

An Introduction to Mashhad Suburbs' Geosites and Considering the Development Solutions of Regional Geotourism

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Abstract

Mashhad is the second religious city in the world which welcomes an enormous number of tourists in each year which average is about 25000000 persons per year. With respect to the increasing large number of interested tourists who visit Mashhad each year, in this paper the geotourism potentials of Mashhad has been studied by focusing on some special geosites such as Khaje Morad Granites, Haft Hoz, Moghan Cave, Hendelabad & Oleh Cave, Mashroom shapes of KAMAR-Maghbula Region, Zoshk & Kang Rivers, Akhlamad Waterfalls and some other geosites. Determining some performances such as providing comprehensive plans, investment, advertisements and the introduction of these geosites, would be an advanced step in the development of geotourism in this region.

Introduction

Mashhad city is one of the most attractive locations for religious tourists, with respect to the existence of the tomb of 8th Shiism Imam. This advantage is resulted to the development of Mashhad city and makes it the second religious town in the whole world. In spite of this large number of interested tourists for visiting this city, the high tourism regional potentials have not been applied due to unreasonable planning and management, non on-time announcements and non-suitable introduction of attractive locations. To this extent, in this paper, an effort was made to introduce the geosites and Mashhad geotourisms' potentials for an extension in tourist development.

City Introduction and Its Regional Role

Mashhad is located at 36° 17' altitude and 59° 37' latitude and in Central Khorasan Province, Iran, middle-east region. From geological aspects, this city is situated in the middle of Kopeh-Dagh Zone and Binalood which make it special. Geopolitically speaking, it is the second religious city in the world and the religious capital of Iran.

Mashhad Potentials

Mashhad is one of the largest cities in Iran. It has a high tourism potential such as different types of accommodation facilities including hotels, an advanced transportation systems including international airport, railways, buses terminals, etc. Mashhad area is about 10329.28 square kms. Because of the increasing large number of tourists, the city is developing each

year but from geotourisms' points of view, no special action has been done such as forming expertise tours and publishing guidelines on this matter.

Introduction of Geosites

Garmab Spring

This spring is 49 kms from Mashhad and is located in Mashhad- Neishabur road. Garmab Spring includes different springs with an interval about 500 meters from each other; all of them have a conical entrance and a height of 30 meters. These springs are located on conical mountains and including mineral waters with treatment properties. The water of this spring helps body to discharge the unnecessary materials from the body. Its remedial specifications act as an assistance to cure the joint pains, high secretion of gall bladder, stomach and pancreas. This spring is from Karstic types (Figure 1).

Hendelabad and Oleh Cave

These two caves are 45 kms from Mashhad. Existences of beautiful pillars, Stelagtate, Stelagmit and spring in these caves create spectacular sights view of it (Figure 2).

Akhlamad Waterfalls

This waterfall is located 2 kms from Akhlamad village. Because of the great height and numerous rains, this waterfall has the most amounts of water and attractive sight view in the first months of each year. Akhlamad waterfall has been a tourism place from ancient time (Figure3).

Moghan Cave

Moghan cave is 35 kms from Mashhad and is located in southern of Moghan village. For reaching the cave, primarily we have to pass Ardameh, Islam-Rood and Moghan villages and after climbing the Sarcheshmeh highlands and passing 5 kms, Moghan Cave would be appeared. This cave includes two entrances. Its level from the sea is 2910 meters. There are Stalagmite and Stalactite effects in the cave and is included in some wells, each depth is about 25 meters. Also this cave includes precipice and Water Lake. This cave was discovered on 1946 by Mashhad Mountain's Climbers Group. With respect to the close distance of this cave to Mashhad and its specifications, it can be introduced as a very famous attractive touristy location (such as Alisadr Cave in Hamedan) by applying appropriate investments (Figure4).

Koohsangi of Mashhad

Kuhsangi of Mashhad, including Khaje Morad's Batolic Blocks, is an entertainment location of Mashhad which is located inside the city. This place has become a park from ancient times and welcomes lots of tourists each year.

Kuhsangi Park which includes comprehensive facilities, and many different types of equipment and centers have been constructed in it. Because of its location at inside of the city, reaching to it is easy and less- costing. Kuhsangi Park is actually a kind of site forming around a core which is itself a geological phenomenon and can be mentioned as provincial geotourism attractions (Figure5).

Cave and Androkht Valley

Androkht cave is located 40 kms from Mashhad and is located on the way of Kardeh to Androkht. This cave is not deep, but its surrounded valley is very beautiful and is appropriate for climbing (Figure6).

Granites of Kamar-Maghbula Rigion

Kamar-Maghbula Region is located 8 kms from Mashhad and on the way of Mashhad to Torghabeh, including 5 kms asphalt roads and 3 kms dirt roads. Kamar-Maghbula region includes Granites and Granodiorits with beautiful complicated shapes and surrounded springs. The appropriate climate of this region in comparison with Mashhad and its spectacular sight views are from the special characteristics of this region. The regional topography is smooth and is like hills and high grounds. The existences of the erosive shapes in granites make it more beautiful (Figure7).

Kang & Zoshk Rivers

Kang & Zoshk Rivers are located around Mashhad villages and in Torghabeh & Shandiz Cities. With respect to deep valleys and the existence of rivers, these regions create beautiful sight views. These regions are now one of the plased which tourists visit (Figure 8)

Kardeh River

Kardeh cave is 40 kms from Mashhad and is located in front of Kardeh village. The distance of cave from asphalt road is a rocky path about 200 meters. The cave mount is about 1 meter in 1.5 meters in which some sections have been fallled in (Figure 9).

Vakilabad Tourism Region and River

Vakilabad tourism region is located inside Mashhad city and includes Granites and Granodiorites which are forming Vakilabad's river bed. In this region a park has been and accommodation facilities have been established and it is an appropriate place for visitors (Figure 10).

Khalaj Highlands

Metamorphism of Khalaj highlands is an appropriate place for visitors which make them familiar with these geological phenomenons. The existing of Talk-Schist, Garnet-Schist and Starlit- Schist metamorphisms, in addition to the lime stones converted to marble are from the geological indicators in this region. Occurring of marble mines in the Schist layers make a special sigh to the region (Figure11).

Chalidareh Dam

Chalidareh dam is located around Mashhad and on the way of Kang village and because of its close distance to the city it has become one of the amusement tourist locations. Including different facilities such as restaurants, boating, etc. in this region and also its appropriate roads are the special characteristics of this region (Figure 12).

Golamakan Green Spring

Green spring is about 20 Kms from Golmakan Village and is located on the way of Mashhad to Ghoochan and on the highest point of Binalood mountains. This spring with a large amount of length and width and a lot of water has been beautiful and descriptive from ancients. This spring, which is surrounded by mountainsides, has formed a lake. One of the famous springs of this region is called Shteha. The importance of Green Spring is its appropriate climate. The beautiful regional nature of Shtehar, make it more respectful and interesting (Figure13).

Haft Hoz of Mashhad

Haft Hoz is one of the most slightly attractions which is located in the Khalag Mountains around Mashhad City and is about 7 Kms far distance from it. Its exact situation is (36° 11' 13.86' N & 59° 33' 36.91E). Existing of different basins inside the granites and the beautiful waterfalls make the sights spectacular. With respect to the regional potentials, this geosite is very suitable for financial investments (Figure 14).

Deh-Gheibi Granit Mines

These Granit Mines are located in Mashhad's Deh-Gheibi Region and actually inside of Mashhad City. The existence of different mines and artificial lakes which are formed because of mining can be mentioned as regional specifications. This region is an appropriate location for Geotourism expertise tours (Figure15).

In addition to the mentioned geosites, some other regions such as Gilas Spring, Flocky layers of Mashhad- Sarakhs road, Sekaren and also typical garnets of Mashhad- Shandiz path, etc. can be pointed too that can be used by visitors.

Development Methods

Different solutions can be applied to develop Mashhad's Geotourism industry, with respect to its high potential. These solutions are included in providing geosites' data banks, recognizing of talented sites for investment, preparing comprehensive geotourism plans, considering the potential of geoparks, procurement of required hardware and software for tourist entrance, forming of NGOs (which are active on geotourism and organizing of special expertise tours), introducing of geosites by applying advertisements, websites, civilization and governmental supports.

Conclusion

Geotourism development can be scheduled to a wide scale in Mashhad city, according to its high potentials in Geology, the diversity of its geosites, applying different facilities such as accommodation requirements, roads, and also including a large number of interested tourists. This goal can be achieved by applying an efficient management and a comprehensive planning, in addition to the training, civilizing, advertisements and stable development of geotourism in this city. With respect to this topic that geosites of Mashhad are located in suburbs, they can be developed easily to a high extent.

Families and populations on the base of resident and Non-Resident, October 2006

City	Total		Resident in Municipal Areas		Resident in Rural Areas		Non-Resident	
	Families	Population	Families	Population	Families	Population	Families	Population
Mashhad	746920	2868350	643810	2451712	103107	416635	3	3

Number of Flights and Passengers Transported by Internal and External Airlines, 2006

Description	Number of Flights	Number of Passengers	
		Entrance	Exit
Total	3102	154514	180087
Internal Airlines	2246	117754	142391
External Airlines	856	36760	37696

Mashhad Geosites' Table

No.	Geosite Name	No.	Geosite Name
2	Kardeh Cave	24	Gilas Spring
3	Androkht Cave	25	Akhlamad
4	Bardeh-Rostam Cave	27	Golmakan Green Llake
5	Oleh-Ableh Cave	33	Vakilabad Garden
6	Garmab Spring	34	Chalidareh Dam
7	Deh-Sorkh Spring	35	Gaghargh River
8	Moghan Cave	36	Kang
9	Khalaj Highlands & Marmar Mine	37	Zoshk
10	Deh-Gheibi Granit Mine	38	Gholgholi Spring- Chaman Highlands' Slope
11	Haft- Hoz	39	Hendelabad Cave
12	Kuhsangi	40	Oleh Cave



Figure1



Figure2



Figure3

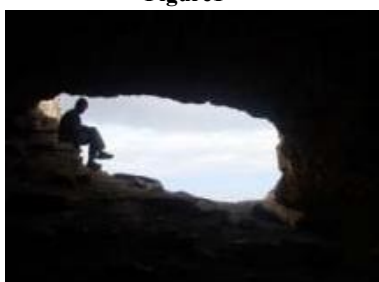


Figure4



Figure5



Figure6



Figure7



Figure8



Figure9



Figure10



Figure11



Figure12



Figure 13



Figure 14



Figure 15

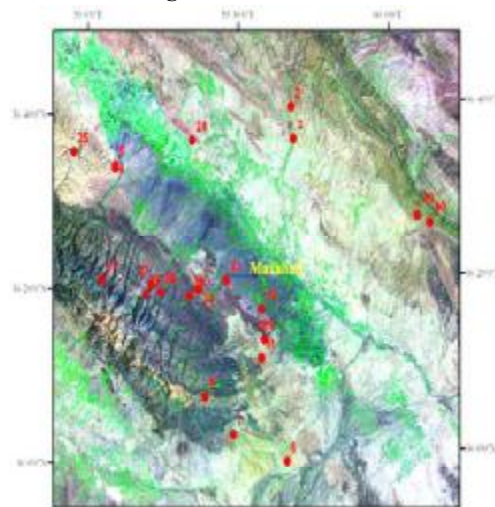


Figure16. Mashhad suburbs' geosites locations with respect to the satellite pictures