impacts were shown to have a complex mix of high agree and disagree items. While the majority of respondents were selecting agree or strongly agree for “Increase the real estate prices” (90.3%), their response to food shortage expressed greater disagreement. The visitors highly perceived that ecotourism development would “Attract non-local investors” and “Increase in the price of goods” with a total of 85.6% and 71.2%, respectively.

Some of the items were neither agreed nor disagreed and respondents preferred to select neutral for them. A total of 58.5% of respondents selected disagree or strongly disagree for “Inadequate food resources”. The last negative economic item was “Encourage the import of non-local products”, for which nearly half of the respondents (46.2%) selected neutral due to uncertainty about agreeing or disagreeing with this impact.

Visitors’ intention was defined by four items and the item that was most agreed was “Recommend to family and friends” (89.8% agreement), followed by “Tend to visit again” and “Satisfy with my
trip” which 82.2% and 77.5% of visitors agreeing and strongly agreeing. In other words, visitors were more likely to revisit and recommend the Alamout area.

In the support section, visitors highly supported “establishing infrastructure” with 75.8% agreeing and strongly agreeing. They also highly agreed with “establishing local museum and festivals” (65.3%). The next two items were accepted by more than half of the respondents; “Tourism organisation plans” and “have a vital role in future” received 64.4% and 63.1% agreement, respectively. Table 2 provides the results of visitors’ mean and standard deviation score for ecotourism economic positive and negative impacts, intention and support.

**Analysis of Structural Model**

For each of the above mentioned factors, the first order of confirmatory factor analysis was conducted and items with factor loading less than 0.30 were removed (Jöreskog, 1993; Yoon et al., 2001) to achieve acceptable model fit indices. After this process, five positive and two negative economic impacts and three items for each of the satisfaction and support factors remained. Fig.4 shows the structural model and related correlation and fit indices.

**TABLE 2**

**Measurement Items for Variables**

<table>
<thead>
<tr>
<th>Factors and Items</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive economic impact perception</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Creates a variety of jobs for local people</td>
<td>4.3390</td>
<td>0.5939</td>
</tr>
<tr>
<td>2 Brings economic benefits to the residents</td>
<td>4.3305</td>
<td>0.6595</td>
</tr>
<tr>
<td>3 Creates employment opportunities for local people</td>
<td>4.2627</td>
<td>0.6514</td>
</tr>
<tr>
<td>4 Attracts more economic investment</td>
<td>4.1695</td>
<td>0.6162</td>
</tr>
<tr>
<td>5 Increases the standard of living in local community</td>
<td>4.0990</td>
<td>0.7913</td>
</tr>
<tr>
<td>6 Improves the local natural products</td>
<td>4.1186</td>
<td>0.6545</td>
</tr>
<tr>
<td>7</td>
<td>3.9619</td>
<td>0.9101</td>
</tr>
<tr>
<td><strong>Negative economic impact perception</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Increases in the price of goods and services</td>
<td>3.8008</td>
<td>0.9623</td>
</tr>
<tr>
<td>2 Leads to inadequate food resources</td>
<td>2.9873</td>
<td>1.1687</td>
</tr>
<tr>
<td>3 Increases the real estate prices</td>
<td>4.1483</td>
<td>0.7432</td>
</tr>
<tr>
<td>4 Attracts non-local investors</td>
<td>4.0551</td>
<td>0.7781</td>
</tr>
<tr>
<td>5 Encourages the import of non-local products</td>
<td>3.3729</td>
<td>0.9340</td>
</tr>
<tr>
<td><strong>Satisfaction of visit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Tend to revisit</td>
<td>4.0551</td>
<td>0.8411</td>
</tr>
<tr>
<td>2 Travel again in one year</td>
<td>3.1949</td>
<td>1.1166</td>
</tr>
<tr>
<td>3 Recommend to family and friends</td>
<td>4.2839</td>
<td>0.7662</td>
</tr>
<tr>
<td>4 Overall satisfied</td>
<td>4.0424</td>
<td>0.8838</td>
</tr>
<tr>
<td><strong>Support for Ecotourism development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Tourism organisations of Iran should plan and manage for the growth of Ecotourism</td>
<td>3.8008</td>
<td>0.9711</td>
</tr>
<tr>
<td>2 I support establishing a museum, handicraft exhibition and traditional festivals for ecotourism development</td>
<td>3.7331</td>
<td>0.9635</td>
</tr>
<tr>
<td>3 Ecotourism development has a vital role in the future of the community</td>
<td>3.6907</td>
<td>0.9001</td>
</tr>
<tr>
<td>4 I support establishing and supplying infrastructure (road, drinking water,..) for ecotourism development</td>
<td>3.9788</td>
<td>0.9291</td>
</tr>
</tbody>
</table>
As can be seen from Fig.4, there was a significant negative relationship between visitors’ negative economic impact perceptions and their satisfaction of visit ($\beta=-0.30$, $p=0.05$). There was also a weak positive relationship between visitors’ positive economic impact perceptions and their visit satisfaction. However this relationship is not statistically significant ($\beta=0.03$, $p=0.735$). The relationship between visit satisfaction and support for ecotourism development was strongly positive and statistically significant ($\beta=0.73$, $p=0.000$).

CONCLUSION AND SUGGESTIONS

Economic impacts were directly affected by locals’ job occasion and income level. Visitors expressed that creating job and employment opportunity, which can generate economic benefits to residents, were the highest perceived economic impacts of ecotourism development in the Alamout area. These items were confirmed in several studies, which are discussed in the literature review. For instance, in his recent study, Lee (2012) pointed out that tourism-related employment for local residents generated benefits and as a result, local residents would be more likely to support sustainable tourism development. As mentioned earlier, “Improve natural local products” such as pure natural honey, special black cherry and hazelnut and local dairy was highlighted by managers during discussion. The majority of visitors agreed with this item. The area of Alamout is well-known for tasty fruit such as cherry and hazelnut and local dairy products such as butter and cheese. The visitors
were agreed that ecotourism development would promote local natural products. This improvement would increase the income and living level of residents. The results of the study by Nicholas (2010) also confirmed that most visitors agreed that purchasing local products and services was very important.

The results showed that respondents were highly concerned about increasing the price of land and houses in the area. This scenario occurred in other tourist areas in Iran, for example, the increased attention to build a villa in the mountain area in North of Iran has led to accelerated growth of land and property prices (Jahan Aray, 2013). This trend of changing agricultural land to residential areas has changed the way of life of locals as well. Locals prefer to earn money by selling their agricultural lands to non-local investors rather than retaining the land for cultivation and gardening. This in turn has caused a reduction in agricultural products (Mashregh, 2014). The balance between visitors’ demands and the need to conserve local culture is an important issue to consider in planning ecotourism development in the area.

Referring to the study questions, the results of the structural models pointed out that visitors’ negative perception of ecotourism development economic impacts would affect their intention to revisit and recommend the area. On the other hand, visitors were less likely to revisit or recommend the area to others when they had a negative perception of ecotourism development impacts.

Visitors to the Alamout area expressed their high support of ecotourism development. They indicated their agreement with improving infrastructure (such as road and accommodation) and establishing a museum and performing festivals. They believed that ecotourism has a vital role in the future and therefore, tourism organisations should plan for ecotourism development.

Based on the findings of this study, the authors suggest that ecotourism development in the Alamout area should consider:

(a) local products as a great potential to improve the economy of the local community
(b) monitoring and controlling of the price of land and houses
(c) visitors’ concerns and interests for developing ecotourism
(d) establishing an attractive museum to promote small local industries

A possible limitation of this study may have been the social desirability concept. The respondents tried to express more acceptable behaviour while they were under observation and therefore responses may have been biased towards socially acceptable results.

This study was done in the primary stage of ecotourism development in the area. A suggestion for future studies would be to conduct a comparison of visitor satisfaction of visit and intention of support in further developing stages.
REFERENCES


Visitors’ Economic Perceptions and Ecotourism Support


