

The Environmental Impacts Assessment of Tourism Accommodations in Urban Areas (Case: Mashhad City in Iran)

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Abstract:

Tourism is one of the factors that can affect the urban areas and an integral part of it is accommodation that its impact on environment is undeniable. This is the reason why the present research has been conducted and Mashhad has been considered as a case study for it to illustrate the effect of accommodation sector on a tourism destination. On the one hand the economy of this urban region is linked to tourism, and its future sustainability, on the other hand. A lucrative and profitable business and sustainability are two goals in this part which should be considered by hotels' managers and they could take some measures to internalize environmental cost in the short term and diminish disastrous environmental consequences in the long term. According to research, many hotel owners in Mashhad have little information on the AIP and sustainability. Most of the hotel owners are not paying attention to the issue of sustainable tourism due to the lack of information and deficiency in education.

Key words: Tourist, Tourism, Environmental impact, Sustainable tourism

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1. Introduction

Tourism has been introduced as a multi-functional activity which plays a main role in the regional and spatial developments among countries in recent decades (Shamaie & Mousavivand, 2011). Most countries in a close and comprehensive competition are seeking to increase their benefits over these international activities.

Iran Cultural Heritage, Handicrafts and Tourism Organization has an important role as one of the main pillars of culture and art in the country and the administrator of the lasting heritage of the ancient civilization of Iran, by considering the vastness of the responsibilities turned over, such as introducing its rich culture and civilization, and the cultural, historical, natural and tourism potentials of the country and exploiting its advantages and potentials to promote its real position as one of the large tourism poles in the world.

Iran is a vast country with various settlements that due to Iran's ancient culture and civilization, each of them has historical and cultural values. Existence of many natural attractions and various climate in Iran make it as one of the most attractive countries around the world (Khatibzadeh, Honarvar, Mohammad Ehsani, & Kouzechian, 2012). Iran's vast land mass of 1,648,195 km² makes it the sixteenth in size among the countries of the world. This quality along with its natural environment has potentially made Iran a prime tourist's destination.

Mashhad, as the largest metropolis of the east of Iran and the second religious city of the world after Mecca, in recent decades, both in terms of construction and population expansion has dramatically increased. About 20 million pilgrims annually has been more emphasized its' national and international aspect (Mashhad, 2006). Despite the importance and function of the Mashhad in the development of tourism in national and

international markets, it has a number of inadequacies and deficiencies in satisfying visitors' demands as a main factor in sustainable development of the city. There are several varieties of hotels in Mashhad that give visitors the chance for choosing their accommodation according to their income levels. Based on recent data, the city has a population around three million people and accommodate over 20 million tourists annually (Iran, 2011). Mashhad city currently has 113 hotels with a capacity of over 17,000 beds and most of the hotels has been located in the central part of the city and near the holy shrine. Most of these accommodations authorized by "Iran Cultural Heritage, Handicrafts and Tourism Organization"(Dinari, 2004). There are also some establishments working without licenses. The majority of visitors are Iranians and most of the foreigner tourists are from the Islamic countries, specifically Iran's neighbors.

Because of lack of a designed urban program , Mashhad' development could cause serious environmental problems. As a result, happening a big variety of environmental problems and matters is inevitable. Some of the fundamental environmental problems are water pollution and shortage , air pollution, disorganized development and etc. Accommodation part is not separated from this issue, so it has been become obviously important in terms of impact and influence, cost, marketing, image, employee's loyalty and in particular sustainability. (Dodds & Joppe, 2001)

1.1.Environmental Impact Assessment:

There has been a remarkable and refreshing in environmental issues over the past few years (Glasson, Therivel, & Chadwick, 2012). A major imputes was provided by the 1987 report of the World Commission on the Environment and Development (the Brundtland Report); the Rio Summit in 1992 sought to accelerate the

imputes. Environmental Impact Assessment (EIA) is a Science-based that has emerged since the early 1980s in response to the passage of regulation regarding air quality, water quality, toxic chemicals, and other environment threats (Wheeler, 2013). Hotels' managers and owners around the world need to increase their knowledge and understanding, their investment and financial strategies and also their regular measures which are being taken daily, because EIA in service industries not only concerns about ecology but also economy, in long term. The hotel industry, due to its very specific function, operating characteristics and consumes services provided, substantial quantities of energy, water and non-durable products (Bohdanowicz, Responsible resource management in hotels-attitudes, indicators, tools and strategies, 2006). Environmental exercises adopted in accommodations could measure EIA. This measurement focuses on recycling, water efficiency, waste reduction, education, energy efficiency, environmental planning and management, social management (Kattara & Zeid, 2002).

Popular pressure is often on companies to operate in an environmentally-friendly manner, although companies must externalize costs like pollution (it is cheaper than minimization), minimize market prices (the buyer cannot estimate the true cost), and attain short-term profitability (to survive) (Roarty, 1997). The managers' policy can provide tangible and intangible resources, which could influence raising customers' sensitivity to the hotels' EIA. This strategy would increase the sales and could bring advantages in competitiveness and decrease the premium prices (Rivera J. , 2004). The competition on the hotel market is fierce. To attract more customers and remain profitable, hotels are continuously trying more diverse and better services, as well as a higher quality and quantity of entertainment. This is typically done with little concern for

associated environmental or socio-economic impacts, leading to many forms of overexploitation (Bohdanowicz, Simanic, & Martinac, Environmental training and measures at Scandic hotels, Sweden, 2005). To measure EIA we need to have some indicators which help us to assess its effects on hotels. EIA indicators may find out how 'sustainable', 'green', or 'environmentally loyal' and accommodation is and how managers of hotels could use EIA.

1.2.Sustainable Development

One of the key concepts is ((sustainable development)). In the 1970s, the concept of sustainability can be the logical result of a new awareness regarding global environmental and development issues as which in turn influenced by factors such as environmental movements of the 60s, releasing books such as the limits of development and the first UN conference which was held in 1972 in Stockholm, Sweden. Detailed definition of sustainable development is not available yet, but in some cases it can be noted:

Definition of the World Commission on Environment and Development: Supplying current needs without compromising the ability of future generations to meet their specific needs.

Define David Pearce, English economist: Sustainability requires a minimum fixed capital stock of natural assets, sustainable development is a development which could improve health and ecological systems in the long-term (Pearce & Atkinson, 1992).

Hague Conference: Sustainable development involves a new concept of economic development which could cause well-being and opportunities for all people and it is not fair that the minority of people destroy natural resources and available capacities just for their individual benefits (Bahreini & Maknoon, 2001).

In general, given the above definitions can be stated simply that Sustainable development is the development that will improve the lives of people and their environment during the time, and could take both simultaneously and in parallel into consideration.

1.3. Definition of Tourism

WTO in 1991 has defined tourism: "Tourism comprises the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited."

There are differences between tourism and travel. Tourism includes replacement; an individual travel using transportation. It could even happen on foot like pilgrimage or hiking. Not all travels are considered as tourism. Three criteria should be met to characterize a trip as tourism:

- Displacement: Trip must be outside the usual environment. This is the most important character.
- Type of purpose: Trip should be taken for different purposes.
- Duration: The displacement can be with or without overnight stay.

Tourist has been defined as "a person who travels individually or collectively with the purposes pointed out in the definition of the tourism and spends at least one night in the country he/she visits" (Holloway, 1998).

Davies (2003) believes that when a person travels at least 100 miles to a place, a trip activity has occurred. He also defines travel as taking trips to places outside of one's residence for any purpose except daily commuting to and from work.

Tourism industry has been defined as a combination of all activities like transportation, accommodation, food and beverage services and others needed by 28

tourists during their departure from their home until they come back (Holloway, 1998).

1.4. Sustainable Tourism Development

Tourism has broad economic, social, cultural, and environmental impacts with a socio-cultural and economic nature. Sustainable tourism has the same dimensions but in a sustainable way. Efficient development in economy, with consideration of the resources, in the way to support the future generation is called economic sustainability. Appropriate development in ecological processes and biological resources is mentioned as ecological sustainability. Increasing peoples' control over their lives makes the development compatible with people's values and cultures, and it will increase the society's identity strongly. These are the results of social and cultural sustainability (World Travel and Tourism Council, 1995).

There is no widely accepted definition of sustainable tourism, but all the many definitions share some commonalities. The definitions of sustainable tourism emphasize the following important features:

- Quality – sustainable tourism provides a quality experience for visitors while improving the quality of life of the host community and protecting the quality of the environment.
- Continuity- sustainable tourism ensures the continuity of the natural resources upon which it is based and the continuity of the culture of the host community with satisfying experiences for visitors.
- Balance- sustainable tourism balances the needs of the tourism industry, supporters of the environment, and the local community. Sustainable tourism also emphasizes mutual goals and cooperation among visitors, the host community, and the destinations (management).

WTO, (1993) associated three partners for sustainable tourism development as follows: tourism industry, environmental supporters, and local and community authority. Tourism industry creates jobs, income and foreign exchange by providing facilities and services. Tourism needs profitable growth in long-term(WTO, 1993). Based on the available natural and cultural resources, environmental supporters push their balanced efforts to attract the tourists. Residents and local government are concerned to create jobs and facilities in the way to protect the resources (Timur & Getz, 2009) . These groups have some goals in common. To name a few, resource and economic sustainability, socio-cultural and economic sustainability, and sustainable resource usage and resource protection (WTO, 1993).

As Timur and Getz(2009) stated, lack of coordination, lack of governmental support, lack of leadership, large number of agencies involved in decision making process, lack of local people's and tourists' awareness, different interests of stake holders, and the diversity between the tourism industry and its huge actors are the main problems among the sustainable urban tourism.

1.5. Urban Tourism

The United Nations (1968) defined 'Urban' as an area with the population of 20,000 people. Statistics New Zealand (2006) described six measures to identify the urban boundary: "1) strong economic ties, 2) cultural and recreational interaction, 3) serviced from the core for major business and professional activities; 4) an integrated public transport network, 5) significant workplace commuting to and from the central core, and 6) planned development within the next 20 years, as a dormitory area to, or an extension of, the central core."

Edwards (2008), defined urban as an area with the following elements: " A strong and broad

economic base that is serviced from multiple cores for major business and professional activities, a significant public transport network that acts as a gateway to other areas, a significant population with a workforce that commutes to and from the multiple cores, and long-term planned development." This functional and physical environment is characterized by a perception that the urban landscape is a web in which many individuals and groups have social, cultural, political, and economic relationships(Edwards, Griffin, & Hayllar, 2008).

Edwards (2008) defined urban tourism as one of the social and economic forces in the urban environment. This market presents different motivations, preferences, and cultural perspectives in a wide range that is engaged with the host/local community(Edwards, Griffin, & Hayllar, 2008).

Urban tourism gathers different people, places, and consumptions and combines different cultures, expectations, values and experiences(Edwards, Griffin, & Hayllar, 2008).

Tourists are visiting cities for different objectives. Urban facilities are used by tourists; but there are few cities, which are designed especially for tourists' usage. Tourism can bring economic benefits to the cities. World's urban population has increased from 14% in 1900 up to 47% in 2000 and it is estimated that it will grow up to 61% by 2030 (Ashworth & Page, 2011).

Urban tourism includes different types of tourism, like cultural tourism, historical tourism, sport tourism, gastronomic tourism, nightlife tourism, congress tourism, and shopping tourism. Cities have been described by density and diversity. Their wide range attractions attract people by different motivations. Urban tourism has an especial concern on interests and activities in duration of holiday (Ashworth & Page, 2011).

As Ashworth and Page (2011) argued, tourists' behavioral conduction in urban areas can be classified into four groups:

- Selectivity: tourists are using very small portion of the cities.
- Rapidity: based on urban life, which is fast, tourists are using the urban tourism products very fast.
- Infrequency: urban tourists do not like to repeat their visit again which is the opposite of non-urban tourists' desires.
- Capriciousness: urban tourists are fickle. They have different desires and these desires are changing during the time.

Law (1996) states that, there are some characteristics, which make urban areas as tourism destination (Law, 1996). Huge population of urban areas attracts tourists to visit their families and friends. As urban areas are developed better than the other destinations, they attract more tourists. Urban destinations are more accessible through airport and they have better service schedules. Cities have large amounts of accommodations to attract businesspersons. Cities can appeal different kinds of tourists based on their transportation, services, communications, and facilities.

In addition, the fast growth of cultural, pilgrimage and other kinds of tourism in urban areas has changed the face of these areas and caused new problems like pollution, traffic, etc. in last few years.

'Urban green tourism' is a new concept that expresses the importance of the travel in and around the cities, considering natural and cultural aspects of the cities (Dodds & Joppe, 2001).

1.6. Environmental Impact of Tourism

The quality of the environment, both natural and man-made, is essential to tourism.

However, the relationship of tourism with the environment is complex. It involves many activities that can have adverse environmental effects. Many of these impacts are linked with the construction of general infrastructure such as roads and airports, and of tourism facilities, including resorts, hotels, restaurants, shops, golf courses and marinas. The negative impacts of tourism development can gradually destroy environmental resources on which it depends.

On the other hand, tourism has the potential to create beneficial effects on the environment by contributing to environmental protection and conservation. It is a way to raise awareness of environmental values and it can serve as a tool to finance protection of natural areas and increase their economic importance. (Sunlu, 2003)

Furthermore, the fast growth of tourism in recent decades has made problems and opportunities. In 20th century tourism, development brings different kinds of pollution. Mass tourism movement needs mass transportation and the used fuel pollutes the air. Mass tourism also causes sound pollution in residential areas. Water pollution is the other impact of tourism on the wild nature and urban areas. These effects of mass tourism made governments to introduce the concept of sustainable tourism to guarantee that their environment will not be destroyed by mass tourism. Tourism development causes environmental pollution, which is more aesthetic than physical. Visual pollution is another kind of pollution, which is defined as the attribute of insensitivity in tourism establishments' design. Owners intend to make cheaper accommodations, which are not in harmony with the surrounding environment architecture. Lack of master plan and planning control are the main reasons of visual pollution. Now in many countries there are restricting rules that make owners to construct their establishments by local materials or build accommodations in harmony with culture or

traditions of the country. For example in Tunisia, it is forbidden to build a hotel higher than the height of the palm trees (Holloway, 1998).

The global conference on business and environment in 1992 expresses the steps necessary for tourism industry to learn its impacts on the environment. They argued that tourism standards should be developed and be in harmony with the collaboration of effective regulatory mechanisms. These regulations can be divided in two terms, terms of command and control, and terms of self-regulation. Under the term of command and control, tourism officials are clearly describing the policies and procedure to bring into being an especial outcome. Operators can employ the best methods to obtain the outcomes which are called self-regulation (Herremans, Reid, & Wilson, 2005).

1.7.Resource-based Theory

In 1995, Hart expressed the relevance of internal factors, like competitive advantages and financial considerations, which are motivational reasons for improvement of a firm. Based on this theory each firm has two types of resources. Heterogeneity resources that refer to human, physical and intangible resources are different among competitors. Immobility resources refer to the lack of ability of a company to compete with mimic or buy the resources from the other companies (Rivera J. , 2002). “Brand names, in-house knowledge of technology, employment of skilled personnel, trade contacts, capital, and efficient procedures are the examples”(Hart, 1995). Resource based theory focuses on internally driven and cost saving procedures, materials, avoidance of fines, and law driven interference(Bansal & Roth, 2000). In hospitality industry, cost reduction is the prior motive via operational efficiency behind the environmental measures (Gonzalez & Leon, 2001). Resource based theory is internally driven as a result of productivity concentration and resource efficiency by motivating the

employees, increasing the legal certainty and improving the internal organization, minimizing the environmental risks and decreasing the environmental impacts. What all these characteristics have in common is to make the firm internally strong(Morrow & Rondinelli, 2002). It is suggested that hotels should move from internal approach to external approach in order to manage their environmental resources and environmental impacts. Accommodations with long experience in environmental management accept environmental protection as a competitive advantage and as an eco-efficiency tool(Carmona-Moreno, Cespedes-Lorente, & De Burgos-Jimenez, 2004).

1.8. Accommodation Sector

In the modern times, the way people spend their vacations has undergone a great change. People like to spend good times with family and friend while at the same time exploring various tourist places across the globe (Ahliya). Hotels are the most distinguished form of accommodations. The English Hotel ‘Occupancy Survey’ defined ‘hotel’ as an establishment with five or more bedrooms that is not identified as guest house and is listed as bed and breakfast establishment only. Travel and Tourism Intelligence appraised the total supply of beds about 12.6 million around the world with occupancy rate of 44% (Holloway, 1998).

1.8.1.Mashhad as a Religious and Cultural City

Mashhad is a traditional pilgrimage destination as well as a metropolitan area with overwhelming VFR tourism. The main factor attributing to the city is the shrine of Imam Reza, a revered religious figure in Islam; especially among the Shiite sect .Mashhad is one of the major cities that require special attention as a magnet for the Shiites due to being the location of the shrine of the 8th Shiite’s Imam. As the majority of Iranians are followers of this sect, pilgrims throughout the year overrun the city.

Mashhad is also considered as a cultural city. Ferdowsi (940-1020), the greatest epic poet of Iran, who composed 'Shah Name', is buried in Toos village, near Mashhad. The tombs of Omar Khayyam (1048-1131) and Attar (1145-1221) are also located in city of Neyshabur, about 100 km far from Mashhad. Kamal ol-molk, the most famous Persian painter is also buried in Neyshabur. Khorasan has been called the 'Land of Sufis'. Based on this historical and cultural archaism, many seminars, and national days are held in Mashhad that bring many international and local tourists to the city. The holy shrine is not only a historical

building but also an architectural feature. Tomb of Nader Shah; the founder of Afshari monarchy is also in Mashhad. Mashhad was the capital of Iran during Afshari period.

1.8.2. Tourism Accommodations in Mashhad

Mashhad has the most accommodations among the other cities of Iran. Mashhad has 113 hotels which contain 3 five- star, 10 four -star, 34 three- star, 29 two- star, and 37 one- star hotels (See Table 1). As it appears most of 20 the hotels in Mashhad are 3- star hotels. These hotels have totally 8651 rooms and 24591 beds.

Table 1: Hotel accommodation facilities, capacity per month and occupation percentage by star

stars	Number of hotels	Number of rooms	Number Of beds	Capacity per month		Occupation percentage	
				Rooms	Beds	Rooms	Beds
Total	113	8651	24591	259530	737730	292	300
5 star	3	617	1630	18510	48900	58	59
4 star	10	1155	3438	34650	103140	56	59
3 star	34	3551	10082	106530	302460	63	65
2 star	29	1445	3980	43350	119400	55	57
1 star	37	1883	5461	56490	163820	60	61

Source: (www. chto-khr.ir), 2010

2. Research methodology and data analysis

A quantitative research method is utilized in this study. Data collection is achieved through distributing 1: an interview with 30 managers/owners of different types of accommodations in the city of Mashhad, Iran; 2: the survey questionnaire was administered to 300 managers and owner of hotels, hotel

apartments and inns in Mashhad. Out of this, 338 people answered the survey questions. The questionnaire involves seven environmental performance categories and 58 questions (indicates). The validity was approved by experienced professor in geography and rural planning and tourism and its reliability was verified by Cranach's alpha method, $\alpha = 0/810$.

Table 2: Environmental Performance Categories and Distribution of Indicates

No. of Indicates	EP categories	Cat. No
7	Architecture and Landscape Design	1
9	Energy Efficiency	2
9	Waste Reduction	3
6	Water Efficiency	4
5	Education Training for Environmental Awareness	5
6	Communication for Environmental Awareness	6
16	Managerial Practice/Knowledge on the Environmental Protection	7

Hypothesized categories were analyzed in relation to the environmental performance (EP) as a dependent variable. The intensity of correlations either positive or negative was determined by the level of factor loading in the hypothesized categories. Pearson 's' r was applied to probe the correlation between component and EP, and to reveal the correlation coefficient between 7 quantitative and continuous variables which are lining towards upper level of value 1 as a perfect positive linear correlation. This is an indication for showing the strength of the association between variables. The results show that the

strength of association between the variables is high, and the correlation coefficient is significantly different from zero ($P < 0.001$). the questionnaire sought the respondents' reflection intensity on an matter through a 5-point Likert Scale ranging from strongly agree to strongly disagree. It should be considered that only 5.4% of the respondents were female. The compiled data was analyzed using the recent version of SPSS where the different categories were translated into hypotheses. Table 3 illustrates the demographic features of the participants.

Table 3: *Demographic Features of the Participants*

Variable	Level	N	%
Sex	Male	320	94.6
	Female	18	5.4
Marital Status	Married	330	97.6
	Unmarried	8	2.4
Age	-30	10	2.9
	30-34	28	8.3
	35-44	48	14.2
	45-54	62	18.4
	55-64	166	49.1
	+65	24	7.1
Occupation	Manager	34	11.1
	Owner	304	89.9
Education	Primary	12	3.6
	Secondary	96	28.4
	Associate	38	11.2
	Undergraduate	106	31.4
	Graduate	76	22.5
	Other	10	2.9

3. Findings:

Results show that most of the hotels in Mashhad are supportive and try to follow the local government's planning regulations about environment. On the other hand, most of the owners announced that they used local materials in the construction of their establishments. Meanwhile, the majority of

managers believed that locations of their hotels were not the cause of the traffic congestion (Mean 4.25, SD 1.8). the reasons why most of the hotels in Mashhad do not have no open/green spaces are that the price of the land near the holy shrine is high and there is no restricting laws in municipalities and

ICTHO's constructional regulation (Mean:4.17).

More than 35.7% of managers claimed that their hotels' location has caused traffic congestion. Parking lot is a critical problem for hotels, because Mashhad municipality allowed owners to build their accommodations without considering enough parking areas in the first decades after the Islamic revolution. One main concern of ecological architects is to meet buildings' heating, cooling and lightening needs in way that could minimize the consumption of energy. Although there is no effective implementation for heating and cooling, more than 88.9% of Mashhad's hotels are using energy-saving light bulbs in their rooms. They also declared that the use/purchase low energy consuming materials (86.9%). 77.5% of the owners also mentioned that they use fossil fuel in their accommodations. More than 59.2% hotels apply energy-saver control system in their guest rooms. The application of renewable energy (solar, wind, bio-fuel ...etc.) systems in the accommodation sector is either non-existent or very minimal in Mashhad. Responses show that half of the hotels are using phosphorus lighting in lighting outside areas. In spite of the fact that the price of electricity is relatively low in Iran, the consequences show that the owners are aware of the issue of energy efficiency. However, they do not have any plan to decrease the usage of fossil energy.

The "Three Rs" – reduction, reuse and recycling– could form core strategies for having sustainable resources. Reduction is perhaps the most important of these factors and Regarding the waste management and recycling, efforts are made by the municipality and hotel managers to practice waste separation and recycling.

More than 69.1% of managers mentioned that they apply solid waste separation and they are cooperating with recycling firms and are collaborating with recycling programs of the local government.

85.9% of the hotels are purchasing environmental friendly materials and 71.6% of them are buying materials with recyclable features. Using recycled materials is not common among Mashhad's hotels and only 24.7% of owners said that they are composting the organic and food wastes. Over 88.9% of managers believed that pollution in general and air pollution in particular have been increased in Mashhad.

The municipality of Mashhad has established some kiosks around the city for gathering people's dry waste materials, and in exchange, give them hygienic materials. The municipality's Recycling Organization has built a 'Power Planet' beside the 'Compost Company'. It could generate electricity from biogas which is produced from waste materials.

Regarding the Second UN World Water Development Report, if the present levels of consumption continue, two-thirds of the global population will face water deficiency in 2025. This matter could make the competition for water among agricultural, industrial and human consumption more severe. So, managing the water consumption is very vital and important. Water efficiency is reducing water wastage by measuring the amount of water needed for a particular purpose and the amount of water used or delivered. Water efficiency differs from water conservation and it focuses on reducing waste, not restricting use. Hotels in Mashhad are not involved in any water efficiency program. Only 23.7% of hotels use photocell tapes. However, it seems that the majority of managers and owners are aware of water-saving system measures on linen and towels and inform guests to cooperate with them. The percentage of managers who apply wastewater treatment system is 40%.

education are the most important strategy for a long-term change. Although 80% of hotels in Mashhad provide their personnel with education sensitive training, but it seems that

they do not have any education for their guests (only 42.5%). Most of the managers and owners claimed that they have participated in environmental meeting and workshops (72.6%).

74.1% of accommodations in Mashhad collect information on environmental protection. Managers are interested in obtaining guests' opinions on environmental activities of their hotels and reflecting these ideas. By the mean of 3.08, it seems that the majority of hotels in Mashhad are using mass transportation for their guests and personnel. These is a good way for decreasing air pollution in one hand, and reduce the traffic jam on the other hand. Guests' opinions are gathered in order to be used in hotels' environmental activities (Mean: 3.7, 3.39). Results indicate that owners and managers are communicating with their guests and personnel for environmental awareness.

The research findings proved that managers' awareness Pine Awards, and Blue Flag Project and ISO 14001 is low. Half of them are informed about sustainability concept and only 36.5% of owners think about investment strategies conforming to the goals of sustainability. 81% of managers believe that hotels' environmental quality dramatically affects the competitiveness.

4. Conclusion and discussion

Tourism is a serious phenomenon which has the potential to create both negative and beneficial effects on the environment and one of the main aspect of tourism is its accommodation sector with its undeniable impacts. Generally, buildings are one of the main and considerable uses of energy and materials, accounting for some 40% of all energy used in the United States and a large proportion of the solid waste going into municipal organizations (Wheeler, 2013, p. 79) Because of this fact, this study measured seven EIA categories to assess the environmental performance of hotels in Mashhad. The results proved that the managers and owners of Mashhad's hotels are not aware of the EIA and

the concept of sustainability. Lack of information and conferences and academic education are the main reasons of this ignorance. Absence of a master plan is a crucial problem for hotels. Increasing in usage of fossil fuels and deficiency in using solar, wind, biomass and nuclear sources of energy are the other critical and crucial points. Mashhad is suffering from shortage in water resources, specifically in summer and sometimes to local government is forced to use water ration in order to manage the water consumption. However, the local government has no training program even to teach and inform people on how to cooperate and water saving practices is not adequate, too.

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