The Study of Tourism, Ecotourism & Geotourism Potentials of Dasht-e-Kavir

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Abstract
Today, tourism industry is addressed with a wise and specialized approach which encompasses different sectors. One of the important sectors of tourism is ecotourism and geotourism. From scientific viewpoint, Ecotourists and Geotourists are those who start on a journey to observe natural and geological sights and landscapes in order to visually observe world’s wonders. In addition to beautiful natural landscapes including deserts, kavirs, basins, beautiful coasts, mountains and unique plant covers, Iran has high tourism (ecotourism and geotourism) potentials due to diverse climatic conditions, suitable sunny hours, etc. Among all these landscapes, Dasht-e-Kavir, as the largest salare of Iran and world with an area more than 120,000 km², has placed in itself a set of most unique landscapes of the world. Based on geological divisions, Dasht-e-Kavir is located in the limits of central Iran and has experienced several changes during its life. It is likely to have been under water for millions of years as the result of tectonic movements or it may sometimes have come out of water due to vertical movements. By formation of Alborz and Zagros mountain ranges in about 65 million years ago, a shallow lake was formed at that part and was affected by several complicated climatic and tectonic conditions in Tertiary and Quaternary periods. The result of all these accidents has provided the possibility of formation of a set of most surprising landscapes in a relatively limited space. The main goal of this research is to introduce tourism and ecotourism attractions of Dasht-e-Kavir. In this desert, a set of salares, deserts, sand dunes, salt polygons, salt and clay pans, several swamps and cold and warm springs are observed beside historical works. Major landscapes and historical works available in Dasht-e-Kavir include Masileh Desert, Haz-e-Soltan, Salt Lake, Dagh Sorkh, Rig Gen, Nakhjir valley of Maranjab desert, mountains of Siah Kouh, Talkeh Mountain, Bahram Palace, Shah Abbasi Caravanserai.

Keywords: Tourism, Ecotourism, Geotourism, Dasht-e-Kavir, Landscape.

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Received Date: 30 April 2017 Accepted Date: 15 July 2017
Introduction
Over half of the area of the country has been covered by mountains and heights, one quarter by plains and less than a quarter by a vast salt desert straddling between Khour and Tabas (http://www.ngdir.ir... / www.lajvar). Deserts are low, flat areas which have expanded in alluvial plains of dry areas. They may be placed over lake sediments dating past with a larger ratio of precipitation to evaporation than present. Some of these deserts are covered by seasonal waters in some years. In Iran, a salt marsh is called Kavir (Pashayi, 2002). They include Markazi Kavir, Bejestan Kavir and Khaf Kavir (Kardovani, 2007). Iran's Markazi Kavir or central desert is a highly potential area. A large part of the desert's integrated and invaluable parts (salts, sceneries, communication and historical routes, etc) are situated in Tehran (Kardovani, 2007). The sand hills of Salt Lake in the Dasht-e-kavir are very scenic. The sighting of sunset over the polygons of the Salt Lake is very joyful. (www.chn.ir). Development of facilities for different sports especially walking, camel riding, and establishment of course of car race, motorcycle race and bicycle race would add to the attractions of the Dasht-e-kavir. Be that as it may, any ill-thought decision might lead to unpleasant incidents. Tourism across the plain then must be conducted with guide, a sufficient amount of supplies especially water, warm tent and clothes, thermal and cooling devices and the relatives and friends must be informed about such a decision so that necessary measures are taken in case of delay of tourists.

Data and methodology
The present study is largely a documentary, library and field research, informed by data resources of tourism related organizations and bodies as well as state bodies' reports. The present research has been conducted by examination and analysis of issues in light of the aim of research which is to introduce tourism attractions of Dasht-e-kavir as a major salt desert tourism hub in Iran.

Dasht-e-kavir
Dasht-e-kavir as the largest salt marsh of Iran and world (forum.pacyrus.com site) with an area of more than 120,000 square kilometers has extended from the southern slopes of Alborz to central Iran. It extends northward towards the eastern Alborz mountain range and Binaloud Mountains, eastward towards the Eshqabad city and Ozbak Mountain, westward towards the small Kavir and southward towards Lout Salt Desert as well as the salt deserts around Yazd and Khour. The Dasht-e-kavir is situated in central Iran based on geological divisions. It has undergone many developments and probably has been inundated for millions of years due to tectonic movements and in some cases has emerged from water due to vertical movements. About 656 millions years ago, after formation of the Alborz and Zagros mountain ranges, a shallow lake was developed in the area and underwent numerous, complex climatic and tectonic conditions during the tertiary and quaternary periods eventually leading to formation of a wonderful collection of sceneries within a relatively limited space. The area, though unfavorable for agricultural and other similar activities, proves significant in attracting of tourists due to its magnificent landscapes and sceneries. 

Major tourism attractions in Dasht-e-kavir are as follows:

1- Kavir National Park

Kavir National Park is an example of dry desert ecosystems in the world. Low precipitation and unfavorable environmental conditions has put limits to many economic activities in the area to the extent of impossibility in some cases. Nonetheless, some species have been able to grow in the plain, hence providing ground for some living creatures. The park is one of the oldest protected areas in Iran. It is located south of Semnan Province, straddling between Central Kavir and Qom's Salt Lake. The National Park has an area of 45 thousand hectares. It is the only national park where no mine activities are conducted. It has been protected and expanded in a bid to preserve species of flora and fauna. The existence of rarest species of flora and fauna which risk extinction attests to the reality that the ecologic myriad of the park has lesser been subject to changes or destruction. Various plant species can be seen in the park, providing habitat for different species of animals. In flat areas, vegetation is salt desert like or semi salt desert like, being notably the habitat of deer, wild cats and zebras. Steppe plants live in
mountain areas of the park, providing habitat for such animals as bezoar goats, goats, rams, and ewes. Bird life is also diverse in the area so that many indigenous birds including partridges, dull-yellow partridges and immigrant birds like flamingoes, mallards, ruddy shelducks, and common teals (Mghsoudi and Rahimiherabadi, 2010).

Aran and Bidgol Salt Lake
The salt lake is placed in Iran's Kavir Markazi area. The special location of the said lake and method of formation of orderly beehive like polygons of salt has created ample attractions. Salt Lake, situated 55 kilometers to the north of Aran and Bidgol city and long been referred as resource of salt, is an extraordinary excursion attraction of the city. Method of formation of orderly polygons with crystal walls on the bed of the lake is so scenic that it could turn into a leading tourism attraction once its communication routes are improved. (www.drazimirc.com).

Rig Jen
Rig Jen with an area of 3800 square kilometers is located to the south and southwest of the Dasht-e-kavir and east of the Kavir's protected area. Huge crescent-like or pyramid like masses of sand, called Barkhan or Qourd are seen in the area alongside salt sediments. During the year, sand hills move in the direction of dominant winds. The area is among the most rugged terrains of the world. In the past, no caravan or desert farers never crossed it and at present no route or small village is there in the desert so that except for researchers, a handful, no other one has ever crossed it (www.drazimirc.com). Our ancestors considered the land as damned and stronghold of malicious souls and demons. Nowadays too most people in the surrounding cities and villages believe in the conviction and have even made myths about the issue. From antiquity it was said that anyone who enters the land would not escape live or will be lost. Perhaps those entering the land were got stuck in salt marshes or lost their lives due to thirst or fatigue (www.ab.epage.).

Banderik
A vast area north of Aran and Bidgol city with high sand hills which is a tourism zone in the area and is placed along one of the offshoots of the well known Silk Road.

Yakhab Mountains
In the desert side of Aran and Bidgol city there are mountain ranges which in summer enjoy a cold and favorable climate. The existence of cool weather in the desert area in summer stuns tourists.

**Hoz Soltan Lake**
The salt lake of Hoz Soltan is situated 85 kilometers to the south of Tehran along the side of Tehran-Qom highway. The lake, also known as Saveh Qom Lake and Shahi Lake, is located northeast of Qom Province in an estimated area of 240 square kilometers. Alborz Mountain Range is placed north of the Lake. The area and shape of the lake varies in different seasons proportionate with rivers inflow and amount of precipitation. In time of precipitation and snow meltdown, the lake grows vaster while in dry seasons it gets smaller in area. The lake has made up of two separate pits. The western pit is called Hoz Soltan and the eastern pit is called Hoz Marreh. They are interconnected with a waterway. In seasons with high levels of precipitation, the Marreh pit is first filled with water and the excess water spills into Hoz Soltan.

**Deq Sorkh Desert**
Deq Sorkh area is located east of Ardestan. It is about 639 square kilometers. The highest point is at an altitude of 2085 meters while the lowest one is 922.

A water saturated layer of salt with varying thickness is placed at surface and has no notable shape due to having water. The desert side is fully affected by the amount of humidity and water in the desert and wind related erosion. For the same reason, when the water table goes down in desert and the desert side loses humidity to some extent, salt crystals are formed and ploughed-like land or cauliflower-like land is formed.

Cauliflower like lands and salt polygons on the side of the desert is another visible formation. Such formations changes form under dry or humid seasonal conditions so that their amount, density and diversity grows in dry season (summer) and in winter and spring when the air has higher levels of humidity and water table stands higher, they grow lesser and even disappear.

Trees and sand hills are among other sand formations in the area which are formed along the direction of dominant wind. Sand hills
usually appear unmovable and consolidated. They are often laterally formed on a north-south direction.

2- Historical sites
A unique feature of Dasht-e-kavir is its historical sites which stun any viewers. Major historical and ancient monuments in the park is a collection of buildings of Qasr Bahram, Einorashid Palace, Haramkhaneh Edifice, Siahkouh rocky waterway situated north of Siahkouh and resort of Safavid kings. Moreover, Maranjab and Sefidab old caravanserais as well as Abbasabad edifice and old water basins would double the lure of the area for tourists. The existence of a 25 kilometer rocky walkway, 2 meters wide and 6 meters deep in the marsh area is another comely landmark in the Dasht-e-kavir.

Maranjab Caravanserai
Maranjab historical castle is one of the most significant resting place in the main route of caravanserais crossed by commercial caravanserais who were commuting between central and northern cities of the country in the past. The caravanserai was built early in sixteenth century upon an order by Safavid King Shah Abbas. In the premises of the caravanserai, an aqueduct and a natural park has been built alongside the salt lake.

Sefidab Caravanserai
In the Kavir's national park, 50 kilometers east of Maranjab, an old caravanserai stands which some time was a resting place for caravans. The caravanserai was built about four hundred years ago by Safavid King Shah Abbassi southeast of the salt lake of Aran and Bidgol. It is one of the four caravanserais on the lake side. Shah Abbas frequented the caravanserai when traveling from Isfahan to Farahabad in Sari. Sefidab mountain and Sefidab spring, supplying waster to the caravanserai, are lying in the southern side of the caravanserai. Sefidab caravanserai is situated close to boundaries inside the preservative zone of Kavir National Park and Sefidab environment keeping department.

Einorashid Caravanserai
The historical Einorashid caravanserai situated in the Kavir National Park too dates back to Safavid era. On one side of the caravanserai, there is a collapsed water basin. Einorashid spring is placed over the hills close to the caravanserai and is a drinking place for the regional
animals including deer and goats. Einorrashid caravanserai has been subject to many damages in the course of time so that most of ceilings and covers of the historical place have collapsed.

**Qasr Bahram**

Qasr Bahram is situated 154 kilometers to the south of Tehran along the route of an old desert rock road which connected Isfahan, Kashan and Garmasar and was taken by caravanserais. The road is known as cobblestone road in its route from Einorrashid caravanserai to Garmasar city.

The caravanserai resembles a square from outside and its façade has been built from large, orderly, white lime stones. The palace has four half-circle high towers as well as two gates north and south. A one-piece rock is placed on the front of the northern entrance. Two chambers have been built on both sides of the front which were most likely guard house. The pivot of the gates were hinging inside holes created in those large rocks.

The monument is also landmark for its water system. Water goes through a double decker duct with the lower one made from pottery pipes and the higher one in the form of a rock creek made from integrated white rocks, cut concavely. They form a canal altogether which transfers water from Shahi Spring located 5.7 kilometers from the caravanserai on te slopes of the Siahkouh to a basin inside the central yard of the caravanserai.

Safavid kings stayed in the caravanserais during the trips to Mazandaran or Khorasan or when they were on hunting excursions. Nonetheless, within a vast area enclosed by a solid fence, there were two inter-connected yards with separate gates. It was then possible that one of the two yards was allocated to merchants and the other one to passengers. It was also possible that when the king or official state delegations were staying in the caravanserai, the yards were strictly and fully separated from each other. Round the caravanserai, the lower floor of the rooms was allocated to docile animals whereas the rooms above were lodgings for passengers. The separated rooms have a platform like form and the unharmonious exterior is visible in many Safavid era buildings. However, the exterior of the Qasr Bahram is very eye catching as there is large cut rocks, carefully placed over one another in a gorgeous manner.
Results and suggestions:
Dasht-e-kavir is among the most important tourism hub in the country. It enjoys beautiful natural features and historical sites, offering many attractions to tourists. The area has remained unknown in large part even though it enjoys high potentials for attracting tourists, having hosted one of the rarest sceneries of the world. It then has many capacities in the field of tourism, ecotourism, and geotourism, some of which already discussed.

The scenic collection can play a major role in inbound and domestic tourism attraction provided that the related organizations, especially tourism bodies, play a more active role in desert areas, adopting and implementing the following measures:
- As the tourism attractions of the Dasht-e-kavir have remained unknown as a major problem of tourism industry, it is necessary to publicize the potentials of the Dasht-e-kavir in different economic fields by use of all facilities at hand.
- Provision of necessary facilities to tourists in the Dasht-e-kavir can boost the chance for absorbing more tourists to the area.
- Investment for development of courses for car racing, bicycle racing, etc.
- Provision of flight facilities (along the route of field sightings) over the Kavir Markazi, offering tourists to view the landmarks high in sky and double their joy.
- Preservation, restoration and prevention of destruction of historical monuments as well as flora and fauna coverage.
- Registration in national heritage list of invaluable monuments available in the discussed collection.
- Establishment of camps and rest houses with favorable amenities for tourists.

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