

The Impact of Rageh Canyon Geotourism on the Tourism Boom of Rafsanjan City

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Abstract

Geotourism is a relatively new concept in tourism industry which has considerable growth in recent decade. The variety of geological phenomena in Iran is unique and remarkable. Rageh Canyon, near Rafsanjan city in Iran, with a length of 20 km and a width of 180 meters, and a depth of 70 meters, is beautiful and majestic. This Canyon is the result of the eroding of the water of the permanent river of Givederi, and is related to the Quaternary, and is estimated to be about 20, 000 years old. The erosion of the water in the region has caused a very beautiful shape in the walls of the Rageh Valley, which has added to the beauty of the area. The beauty and uniqueness of this valley has made some people consider the attractiveness of this region to the Shahdad Clement plain in terms of tourism potential. Now the canyon is a place for the presence of some observation tours of the sky, valley climbing and climbing. Rafsanjan is a pistachio pole in Iran, which has a single-product economy. By identifying and introducing natural phenomena such as Rageh Canyon as geotourism attractions, this city can be extracted from the single-economy. So the tourism industry in the city booms.

Keywords: Rageh Canyon, Geotourism, Rfsanjan, Tourism Boom

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Introduction

expression 'Geotourism' has only become known in Hungary in the last couple of years. Its basic objectives are to introduce and raise awareness of the importance of our geological heritage and the dissemination of knowledge in the field of natural sciences (Dávid, 2002). This new trend of tourism can be described in two different ways: one definition focuses on protection, while the other puts emphasis on optimisation (Dowling, 2006). According to TIAA (Travel Industry Association of America) and NG (National Geographic), Geotourism is defined as tourism that sustains or enhances the geographical character of a place—its environment, culture, aesthetics, heritage, and the well-being of its residents (Stueve, Cook, & Drew, 2002; Szabó & Süt E, 2002). Based on this definition, a geotourist will gain awareness of the environment and will travel to get to know the culture and unique characteristics of the given destination (Stueve, Cook, & Drew, 2002). The other definition, recommended by scientists, focuses on rocks (e.g.: stones, minerals, etc.) and geological formations (e.g. glaciers, caves, etc.) (Donka & Gyuricza, 2002). Another definition states that participants of Geotourism will travel because of wishing to experience and learn from and enjoy our world's heritage assets (Larwood & Prosser, 1998; Buckley, 2003). Geotourism can play a leading role in the field of tourism, because it is a sustainable type of nature-based tourism that focuses on nature-related new experiences and knowledge, has only little negative impact, is not part of mainstream tourism and its development is in the interest of the local community (Boley, Nickerson & Bosak, 2011).

In recent years, tourism industry has become one of the main poles of development from various respects, especially economic source. It is such that most authorities believe that tourism will become dominant industry in near future and will have various socioeconomic effects (Bayati Khatibi, 2010). Due to job creation and relatively rapid profiting characteristic, tourism is a proper ground for foreign investment and can accelerate tourism development, promote its economic criteria and bring out new ideas, technologies and markets (Papeli Yazdi, 2011). Geotourism, as a subcategory of tourism, is considered one of the new methods in providing tourism attraction (Servati, 2008). and has allocated a main part of tourism studies to itself. Iran has a nice nature,

diverse continent and areas full of unique geological phenomenon so that it seems necessary to investigate these attractions for their better cognition and geotourism development (Yazdi, 2012). Iran is one of the few countries of the world with beautiful natural and geological phenomenon due to its unique and excellent geographical condition.

Method

This research is practical and developmental and the methodology used in it is descriptive-analytical. Based on this, library-documentary studies, interpretation and analysis of satellite images, various field studies and direct observation of phenomenon have been used.

Geotourism

Geotourism is a relatively new concept in tourism industry which has considerable growth in recent decade. Geotourism has a certain definition with geological tourism at its centre (Newsome & Dowling, 2006) and deals with the investigation of related forms and consequences to earth, geomorphologic and geological phenomena. According to Gates (2006), geotourism means “tourism in geological outlooks”. Geotourism, according to Dowling & Newsome (2006) deals with geology, geomorphology, natural outlooks and the forms of earth surface, layers with fossil, rocks and minerals with emphasis on the creating processes. Furthermore, it can be argued that geotourism is informed and responsible tourism in nature with the aim of looking at recognition of geological phenomena and processes and learning their formation and revolution (Amrikazemi, 2009). According to the above definitions, geotourism is not only a new part of tourism market, it is a principal guidance to help maintaining nature and sustainable development, which is compatible with the economic equilibrium, social condition and ecology and complements them. Introduction of Iran’s geological phenomena in the 10th Australian International Ecotourism Conference, 2002. Attractiveness of these phenomena brought about the idea of compiling and publishing the first book of geotourism known as the "Global Geotourism" which was published in 2006 in England with participation of Iranian authors. Investigation and identification of Qeshm Island geotourism perspective, geopark registration proposal in Qeshm in 2002, and publication of Qeshm Geotourism Atlas in 2004 (As a result, Qeshm Geopark was internationally registered in 2006, through the cooperation of Qeshm

Free Zone Organization and the GSI. Active participation, presentation of scientific papers and lectures at international conferences related to the geoheritage in Germany, Italy, Malaysia, Poland, Portugal, Greece, Australia and Oman since 2002 to 2011, such that Iran has always been known as a pioneer country in this area. Publication of numerous articles in scientific and general journals aiming at public awareness and informing experts about the country's geoheritage. The first integrated conference on geotourism was in Iran in 2008. Successful encouragement of private sector to become active in utilizing tourism or geological studies of Iran. Publication of "Atlas of Geopark and Geotourism Resources of Iran", a novel unprecedented work in globally introducing Iran's geoheritage (In some countries there are atlases published for specific regions in a limited scale, but there is no similar atlas to this one which is prepared for the whole territory). Besides, through adopting a regulation, the Iranian government has introduced GSI as a reference institution related to geoheritage, assigning GSI in charge of relative issues.

Above all, GSI has attributed a section in its organizational chart under the name of "Geoheritage Evaluation", hence it is officially considered as one of the geological surveys with this technical section. In the coming issues we will introduce Iran's considerable and valuable geotouristic phenomena, categorized based upon their remarkable geological features.

Classification of geological phenomena and geo-sites of Iran

The variety of geological phenomena in Iran is unique and remarkable which allows us to claim that in Iran there is at least one sample of each of geological phenomena. "Heaven of geologists" and "the 1.5-million-km² museum" are the sobriquets which some of foreigners attribute to Iran.

Formulation of strategic plans of principal utilization, protection, preservation, education and investigation of these phenomena will encourage people of different classes in geosciences and to honor geoheritage.

Geological phenomena and Geosites are categorized based on different viewpoints (Amrikazemi, 2009):

- Value and Importance

Here, Geological phenomena are divided into local, national and international groups.

- Local Phenomena: Phenomena of which there are other samples in the country and whose value lies within the territory of one or several neighboring provinces. These phenomena have local value, such as Kahak Cave in Qom.

- National Phenomena which are unique, or the best of their kind in the country. These phenomena have national value, such as Kataleh Khor Cave in Zanjan.

- International Phenomena which are either internationally unique or unmatched, or globally the best of their kind. These phenomena have international value, such as Ali Sadr Cave in Hamadan (which has the longest sailing route in the world).

- Accessibility

Accessibility to the geo-sites is of great significance to increase the number of visitors. Accordingly they are divided in 3 groups:

- Easy access: Those geo-sites which can be reached by road, and all generations with normal physical ability may reach them without difficulty, such as Setareha Valley (Fallen Star Valley) in Qeshm.

- Hard access: Those geosites which cannot be reached by road and visitors need to have high physical or athletic power to walk or mountaineer long, such as Crater Lake of Sabalan Volcano.

- Moderate access: Accessibility to these geosites is not very easy, nor difficult. Most people may reach them except for those with poor body strength and also young children.

- Geology and Geomorphology

This classification is based on the most characteristic of a geosite, i.e. type of phenomena and feature in terms of geology and geomorphology, leaning on the origin and geotourism values (table 1). What is crucial about this classification is that some geological phenomena have manifold nature which makes them fit into other groups.

Table1. Classification of Geological and Geomorphological Phenomena of Iran

Group	Sub Group					
Sedimentary	Sedimentary Forms	Travertine Springs	Mud Volcanoes	Glaciers	Deserts	Caves
Erosion	Karst Features	Erosion Forms				
Magmatism & Metamorphism	Metamorphic Facies	Plutonic	Sub Volcanic	Volcanic		
Structural	Faults	Folds	Diapirs	Small Structural Phenomena		
Geological Specimens	Fossils	Rocks, Minerals & Mines	Natural Oil, Gas & bitumen Springs			
Engineering Geology	Mass Movements	Site ion	Sink holes	Geohazards		
Cultural Geology	Geo-Archaeological Sites	Ancient Mining				
Geological Landscapes	Formations Outcrops	Waterfalls	Lakes	Islands	Mountains	Valleys

Source: (Amrikazemi, 2009)

Rageh Canyon

Rageh Canyon is a great valley. Rageh Canyon is located in the southeast of Rafsanjan in Kerman province (Figure 1). This Canyon in Iran can be compared with the Grand Canyon in the United States. Rageh Canyon is smaller and Beautiful like Grand Canyon.

The Rageh canyon is clearly identifiable in satellite images. This canyon was examined by processed satellite images (Figure 2). Observations on the ground showed that most of the canyon is in a flat plain (Figure 3).

Rageh Canyon near Rafsanjan city, with a length of 20 km and a width of 180 meters, and a depth of 70 meters, is beautiful and majestic. Canyon is a great valley. This great valley is located in the desert surrounding the city of Rafsanjan. Interestingly, the flow of a permanent Givederi river is in the depths of the valley and, according to experts from the valley, due to alluvial erosion, is formed due to the continuing erosion of the shapes of some parts of the changing valley. The erosion of the water in the region has caused a very beautiful shape in the walls of the Rageh Valley, which has added to the beauty of the area (Figure 4). The remarkable thing about this natural area is the unique existence of wildlife in this area. This valley is the result of the eroding of the water of the permanent river of Givederi, and is related to the Quaternary, and is estimated to be about 20, 000 years old. There are some roads to reach down of Canyon for tourists (Figure 5).



Figure1. Rageh Canyon is located in the southeast of Rafsanjān in Kerman province

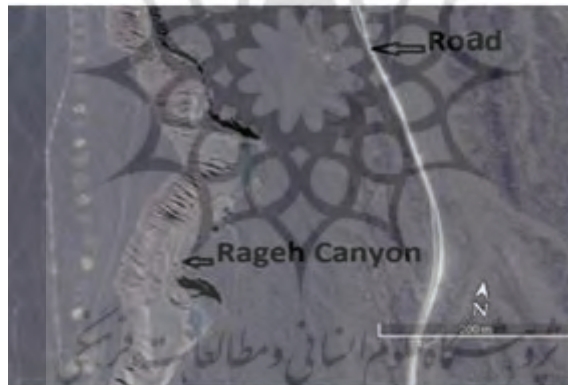


Figure2. Satellite image of Rageh Canyon



Figure3. Most of the canyon is in a flat plain



Figure 4. beautiful shape in the walls of the Rageh Canyon



Figure 5. View of a road to reach down of Canyon for tourists.

Results

Due to its wide range and variety, Kerman province has one of the most unique climatic conditions for ecotourism in the country. Interestingly, every few years, a new and unique tourist destination in this area is identified and introduced and becomes one of the main tourist hubs. Rageh canyon in Rafsanjan is on the path of tourism, the two ecotouristic attractions of the province, the Meymand Historical Village and Shahdad Kaloot. Satellite image processing and regional observations were used in the region analysis. Rageh canyon was examined by processed satellite images. Observations on the ground showed that most of the canyon is in a flat plain. The water erosion in the region has caused a very beautiful shape in the walls of the Rageh canyon, which has added to the beauty of the area. The beauty and uniqueness of this valley has made some people consider the attractiveness of this region to the Shahdad Clement plain in terms of tourism potential. And officials in Kerman province, especially in the

Cultural Heritage and Rafsanjan Governorate, are planning to develop tourism in the region. Now the canyon is a place for the presence of some observation tours of the sky, valley climbing and climbing, and officials are also in the process of attracting investors and building infrastructures with the least damage to the region. This canyon is of a very unique character. There are also such valleys in some other provinces, but there is no such place in the size, length and depth of the canyon. What makes the canyon beautiful, the flow of the river in the valley, the length and shape Unique in the valley walls that was created due to erosion. Rageh canyon was discovered by people looking for a mine. Rageh Geopark should be strengthened to attract more tourists. There are some roads to reach down of Canyon for tourists. Rafsanjan is a pistachio pole in Iran, which has a single-product economy. By identifying and introducing natural phenomena such as Rageh Canyon as geotourism attractions, this city can be extracted from the single-economy. So the tourism industry in the city booms. Rafsanjan can become the pole of Geotourism.

Discussion

Rageh Canyon near Rafsanjan city in Iran, with a length of 20 km and a width of 180 meters, and a depth of 70 meters, is beautiful and majestic. This Canyon is the result of the eroding of the water of the permanent river of Givederi, and is related to the Quaternary, and is estimated to be about 20, 000 years old. The erosion of the water in the region has caused a very beautiful shape in the walls of the Rageh Valley, which has added to the beauty of the area. Rageh canyon was examined by processed satellite images. Observations on the ground showed that Most of the canyon is in a flat plain. The beauty and uniqueness of this valley has made some people consider the attractiveness of this region to the Shahdad Clement plain in terms of tourism potential. Now the canyon is a place for the presence of some observation tours of the sky, valley climbing and climbing. Rageh Geopark should be strengthened to attract more tourists. Rafsanjan is a pistachio pole in Iran, which has a single-product economy. By identifying and introducing natural phenomena such as Rageh Canyon as geotourism attractions, this city can be extracted from the single-economy. So the tourism industry in the city booms. Rafsanjan can become the pole of Geotourism.

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