



Investigation of the important items in the development of desert ecotourism (Case studies: Matin Abad eco-camp in Iran and Nights eco-camp in Oman)

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ABSTRACT

Deserts of high quality are key levels in nature tourism and can cater to a variety of tourist needs. Because the world's deserts cover such a large region, developing tourism and ecotourism can be a significant concern. Two Eco Camps in Iran and Oman (Matin Abad in Iran and Night in Oman) have been explored in this regard. This study that has a descriptive-analytical method was conducted in which prominent and crucial points of these two camps were discovered and a comparison was made. Finally, the findings show that, particularly in desert tourism, besides the absorbing tourism policy, the physical and spatial structures of camps are important in developing a sense of place that might increase the number of tourists and enhance tourism.

Keywords: Desert ecotourism, sustainability, Matin Abad eco-Camp, Night eco-Camp

INTRODUCTION

From long time ago people were to travel with basic equipment for shopping, sightseeing, visiting historical sites and major cities (1). In Iran because of a relative safety, cities, roads and resorts were expanding. The reign of Shah Abbas I can be one of the most important periods of development of tourism in Iran (7).

Arid, places, and deserts, make up about one-third of the world's droughts. This value in Iran is classified as about 4/3 of the country within the hot and dry climate. The area of this desert is 32 million and 500 thousand hectares that is distributed in 18 provinces of Iran. The ecological and biological richness of the country, have shown the face of this ancient land as the view of environmental capabilities (13). Today, "tourism" has become a socio-economic phenomenon in the world, tourism is one of the foundations of the globalization and the symbol of "space-time compression" in the postmodern era (2). Economically, tourism is the world's largest and most diverse industry, and with 200 million employees its annual turnover is about 5.4 trillion dollars allocated 8% of global employment to itself (11).

Since a large part of Iran is desert, the country's marked capabilities is in tourism and desert ecotourism. Increased domestic and foreign investment income and foreign exchange and more attention to ecotourism areas can provide the field of reaching full employment, increase in foreign exchange earnings, the introduction of Iranian civilization to the world, show ecotourism attractions to people and breaking ethnic boundaries (4). Also, "Iraj Moradi", documentary film maker, producer and director of the documentary "in the desert of Iran refers to "The interest of foreign tourists to be in the deserts of Iran. He knows the itinerary" Andre Gide" a Journey to the East as an effective factor of the travel of the new group of European tourists who were traveling to the deserts of Iran, so that a new group of tourists who are looking for Eastern mysticism, eagerly spent days in the Deserts of Iran(17).

Today, in order to develop desert ecotourism in the desert and dry areas of the developed countries, great changes have been made by using ultra-modern agriculture and irrigation systems, establishment of industrial centers and large factories, spreading desert sports such as desert walking, rally, motorcycle riding and holding Desert traveling tours. In our country in recent years, the desertification and tourism debate have been developed more and good movements have been started in this field (12).

In order to prove the impact of desert resorts to attract tourists, the sense place of these spaces as architecture spaces are examined. Sense of place, is a phenomenon that is formed by the body confluence, functioning and activities and meanings in people's minds. Physical elements,

activities and ideas that are simultaneously come from the various components and with the meaning of place, have impact on the formation of the sense of attachment and effective place. Activities are to be the most important element in the stability of attachment and sense of place in the sustainability of the spaces (3).

Relationship between man and space, is through the understanding of the body and its current activities, the amount and quality of these relationships have manifested a sense of place and sense of belonging to it. About this, the quality of place designing a has crucial role in our understanding of the environment and the nature and extent of his relationship with them. In general we can say that the relationship between the body and the supervisor in the risk-oriented environmental approach is in this way that on one hand the objective realm of object, exposes the body and on the other hand the mind realm of the individual is involved in its opinion and consideration and in some way trades between physical characteristics and cultural patterns and the person's mental ability (6).

In this study, two desert resorts of Matin Abad in Iran and Nights in Oman that are the examples of national and international residences in terms of visitors (according to a poll on the website Booking.com) are being adaptive based on the aspects of field-oriented, pedestrian-oriented, Space integrity etc as factors that affect the body and diversity, flexibility, vitality and dynamism, collaboration and adaptability as the factors affecting the performance (activity) based on John Patner I model. The aim of studying the features of the two residences, is measuring their success of their making on the basis of physical and functional criteria and evaluating its results on the development of desert ecotourism.

BACKGROUND

In Iran less research have been done on the evaluation of residences and their quality on the development of ecotourism, especially in desert, for example, Noori and colleagues (2010) on the research named feasibility of ecotourism attraction in the desert, believed that ecotourism is a new phenomenon that its main motivation is tourism, observation and enjoyment of nature and natural and cultural landscapes and focuses on ecotourism revenue. Khalidi et al (2012) in a research on a place of desert ecotourism in the development of rural settlements (Case: Camp of Matin Abad-Badrood), in addition to introducing the tourist center, deals with the impact of the participation of local communities in tourism development and its effects on the development of the village. Sepehr and Safrabady (2013) in their study as the analysis of factors affecting the development of ecotourism in deserted areas of Iran , with a view to potential biological and economic attractions of the deserts, attract minds to understand the feasibility of investing ecological attraction in the Iranian desert and attention to ecotourism in the area. In addition to articles on the same topics, seminars and conferences are held every year about wilderness traveling and its expanding, but none of them deals with the influence or quality of the residences in the expansion of the industry. So this study shows new perspective to ecotourism and one of the factors of its development is dealing addressing desert resorts.

LITERATURE

the term Ecotourism in Moeen Persian Dictionary means a kind of tourism in order to visit the natural attractions that also helps to protect the environment. The word was first used in English literature by Rumril (1985) with the aim of considering investment in the manufacturing sector in the studies of attracting tourists in areas with natural potentials (11).

Ecotourism in the world

Each year, World Tourism Organization puts statistics information of the countries on his official site. For example, the destination of tourists in 2013 and its trends in future years are shown.

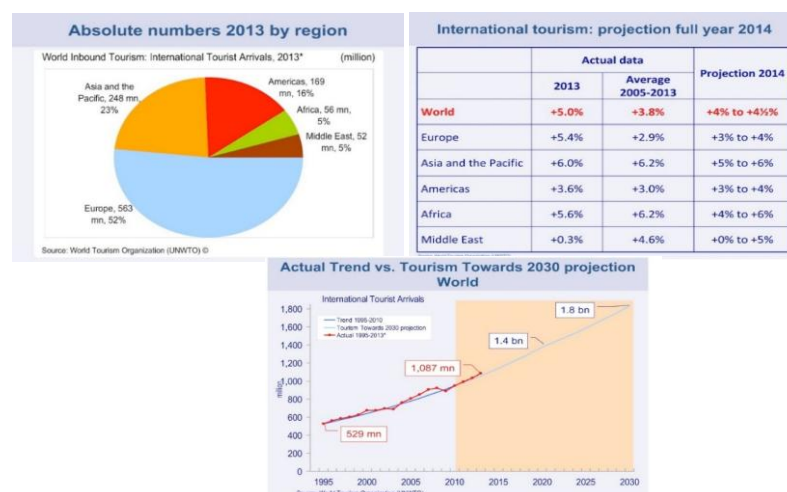


Figure 1. Statistics Information of UNWTO (14).**MATIN ABAD RESIDENCE IN IRAN**

creation of Matin Abad Badrod tourism resort was approved by the cabinet in 2006 and was opened in 2010. This residence was built as the first natural camp in Iran on the basic principles of sustainable tourism and sustainable ecotourism at the 25 km of south of Natanz and 45 kilometers of the southeast of Kashan, and 4 hours distance from Tehran at the beginning of the great sands of the desert area, behind the gravel.

The use of solar cells to provide the necessary energy and attention to the management of recycling is one of the very important benefits of this residence. The peak of visit to the residence is in the months of November, December and May with an average of 900-700 visitors and last year it had about 4500 visitors(www.matinabad.com).

**Figure 2.** Matin Abad residence (18).**NIGHTS RESIDENCE IN OMAN**

Nights Desert resort in the Sultanate of Oman in the sands of Vihaba is a vast desert area that has distance about 2 hours' drive from Muscat, the capital of the Sultanate of Oman. This 5-star desert resort with oasis amongst the golden sands and with spectacular open spaces is located sporadically. The resort is spread over an area of 10 hectares on the silky sand. 30 luxury desert tents await those looking for ultimate adventure in their leisure time at the desert. Two dunes restaurant is the ideal place to have meals. This place has a maximum capacity of 64 seats, that you can entice your palate with a range of exquisite food, including international, Hindi, Chinese, Arabic and Continental foods. Only 2% of the visitors are native to this place. About 90% are from European countries, mostly from Germany and 8% are of Asian, African and Oceania countries. Peak of the visit to the resort is in November and January and about 1500 people and in 2014 the number of visitors reached 12,560.

**Figure 3.** Nights residence (15).

Now the question is that with facilities and services that these two resorts are providing, to what extent they are successful at the national and international scope? To achieve the result of this research, a table is prepared where the standards and criteria in terms of the physical and functional aspects and influencing factors are analyzed (Table 1 and 6).

Then the two residences fully analyze the investigated factors and both residences are being adaptively compared from the point of physical and functional criteria (Table 2-5 and 7).









Table 1. Body: Effective factors and its related functions (Authors).





body	Effective factors	Functions
	Field-oriented	Preserve the natural substrate and background of desert. Use of traditional forms of ancient architecture. Use of materials consistent with desert. Preservation and restoration of the historical and valuable elements of the residence.
	pedestrian-oriented	Pay attention to the scale of walking in the design and locating of spaces. The priority of pedestrians on the overpasses. Suitable floor for walking.
	Spatial coherence	Pay attention to proximity and spatial sequences.
	Permeability	Existence of a hierarchy of access. Availability of easy access to the residence. Pay attention to aggregate and index in designing the residence. Access to parking for employees and visitors.
	Visual proportions	Pay attention to the values of harmony, coordination and sequencing. Pay attention to the horizontal and vertical rhythm in design. Pay attention to visual balance. Pay attention to the full and empty spaces.
Closure and coherence	Pay attention to the final shell of the spaces. Pay attention to the integration of spaces.	
Comfort	Solving the problem of transport. Recovery of facilities (electricity, water, gas ...). Provide climate comfort.	

Now by identifying factors that affect the body and the functions related to them, features of two residences of Nights and Matin Abad can be reviewed in terms of this point. In table 2 field-oriented and its functions in these two residences are checked.

Table 2. Field-oriented and its functions in two desert resorts (Authors).

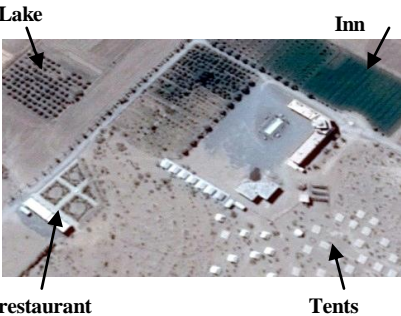



Effective factors	Functions	Matin Abad Residence	Nights residence
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<p>Camp site</p>	<p>Form</p>	 <p>Surrounded by:</p> <ul style="list-style-type: none"> • Desert • Pomegranate gardens • Farms   <ul style="list-style-type: none"> • Using the traditional, architectural and indigenous style of desert in building inn and restaurant. <p>Construction of Bedouin-style tents and nomadic style of desert edge.</p>	 <p>Surrounded by:</p> <ul style="list-style-type: none"> - Desert  <p>- All spaces are designed and built based on Bedouin style tents.</p>
<p>Materials</p>	<p>Materials</p>	  <p>The use of Bahmani brick with grouting.</p> <ul style="list-style-type: none"> - Polyester-cotton tents and the floor is one hundred percent polyester with PVC coating to prevent moisture. 	 <p>- Roof of the suites with tent structure made of canvas, brick walls are coated with waterproof color.</p>

<p>Interior decorations</p>		 <p>- Using the traditional arches, tiles, brickwork.</p>	 <p>- Use of the Arabic arches and tiles, Arabic furniture and lively colors.</p>
<p>Exterior decorations</p>		 <p>- Using brickwork, stucco and colored glass.</p>	 <p>- Use of the Arabic arches, decorations of the parapet and a fence around the camp.</p>

By identifying the features of the resort based on the field-oriented functions it can be said that Matin Abad has more space diversity and form than Nights resort in terms of site and form. In choosing the materials of the residences climate was considering but Matin Abad residence is with traditional materials and Nights residence is with modern materials. The decorations inside and outside of buildings have to taste the local and historical interest. In the following part Table 3 is evaluating pedestrian-oriented and its functions.

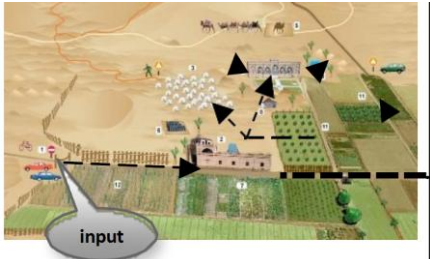



Table 3. Pedestrian-oriented and its functions in two desert resorts (Authors).



<p>Effective factors</p>	<p>Functions</p>	<p>Matin Abad Residence</p>  	<p>Nights residence</p>  
<p>pedestrian-oriented</p>	<p>Locating of the spaces on the site</p>		
	<p>Traveling of the pedestrians and vehicles</p>		

Floor	<p>Car parkings are outside the camp</p> <ul style="list-style-type: none"> The possibility of entering the vehicles inside the campus.  <ul style="list-style-type: none"> Area in front of the inn is covered with sand and the rest of the space is covered with desert gravel. Terrace floor also has mosaic that could also be used as a sitting room and observing stars. 	<p>Car parkings are outside the camp.</p> <ul style="list-style-type: none"> Impossibility of entering the car inside the camp.  <ul style="list-style-type: none"> Camp sites is along the sand and desert fields Just in front of the hotel is worked with stone to prevent entrance of the sand.
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With the conducted studies in terms of pedestrian-oriented and its functions, we can say that the location of the places at the site of Matin Abad is sporadically and at the site of Nights is centrally located within the fence. Traveling of the pedestrians and vehicles, and the floor are different depending on the conditions in the residence. In the following part, Table 3 is evaluating permeability and its functions.





Table 4. Permeability and its functions in two desert resorts (Authors).



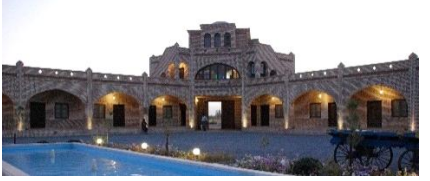

Effective factors	Functions	Matin Abad Residence	Nights residence
	hierarchy of access		
permeability	Access to the camp	 <ul style="list-style-type: none"> - Through crossing several villages and farms arrive in the desert - Exit distance of Kashan- highway to the camp is 22 km 	 <ul style="list-style-type: none"> - Distance of 230 kilometers from Musca International Airport. - Distance of 11 km from the city of Alvzil.

	<p>Aggregate and indicators in camp</p>	 <p>- Camp Inn serves as an indicator for the area.</p>	 <p>- White color of the entire camp acts as a significant element.</p>
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After defining the functions of the permeability of both resorts, the visual proportions and functions are described in Table 5.

Table 5. Visual proportions and its functions in two desert resorts (Authors).

Effective factors	Functions	Matin Abad Residence	Nights residence
	Skyline	 <p>- Various buildings on the campus and various skyline.</p>	 <p>- Uniform skyline in the whole set.</p>
Visual Proportions	Vertical and horizontal rhythms in the facade	 <p>- Horizontal and vertical rhythm</p>	 <p>- Lack of rhythm in the building area</p>

<p>Visual balance in the volume</p>	 <p>- The symmetry of the buildings</p>	 <p>- Each suite has its own balance, but because of the size of distribution of the volumes in the area there is not balance in the collection.</p>
<p>Full and empty spaces</p>	 <p>-Porch and terrace make the volume to be empty and full -Full and empty spaces help to the climate comfort of the zone because of the shadows they create</p>	 <p>-Full and empty spaces in the camp is small and limited, the majority of spaces are full</p>


By comparing the two resorts in terms of the visual proportions, varied skyline, vertical and horizontal rhythms and empty and full spaces can be seen in Matin Abad. But we see monotony in the entire collection of Nights resort. After comparing the body, influencing factors on it and functions related to each factor, we show analysis of performance of each residences in Table 6.


Table 6. Performance: Effective factors and its related functions (Authors).

Criterion	Effective factors	Functions
performance	Diversity	Supplying activities for visitors.
	Flexibility	Selection and locating of similar applications in the sites. The ability to convert and transfer functions.
	Dynamics	Using the spaces during day and night. Lighting of the spaces and landscaping of the Camp in Nights. Using the activities that encourage the use of cultural and commercial services.
	Participation	Enabling participation of local residents in the camp. Building economic self-reliance.
	Compatibility	Pay attention to adaptation activities in the proximities. Pay attention to the coordination of space with its ongoing activities.

Revealing the functions of performance in Table 7, factors affecting the performance including spaces, activities, lighting and local contributions are investigated.

Table 7. Effective factors of performance in two desert resorts (Authors).

<p>Effective factors</p> <p>spaces</p>	<p style="text-align: center;">Matin Abad Residence</p> <p>This residence includes:</p> <ul style="list-style-type: none"> Inn. Restaurant. Residential tents and praying tent. • Organic farms, pomegranates, olives and dates garden. Space for camels. Solar cell area. Place for Ostrich. Lake. 	<p style="text-align: center;">Nights residence</p> <p>This residence includes:</p> <ul style="list-style-type: none"> Residential tents. Restaurant. Playground and game room library. • Commercial space for buying gifts and souvenirs.
<p>Activities</p>	<p>Business activities:</p> <ul style="list-style-type: none"> Selling farm crops and ostrich.  <p>Recreational activities:</p> <ul style="list-style-type: none"> Camel riding. Cycling and walking in the desert. Sand climbing with 4 wheel drive cars. Star monitoring. -Holding Raleigh Tournament. -Atashuni events (sitting next to the fire at night). -Watching a unique wildlife area, including birds such as the blond crow, Houbara Bustard, Partridge and Skylark -Learning about desert flora and local crops. Holding ancient and religious events (harvest festival, Mehrgan celebration, centenary, the last Wednesday of the year and Yalda, holding Tasua and Ashura. 	<p>Recreational activities:</p> <ul style="list-style-type: none"> Quad riding. Camel riding. • Driving four wheel drive cars Walking. Star monitoring. Sitting next to the fire at night.

<p>Lighting</p>	 <p>-Using solar power and lighting for providing light at night</p> <p>Participation of local residents in issues such as:</p> <ul style="list-style-type: none"> - Tourists Accommodation. - Offering garden and agricultural products. 	
<p>Participation</p>	<ul style="list-style-type: none"> Transportation of clients. • Accompanying the clients in visiting area attractions and accommodation facilities. 	<p>The local residents of an area which the residential place is located in that area are called BEDOUIN people.</p> <p>The participation of local residents in issues such visitors.</p> <ul style="list-style-type: none"> - Transporting visitors to the city, the resort and the surrounding area.

In the above table more varieties of spaces and activities in Matin Abad can be seen that are effective in attracting tourists. In both local residents, participation of local residents plays an important role in the desert tours.

CONCLUSIONS

Various factors are effective in the development of ecotourism and ecotourism destination, including environmental, economic, social, cultural and political factors.

The study showed that in addition to the above factors the existence of suitable desert resorts can help develop the industry, however, that these factors also affect the resorts. Investigation through full knowledge of the above-mentioned case and comparing anatomy, and functions of each, it was concluded that considering physical and functional qualities, Matin Abad residence is working equal and stronger than Nights residence in Oman. But unfortunately has lower number of visitors than Nights residence of Oman. Matin Abad residence at its peak has around 700-900 visitors, but the Nights residence during crowded times has 1500 visitors. This is while the majority of visitors of Matin Abad residence are national and local clients and adventurers, but in Nights residence only 2% of visitors are domestic and 90% of them are from European countries, mostly Germany and the rest 8% are from Asia, Africa and Oceania. While Oman desert area is not even as big as one desert of Iran. We hope that by resolving current problems and staying of foreign tourists, we could see the increasing number of foreign desert travelers and expansion of this industry in our country, so that it leads to the design and construction of more settlements in the deserts of the country.

PS

John Patner's sense of place Model: Panter's model suggests that sense of place is created through the activity, physical structure and meaning. Panter knows structural and physical measuring criteria as the urban sight, landscape, permeability, the construction and urban furniture. Also introduces measuring criteria of activity factors as the applications, the amount of foot traffic, car traffic, patterns of behavior, the built environment and readability, and measures of semantic as cultural relations, cognitive functions and quality assessment(3).

REFERENCES

- Alvani, Sayyed Mehdi and Piruzbakht, Maasumeh (2006), Tourism management process, Tehran: Office of Cultural Research, 1st edition.
- Besculides, Antonia, E.Lee, Martha and McCormick, Peter.J (2002), Residents Perceptions of the Cultural Benefits of Tourism, *Annals of Tourism Research*, Vol. 29, No. 2, (303-319)
- Carmona, Matthew, Heath, Tim, Oc, Taner and Tiesdell, Steve (2003), *Public places, urban spaces: The dimensions of urban design*, Architectural Press, (95-100)
- Ehsani, AmirHushang and MohammadiNahuji, Meghdad (2010), Planning and development of sustainable ecotourism of wilderness areas (case study), *Proceedings of the Second National Conference on Geography and Urban Planning*, (97-106)
- Etemad Newspaper, No.1565, date 15.12.2007(Social Report)
- Golkar, Kurosh (2007), The concept of quality of vitality in urban designing, *Soffe*, (44), (71-72).
- Humayun, MohammadHadi (2005), *Tourism: cross-cultural communication*, Imam Sadiq University publications, Tehran, 1st edition.
- Moein, Mohammad (2009), *Moein Persian dictionary*, Tehran: Ashja publications
- National data base of earth sciences (2006), The comparison of the Geotourism income and mining in China, Tunisia and evaluating the potential of desert traveling in Iran.
- National data bases of earth sciences (2008), *Geotourism of Iran's deserts*.
- Rezvani, MohammadReza (2008), *Development of rural tourism (with an approach of sustainable tourism)*, Tehran University Press.
- Ronaghi, Ahmad (2012), *The first national conference on desert traveling and natural tourism attractions*, South Khorasan environmental channel.
- Sepehr, Adel and SafarAbadi, Aazam (2013), Analysis of factors affecting the development of ecotourism in desert areas of Iran, *the studies of human geography*, Vol.45, No.4, p 138.
- UNWTO News Conference HQ, Madrid, Spain, 20 jan 2014
- www.audleytravel.com/oman/geo
- www.booking.com/hotel/om/desert-nights-camp.html
- www.irandesert.com
- www.matinabad.com/pages/page.aspx?id=basicpremises
- www.orbitz.com/Desert Nights Camp in Al Wasil Hotel Rates & Reviews on Orbitz