

## **GEOTOURISM AND GEOPARKS: THE CASE OF KIZILCAHAMAM-ÇAMLIDERE GEOPARK**

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**Abstract:** This case study explores how Kizilcahamam-Çamlidere Geopark and Geotourism Project in Ankara, Turkey is initiated. The project has been developed both to protect the richest geoheritage of the region and to provide its economic benefits to the region. It has to be said that the project will produce permanent results only by embracing local people and the support of nature lovers. As a point of departure, the paper starts with a literature review on geotourism and geoparks. Further, Kizilcahamam-Çamlidere geopark and geotourism project is revealed within the framework of its history, goals of the project, administration, where and what the project covers, and the geological characteristics of the region. The paper also aims to offer a guideline for marketing and promoting the region as a geotourism destination.

**Key words:** geoparks, geotourism, marketing, Kizilcahamam-Çamlidere geopark

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### **INTRODUCTION**

Turkey has been a popular holiday destination due to her rich culture and civilization as well as outstanding natural environment. Being referred by some authors as a cradle of civilisation, Turkey is surrounded by three seas, the Black Sea in the north, Aegean in the west and Mediterranean in the south ([www.kultur.gov.tr](http://www.kultur.gov.tr)). The peninsula creates natural attractions and a variety of archaeological and historical sites as a result of the country being the land for various civilizations, with a geological history covering more than 60 million years. Implements from the Stone Age show that Anatolia was already inhabited in the Middle Paleolithic Period between 100,000 and 40,000 B.C. As such, its archaeological, cultural and natural attractions form an excellent basis for developing geotourism. In this sense, Turkey has a huge potential for both the development of geotourism and the creation of geoparks due to its natural and cultural diversity (Kazancı et al., 2011; Koçan, 2012).

The terms „*geotourism*” and „*geoparks*” have emerged in the tourism literature in recent years. Geotourism is rapidly being recognized as an exciting new direction for tourism surrounding geological and geomorphological attractions and destinations (Dowling, 2011; Akbulut, 2009; Dowling, 2008; Turner, 2006). At the same time, the tourism component of geotourism involves excursions to geosites for the purposes of

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passive recreation, engaging in a sense of wonder, appreciation and learning (Newsome & Dowling, 2006). Consequently, the tourism industry regards geotourism as a new, growing market segment with a prosperous future, particularly so viewed in the light of the ever-increasing demand by tourists around the world for the ultimate nature experience (Pforr & Megerl, 2006). The global diversity of landscapes and geological materials in association with the body of knowledge relating to Earth history and geological processes (Newsome & Dowling, 2006) designates geotourism as an option for all countries. Accordingly, more and more countries have started to develop schemes for recognizing important geological and morphological sites or landscapes within their national boundaries (Eder & Patzak, 2004).

Currently, tourism in Turkey relies on mass tourism, which is unsustainable, concentrated on coastal areas, hence geotourism is less significant. However, geological and geomorphological heritage resources of the country reveal an abundant potential for the development of geotourism. Although it leaves much to be desired, some initiatives and some bodies are trying to promote and develop geotourism in Turkey, and the Kizilcahamam-Çamlidere geopark and geotourism project is a unique example of these efforts. In this sense, the paper aims at exploring how Kizilcahamam-Çamlidere geopark and geotourism project is initiated. For the purpose of the study, the paper starts with a literature review on geotourism and geoparks. Further, the project is examined. The paper concludes with suggestions on the better promotion and marketing of the region as a geotourism destination.

## **GEOTOURISM AND GEOPARKS**

### **GEOTOURISM**

Tourism has experienced a shift from the Fordist model of mass tourism which concentrates on high standardization of tourism services and identikit destinations, to a more conscientious and small-scale style of travel that focuses on the conservation of resources (Peres & Sampol, 2000). In this vein, problems associated with mass tourism have implemented more environmentally and culturally aware designs of tourism, resulting in a global push for conservation (Hardy et al., 2002). Such conservation efforts have resulted in alternative forms of tourism such as sustainable tourism, ecotourism and geotourism. Sustainable tourism meets the needs of today's tourists and host regions while protecting and enhancing opportunities for the future. On the other hand ecotourism is a sustainable form of natural resource-based tourism that focuses primarily on experiencing and learning about nature, and which is ethically managed to be low-impact, non-consumptive, and locally oriented (control, benefits, and scale) (Fennel, 2003:25). Typically ecotourism is connected to natural areas, and should contribute to the conservation or preservation of such natural areas. The assumption underlying ecotourism is that it runs counter to mass tourism (Boley et al., 2011). Finally, the tourism industry regards geotourism as a new, growing market segment with a prosperous future, particularly so in the light of the ever-increasing demand by tourists around the world for the ultimate nature experience (Pforr & Megerl, 2006).

Geotourism's first definition appeared in a professional magazine by Hose in 1995 where he stated that: *"The provision of interpretative and service facilities to enable tourists to acquire knowledge and understanding of the geology and geomorphology of a site (including its contribution to the development of the Earth sciences) beyond the level of mere aesthetic appreciation"* (Hose, 2006). Recent definitions read as follows: *"Geotourism is a form of natural area tourism that specifically focuses on geology and landscape. It promotes tourism to geosites and the conservation of geo-diversity and an understanding of earth sciences through*

*appreciation and learning. This is achieved through independent visits to geological features, use of geo-trails and view points, guided tours, geo-activities and patronage of geosite visitor centers*" (Newsome & Dowling, 2010). In Newsome and Dowling's (2006:3) definition of geotourism, the "geo" part pertains to geology and geomorphology and the natural resources of landscapes, landforms, fossil beds, rocks and minerals, with an emphasis on appreciating the process that are creating and created such features. At the same time, the tourism component of geotourism involves visits to geosites for the purposes of passive recreation, engaging in a sense of wonder, appreciation and learning. In association with these visits there may be regular tours, specific activities and even the development of accommodation facilities.

Geotourism implies the development of a geotourism product that protects geoheritage, helps communities, communicates and promotes geological heritage and works for a wide range of different people (Dowling, 2008:227). Geotourism incorporates the concept of sustainable tourism, which meets the needs of today's tourists and host regions while protecting and enhancing opportunities for future. It is predicted as *"leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled as well as maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems"* (WTO, 1998).

There are five key principles which are fundamental to geotourism, namely that geotourism is geologically based (that is based on the earth's geoheritage), sustainable (i.e., economically viable, community enhancing and fosters geoconservation), educative (achieved through geo-interpretation), locally beneficial and generates tourist satisfaction. The first three characteristics are considered to be essential for a product to be considered *"geotourism"* while the last two are viewed as being desirable for all forms of tourism (Dowling, 2011).

On the other hand Boley et al. (2011) explains the goal of geotourism as to maintain the character of the place. It does not just involve travel to undisturbed natural areas or to centers of human activity but travel to destinations where nature and people come together to setup a working landscape. However, education of the people is also very important in geotourism. Tongkul (2006) presents geotourism as the utilization of geological heritage resources for education-based tourism. He asserts that geological heritage resource is based on the intrinsic values of geological and geomorphological features, where these intrinsic values may include scientific, aesthetic, recreational and cultural values.

Ideally, geotourism can be beneficial for both the tourist and the host because it can provide the tourist with an *"authentic"* experience while holistically sustaining the destinations unique qualities (Boley et al., 2011). Further, geotourism achieves a quasi-balance between regional value and sustainable use, and development by using the potential of the landscape and its established infrastructure (Frey et al., 2006). Moreover, it can make a major contribution to the alleviation of poverty in rural areas (Reimold et al., 2006) by creating employment opportunities in the region. Its potential as a job and income generator, particularly for local communities and therefore as an effective means for regional development, has evaluated geotourism by being strongly encouraged by governments through the development of policies and strategies (Pforr & Megerl, 2006). With sound planning, taking into account the sustainable principles of environmental conservation, community well-being and economic benefits, geotourism offers a potential basis for community and/or regional development for many places around the world (Dowling & Newsome, 2006). To be successful, conservation of geological heritage requires concerted involvement of all stakeholders, both geologists and non-geologists (e.g. politicians, planners, landowners, developers and the public/local communities) (Tongkul, 2006).

## GEOPARKS

In the last decade geotourism has been taking off in a new direction based upon sites called „*geoparks*”, both national and global (Turner, 2006). Geoparks, a fairly recent development focusing in particular on geotopes of regional and national geoscientific importance, can be seen as instruments to coordinate many stakeholders towards the common purpose of regional sustainable development (Pforr & Megerl, 2006). Through the international respect and reach of UNESCO, geoparks have already begun to make their mark on communities and regions; with even greater awareness by countries, the geopark movement will become the benchmark for geotourism acceptance by governments, regions, communities and tourists (Dowling & Newsome, 2006).

The concept of a geopark, as outlined in the operational guidelines published by UNESCO in 2002, is to serve the three goals of conserving a healthy environment, educating in the Earth science and fostering sustainable, local economic development. The ultimate goal of the geopark program is to provide a better understanding of geological heritage and wise use of the Earth (Nowlan et al., 2004).

Geopark is usually understood to be an area designated for its geological and/or geomorphological (i.e. landscape) interest, and using this heritage for sustainable development (UNESCO). According to the definition of the European Geoparks Network established in 2000, a European Geopark is a territory which combines the protection and promotion of geological heritage with sustainable local development including the following main characteristics (Zouras, 2004:165):

- First, a European Geopark has to encompass a particular geological heritage, with specific geological, mineralogical, geophysical, geomorphological, paleontological or geographical features.

- Second, the local authorities of each geopark have to agree to the promotion, with the financial support of the European Union, of a sustainable territorial development strategy for the development of the Geopark area. A European geopark must have clearly defined boundaries and sufficient surface area for true territorial economic development.

- Another important characteristic is that the sites in a European Geopark must be linked in a network, and benefit from protection and management measures. A European Geopark is obliged to defend the values of geological heritage conservation and thus no destruction or sale of geological objects from a European Geopark may be tolerated.

- A European Geopark must be managed by a clearly defined structure, organized according to the national legislation of each country and able to enforce the protection, enhancement and sustainable development policies within its territory.

In essence, geoparks aim to foster regional identity, create greater awareness for local conservation issues through geo-education, and act as a framework for regional sustainable development by bringing together a wide range of stakeholders (Pforr & Megerl, 2006).

Geoparks have been established to create enhanced employment opportunities for the people who live within their boundaries and foster economic benefits for them, usually through the development of sustainable tourism (Dowling, 2011). Geoparks stimulate economic activity and sustainable development through geotourism. By attracting increasing number of visitors, a geopark fosters local socio-economic development through the promotion of a quality label linked with the local natural heritage. It encourages the creation of local enterprises and cottage industries involved in geotourism and geological products (Dowling, 2011). Further, Dowling discusses that the challenge to geotourism in any region or country is to develop its tourism capacity and the quality of its products without adversely affecting the geoenvironment that maintains and nurtures it.

The establishment of geoparks should be based on a strong concept, political will with financial long-term support, and professional management structures (Frey

et al., 2006). Hence, it is essential that, prior to the creation of a geopark, there should be comprehensive and exhaustive discussions with the community, researchers, and government agents to search for a common impetus (Piranha et al., 2011). Geoparks can bring a new combination of social, economic and environmental information to the political table. Many might benefit from supporting geoparks including farmers in rural areas, small businesses and even industries. Such a sharing of knowledge can be made more efficient by the international geopark network linked to UNESCO and the International Union of Geological Sciences and other interested bodies (Turner, 2006). In this way, local governments, economic entities and local communities can consciously take part in the work of geological heritage protection. As the implementation and construction of the UNESCO World Geopark advances, it may be expected that humanity will open a new page on geological heritage protection with it (Jianjun et al., 2006).

According to Martini (2009) geoparks cannot be simply traditionally protected nature areas for teaching and appreciating their geological components „*with sustainable development in mind*”. The geopark’s vocation is to be something totally new and different, allowing us to feel space, to think of time, and by so doing to set the present within a past-future continuum. It must clearly afford a different approach to, a different relation with, „*nature*”, developing new forms of management and equipment. Its mission is to propose a new philosophy of territory, and it must deploy an overall reflection on the holistic and symbolic meaning of geological heritage. Martini concludes that the 21st century geoparks must have something novel to offer in broad spectrum of protected and managed nature areas. As such, it is proposed that all should strive to conceptualize the geoparks of the future.



**Figure 1.** The site of the project

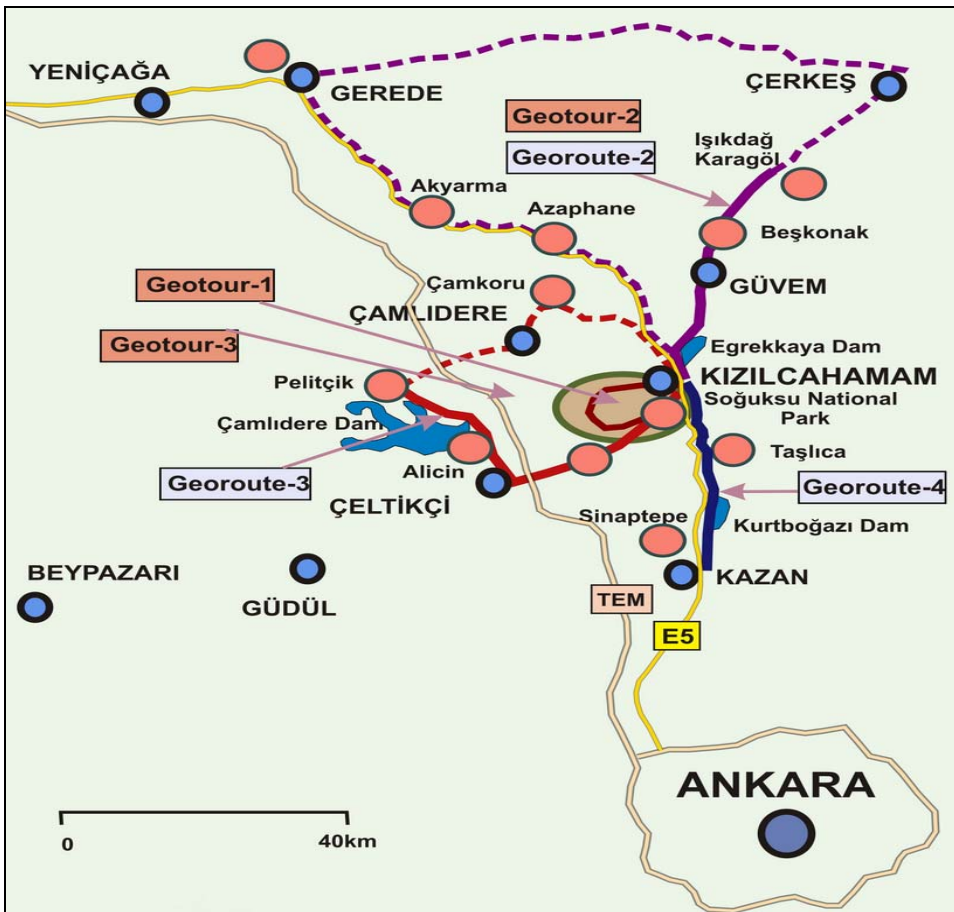
### **KIZILCAHAMAM-ÇAMLIDERE GEOPARK PROJECT STUDY AREA**

Kizilcahamam and Çamlidere are two districts of Ankara with their rich natural and geological heritage (Figure 1-2). The flora of two districts constitutes a transition zone between the Black Sea and Central Anatolia regions, and for this reason the climate, vegetation and landforms are peculiar to the region. Being close to Ankara (75-85 km)

and lacks of sufficient local agriculture and industry accelerated the immigration of local people to urban areas. Similar to other rural areas in Anatolia, many villages are almost empty. New business activities and satisfying employment opportunities are needed to vitalize the region and retain people in their villages and lands.

## RESULTS AND DISCUSSION

The natural and geological heritage of the region offers a good potential for both the development of geotourism and diversification of the tourism offerings of the country. Kizilcahamam-Çamlidere Geopark and Geotourism Project has been developed both to protect geological heritage and to provide economic benefits for sustainable local development. Following the principle that everyone has something to give, the development of partnerships becomes a key aim of the most initiatives (Brunsden et al., 2009). The project is supported and financed by several insitutes, namely: Governorship of Ankara, Ankara University, Kizilcahamam Municipality, Governorship of Kizilcahamam, Governorship of Çamlidere and the Turkish Association for the Conservation of the Geological Heritage.



**Figure 2.** The site and the routes of the project  
(Source: [www.jeoparkankara.com](http://www.jeoparkankara.com), 2012)

The geopark was opened in 2010 and covers an area of 2000 kilometer square. It is expected that the project will produce permanent results only by embracing local



people and supports of nature lovers. It is also expected that visits of neighboring urban residents will make the project more efficient with the scientific infrastructure and the visitors will enjoy a unique experience by viewing a large petrified forest, touching a 15 million years fish bone, examining a frog and wings of an insect in a swamp which covers 10 million years (Figure 3-4).



**Figure 3.** Fish fossil on the rocks in the region  
(Source: [www.jeoparkankara.com](http://www.jeoparkankara.com), 2012)



**Figure 4.** A view from the region  
(Source: [www.jeoparkankara.com](http://www.jeoparkankara.com), 2012)

The most important geological process which forms the earth crust and the earth surface is volcanism. Such volcanic events have also occurred in Kizilcahamam-Çamlidere region. Volcanic products extruded from volcanic centers. Sedimentary rocks, deposited in fluvial, lacustrine and marsh environments indicate the pause of volcanism in the region. During the period of some hundred thousand years, the sequence of volcanic and sedimentary rock alternation has been eroded and various valleys, canyons, mountains and hills have been formed. The incisions

in the geologic sequence exhibit the products and magnificence of ancient events. The Kizilcahamam-Çamlidere Geopark and Geotourism Project live up to this geologic history and bear the geological heritage.

The project, currently, has 23 stops composed of different geologic formations. They are special parts of the earth, ground and rocks, and they constitute the substructure for the fauna and flora of the region. A list of these stops can be seen in Table 1. Stop points have been supported by explanation tables and signs for the people in different levels of backgrounds. A personal approach is highly regarded by guests, and specially trained geopark guides are excellent instruments for communicating geological topics (Frey et al., 2006). People can have the assistance of a guide while touring the geopark trails. For this reason, the Geotourism Square is determined as the meeting point at the center of Kizilcahamam, and preliminary information about the project and stop points can be obtained. A list of stops and formations in the project (Source: [www.jeoparkankara.com](http://www.jeoparkankara.com), 2012):

- Old Turkish bath in Sey
- Guvem columnar basalts and lava flows
- Fish, leaf and insect fossils in Beskonak
- Isikdag (Mount Isik)
- Karagol (a lake)
- Man-made caves and Early Roman period chapels in Mahkemeagcin village
- Fairy chimneys in Abaci village
- Alicin Monastery and Kirmir Valley
- Fault in Kizik village,
- Petrified forest in Pelitcik-Yahsihan village
- Thermal water springs in Kizilcahamam
- Andesites in Soguksu National Park
- Volcanic zone in Soguksu National Park
- Petrified wood fossil in Soguksu National Park
- Mineral water springs and travertines in Kizilcahamam
- Rock formations in Taslica village
- Taslica village Turtle Brothers
- Mammalian fossils in Kazan
- Tuffs of Çamlidere
- Volcanites in Azaphane
- Tuffs in Akyarma
- Volcanites in Ozdere.

Four different „georoutes” and three „geotours” may be followed at present, and they will be expanded in the future. One of the current geotours is within Soguksu National Park. Others are along the Kizilcahamam-Çerkes-Gerede-Kizilcahamam road and on the road of Kizilcahamam-Pelitcik-Çamlidere-Kizilcahamam. For those who desire shorter distances, four different georoutes including five stops are organized.

Following the principle that everyone has something to give, the development of partnerships becomes a key aim of most initiatives (Brunsden et al., 2009). The project is supported and financed by several institutes, namely: the Governorship of Ankara, Ankara University, Kizilcahamam Municipality, Governorship of Kizilcahamam, Governorship of Çamlidere and the Turkish Association for the Conservation of the Geological Heritage. The number of supporters indicates a good cooperation among the interested bodies.

Communication with the public is also necessary for the success of the projects. For this purpose the internet offers a valuable tool for promotion efforts. A well-structured



webpage is prepared for the project (<http://www.jeoparkankara.com>). All necessary information about the project is available on the website in two languages, Turkish and English. The webpage also includes visual material to create a better understanding among the public.

## CONCLUSION

Geotourism and geoparks are relatively new concepts which are gaining remarkable attention all around the world. In order to protect or conserve geological heritage and foster the potential for local socio-economic development, governments focus on geotourism and geopark projects, and Turkey is not an exception to this. The paper analyzes how such an initiative, namely Kizilcahamam-Çamlidere Geopark and Geotourism Project, is realized. However, having established that it is not sufficient for attaining the desired outcomes of such projects. Offering only „*landscape*” as a geotouristic attraction is not enough. Other industries had to be taken into account to keep the region competitive. Geotourism was and still is the gate-keeper between industries, supporting social networks and attracting new high-skilled workers (Gerner et al., 2009).

Marketing of a region is more difficult than the marketing of a product due to the high competition and problems arising from the coordination and communication of different advocacy groups. The complexity of successful marketing for a region is high and finding the right combination of marketing strategies is difficult but can positively influence the development of a region, its economy and tourism (Gerner et al., 2009). Creating an image for a region is even more challenging and sometimes only possible by government regulations.

The global market is looking for unique products and a broader mix of experiences. The customers or tourists of today are more sophisticated, well-travelled and discerning and generally come from higher social-economic demographics. As such, creating a geotourism experience unique to the region is highly important for the success of initiatives and future sustainability of the geoparks and geotourism regions, if not those tourist destinations that do not manage their product may have a short life (Kotler et al., 2006). However, managing the product is not an easy task, and requires cooperative efforts. Governmental, local and scientific institutes should collaborate and cooperate for the purpose of management and marketing of the region, otherwise, valuable resources would be wasted in case of individualistic efforts. According to McKeever and Zouros (2009), a Global Geopark has to work within the network for its further expansion and cohesion, collaborate with other geoparks and local enterprises for the achievement of its objectives, create and promote new by-products linked with geological and cultural heritage in the spirit of complementarity with other Global Geopark Network members.

In our current case study of Kizilcahamam-Çamlidere Geopark and Geotourism Project, it is obvious that several bodies and institutes unite their efforts to develop and promote the project. However, the marketing aspect of management seems to be underestimated. Although the project was announced in the national newspapers, and featured in some television news, these efforts were weak and insufficient. In this sense, a strategic marketing plan should be prepared for the specific conditions of the project. This task requires full time staff, long-term financial assurances, and adherence to the plans in the long-run.

Destination images are heavily influenced by pictorial creations used in movies or television, by music, and in some cases by popular entertainers and celebrities (Kotler et al., 2006). For this reason, an effective use of the media is necessary for creating an image for the project and maintaining it. Further, continuous public relations are the basis for public awareness among the population. This requires a

well-planned media strategy. Maintaining contacts with media representatives is an important investment for the future of any project (Frey et al., 2006).

This paper has examined the Kizilcahamam-Çamlıdere Geopark and Geotourism project. However, further studies are needed. Future studies may analyze geologic and geomorphologic structure of the region. Moreover, managerial structure of the geopark may also be conducted. Finally, studies on the visitor experience may create valuable information for the management and academics.

### Aknowlegments

An earlier version of this paper was presented at the 14th Contemporary Trends in Tourism and Hospitality Conference, 2011, Novi Sad, Serbia.

### REFERENCES

- Akbulut, G., (2009), *The Main Geotourism Resources of Turkey. In the Proceedings of Geographical Diversity*, in Proc. HERODOT Conference, 29-31 May 2009, Ayvalik Turkey, Retrieved from <http://www.herodot.net/conferences/Ayvalik/papers/geog-11.pdf>
- Boley, B. B., Nickerson, N. P., Bosak, K., (2011), *Measuring Geotourism: Developing and Testing the Geotraveler Tendency Scale (GTS)*, Journal of Travel Research, unpublished article, DOI: 10.1177/0047287510382295
- Brunsdon, D., Lin, J.-C., Ford, A., (2009), *Engaging People with Place-Strategies for Education through Science and the Arts*, in the proceedings of 2009 The East Asia Geopark Vision, 27 April-4 May, p. 19-28.
- Dowling, R., (2008), *The Emergence of Geotourism and Geoparks*, Journal of Tourism, no.2, vol.9, p. 227-236.
- Dowling, R. K., (2011), *Geotourism's Glocal Growth*, Geoheritage, unpublished article, DOI 10.1007/s12371-010-0024-7.
- Dowling, R., Newsome, D., (2006), *Geotourism's Issues and Challenges*, in D. Newsome and R. Dowling (eds) Geotourism, p.242-254, Elsevier Butterworth-Heinemann, Oxford.
- Eder, W., Patzak, M., (2004), *Geoparks-Geological Attractions: A Tool for Public Education, Recreation and Sustainable Economic Development*, Episodes, no. 3, vol. 27, p. 162-164.
- Fennel, D., (2003), *Ecotourism*, Routledge, New York.
- Frey, M.-L., Schäfer, K., Büchel, G., Patzak, M., (2006), *Geoparks-A Regional, European and Global Policy*, in R. K. Dowling, and D. Newsome (eds), Geotourism (p. 95-117), Butterworth-Heinemann, Oxford.
- Gerner, D., Rybár, P., Engel, J., Domaracká, L., (2009), *Geotourism Marketing in Lake Constance' Region*, Acta Montanistica Slovaca, no. 1, vol. 14, p. 197-204.
- Hardy, A., Beeton, R. J. S., Pearson, L., (2002), *Sustainable Tourism: An Overview of the Concept and Its Position in Relation to Conceptualizations of Tourism*, Journal of Sustainable Tourism, no. 6, vol. 10, p. 475-96.
- Hose, T.A., (2006), *Geotourism and Interpretation*, in D. Newsome and R. Dowling (eds), Geotourism (p. 221-241), Elsevier Butterworth-Heinemann, Oxford.
- Jianjun, J., Xun, Z., Youfang, C., (2006), *Geological Heritage in China*, in D. Newsome and R. Dowling (eds) Geotourism (p. 140-154), Elsevier Butterworth-Heinemann, Oxford.
- Kazancı, N., Suludere, Y., Mülazımoğlu, N.S., Eker, M., Tuzcu, S., Şahin, Ş., Hakyemez, H.Y., Mengi, H., Boyraz, S., (2011), *First Geoconservation and Geotourism Application in Turkey: Kizilcahamam-Çamlıdere Geopark*, in the proceedings of First International Conference on African and Arabian Geoparks, 20-28 November, p.111.
- Kotler, P., Bowen, J.T., Makens, J.C., (2006), *Marketing for Hospitality and Tourism*, Pearson Education International, New Jersey.
- Koçan, N., (2012), *Ekoturizm ve Sürdürülebilir Kalkınma: Kizilcahamam-Çamlıdere (Ankara) Jeopark ve Jeoturizm Projesi*, Karadeniz Fen Bilimleri Dergisi, vol. 2, no. 6, p.69-82.
- Martini, G., (2009), *Geoparks...A Vision for the Future*, Geologia Publicação Especial USP, no. 5, p. 85-90.
- McKeever, P. J., Zouros, N., (2009), *The Global Network of National Parks*, in the proceedings of 2009 The East Asia Geopark Vision, 27 April-4 May, p. 69-77.
- Newsome, D., Dowling, R. K., (2010), *Geotourism: The Tourism of Geology and Landscape*, Goodfellow Publishers, Oxford.
- Newsome, D., Dowling, R., (2006), *The scope and nature of geotourism*, in R. K. Dowling and D. Newsome, (eds), Geotourism (p. 3-25), Butterworth-Heinemann, Oxford.
- Nowlan, G. S., Bobrowsky, P., Clague, J., (2004), *Protection of Geological Heritage: A North American Perspective on Geoparks*, Episodes, no. 3, vol. 27, p. 172-176.
- Peres, E., Sampol, A., (2000), *Tourist expenditure for mass tourism markets*, Annals of Tourism Research, no. 3, vol. 27, p. 624-637.

- Pforr, C., Megerl, A., (2006), *Geotourism: A Perspective from Southwest Germany*, in D. Newsome and R. Dowling (eds), *Geotourism* (p. 118-139), Elsevier Butterworth-Heinemann, Oxford.
- Piranha, J. M., Del Lama, E. A., Bacci, D. L. C., (2011), *Geoparks in Brazil-Strategy of Geoconservation and Develo**ment*, Geoheritage, unpublished article, DOI 10.1007/s12371-011-0043-z
- Reimold, U. W., Whitfield, G., Wallmach, T., (2006), *Geotourism Potential of Southern Africa*, in D. Newsome and R. Dowling (eds), *Geotourism* (p. 42-62), Elsevier Butterworth-Heinemann, Oxford.
- Tongkul, F., (2006), *Geotourism in Malaysian Borneo*, in D. Newsome and R. Dowling (eds), *Geotourism* (p. 26-41), Elsevier Butterworth-Heinemann, Oxford.
- Turner, S., (2006), *Promoting UNESCO Global Geoparks for Sustainable Development in the Australian-Pacific Region*, Alcheringa: An Australian Journal of Palaeontology, no. 1, vol. 30, p. 351-365.
- WTO, (1998), *Guide for Local Authorities on Developing Sustainable Tourism*, E. Inskeep (ed), Madrid.
- Zouras, N., (2004), *The European Geoparks Network: Geological Heritage Protection and Local Development*, Episodes, no. 3, vol. 27, p. 165-171.
- Kizilcahamam-Çamlidere Geopark and Geotourism Project, [www.jeoparkankara.com](http://www.jeoparkankara.com).
- UNESCO, <http://www.earthwords.fsnet.co.uk/geopark.htm>, [Accessed 1 September 2011].

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