

## Rural Geotourism: A New Tourism Product

NEDA T. FARSAANI<sup>1</sup>, CELESTE O.A. COELHO<sup>2</sup> and CARLOS M.M. COSTA<sup>3</sup>

<sup>1</sup>*Department of Economic, Management and Industrial Engineering,  
Aveiro University, Aveiro, Portugal  
(E-mail: ntorabi@ua.pt)*

<sup>2</sup>*Department of Environment and planning,  
(CESAM: Centre for Environmental and Marine Studies),  
Aveiro University, Aveiro, Portugal  
(E-mail: Coelho@ua.pt)*

<sup>3</sup>*Department of Economic, Management and Industrial Engineering,  
(Research unit GOVCOPP - Governance, Competitiveness and Public Policy),  
Aveiro University, Aveiro, Portugal  
(E-mail: ccosta@ua.pt)*

### Abstract

Nowadays with global warming on one hand and the global financial crisis, which has negatively affected tourism marketing on the other hand, questions have arisen: What kind of investments and new tourism products are required for the 21st Century? And which destinations will be attractive for tourists and can also develop small businesses as a tool for poverty alleviation. This paper strives to introduce a new niche market in tourism – Rural Geotourism. Moreover, this study, with an emphasis on the geo-villages, as new rural geotourism destinations, discusses the benefit of development of network activity for promoting local economy and small and medium-sized enterprise activities in these territories.

**Key words:** geopark, geotourism, geo-village, network activity, rural tourism

## INTRODUCTION

Tourism, like other industries, faces a multitude of significant sustainability-related challenges, and effective management of cultural heritage. In order to overcome the challenges, tourism strives to change to green economy by following sustainability principles.

The term ‘sustainable tourism’ originated from the general concept of ‘sustainable development’ which ‘meets the needs of the present without compromising the ability of future generations to meet their own needs’ and was introduced by Brundtland in 1987 (Beeton et al., 2007). The appearance of the concept of sustainable tourism in 1987 indicates that tourism is a pioneer industry for sustainability and development of green

economy. Moreover, ecotourism, rural tourism and, in the last decade, geotourism are tourism products which develop sustainability and are known as green tourism.

Geological heritage, like other nature heritage, offers numerous tourist attractions, natural resources and landscapes to visitors. Geologists and geographers should consider strategies for protecting and inventorying geo-heritage and sharing this knowledge with specialists in tourism to generate the georesources and geoproducts necessary for tourism activity. For the development of geotourism marketing, geological heritage should be linked to educational aims, economic use, (Ibáñez Palacios et al., 2012) innovation and network activity.

Hose (2003) argued that geotourism marketing as a form of geology-based tourism has been recognized relatively recently but is growing rapidly. One of the products of geotourism which is shaped under the umbrella of rural tourism is Rural Geotourism. Development of rural geotourism especially in rural areas of developing countries can not only be a strategy for promoting the green economy and sustainability in these territories, but also opens a gateway to geo-knowledge transfer and universalization of earth sciences.

This paper is an initial attempt to introduce a new niche market in tourism – Rural Geotourism – as green economy in rural areas. In addition, this paper targets two major purposes: (i) to identify the characteristics of rural geotourism (ii) and to investigate strategies for stimulating rural geotourism in geo-villages.

## RURAL GEOTOURISM

Tourism is a dynamic and competitive industry, and the new products of tourism will take shape in the future (Costa & Buhalis, 2006). For instance, different forms of rural tourism have developed in

different regions. Farm-based holidays are important in many parts of rural Germany and Austria, in France, the self-catering cottage is a key component of the rural tourism product (OECD, 1994). Robinson (1990) noted that second-home development in rural areas is another form of rural tourism. Second-home development in Póvoa Dão village in Portugal can be a good example in this regard. In addition, Bali Village (Crete, Greece) offers well-equipped apartments such as Stone Village Hotel Apartments which, attractively designed in local stone.

Geotourism, like other tourism products, is dynamic. Recently, some research topics have emerged for geotourism development (Figure 1) such as underground geotourism (Garofano & Govoni, 2012) and urban geotourism by National Geographic (Moffet & Moody, 2008) among others. Nekouie Sadry, and Hajalilu (2009) classified geotourism in seven categories: adventure and sport geotourism; geology and geomorphology; outcrops of the roads; rocky and stone monuments which include the art of caving; mine geotourism; human fossils and exploration of geotourism. However, the following category of geotourism is more compatible with thematic tourism products.

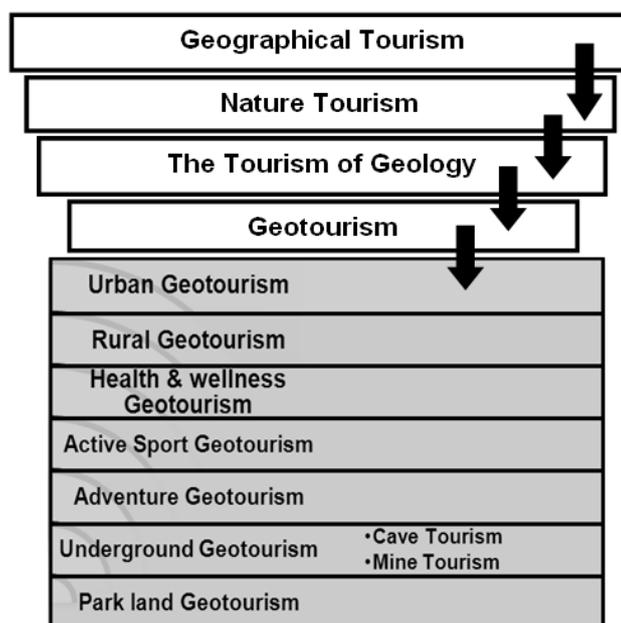


Fig. 1 Research Topics for Geotourism (Source: own construction)

One of the geotourism products which is growing under the umbrella of rural tourism is the recently named “Rural Geotourism”. According to Lane (1994) rural tourism is tourism which occurs in the country side. Furthermore, at local level, population density should be 150 persons per square kilometre (OECD, 1993). Rural settlements are small in size and they include a population of less than 10,000 inhabitants. It is noteworthy that the criteria and the size of settlements for rural areas are different in each country. Lane (1994), noted that rural tourism is located in rural areas and should create small-scale enterprise especially in the form of locally owned businesses, and should try to develop many outdoor activities. Furthermore, rural tourism strives to conserve the landscape, nature and cultural aspects.

Therefore, it can be said that “Rural Geotourism” which takes place in rural areas is not exception from the above mentioned criteria.

Rural geotourism is nature tourism takes place in the countryside which includes unique geological and geomorphological landscapes. In these villages geo-heritage and geo-landscapes fit in with the rural population’s lifestyle and culture. Cappadocia (Turkey); Kandovan village (Figure 2) and Maymand village (Iran);

Monsanto and Schist Villages (Portugal); and Xujiashan village in Ninghai County, southeast China's Zhejiang Province) constitute good examples.

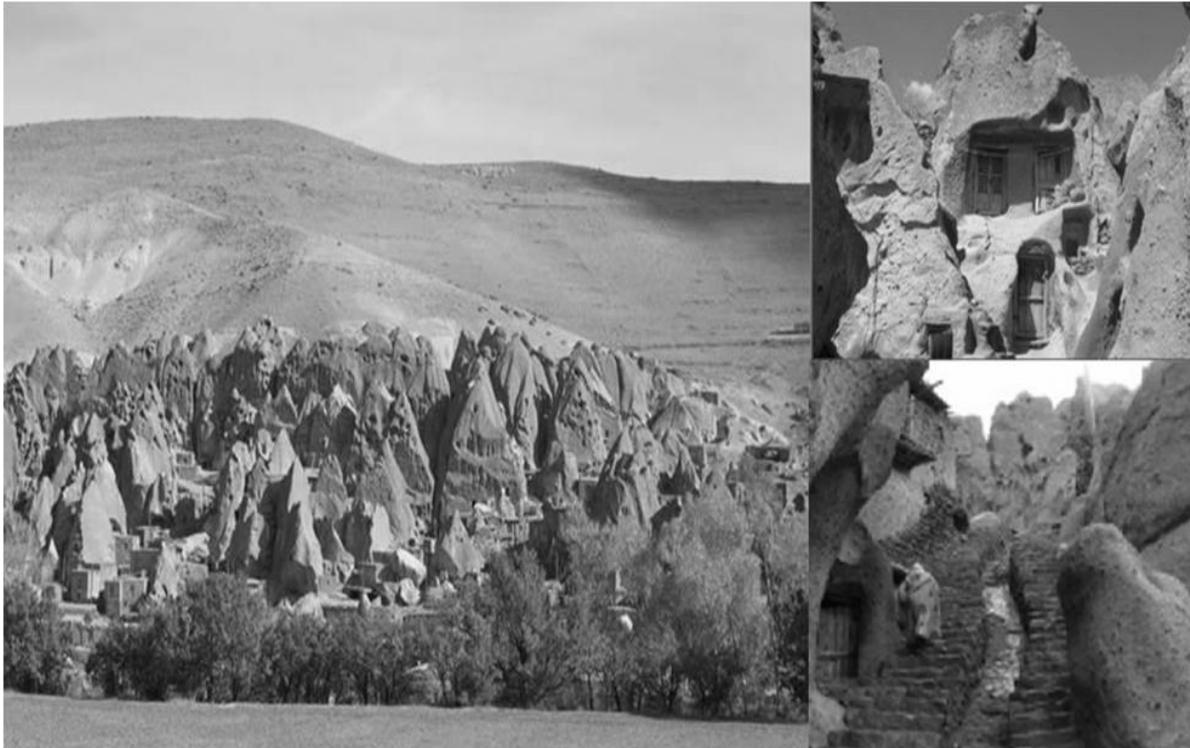
In addition, rural geotourism through innovation, novel strategies, geo-brands, geo-logos, etc. should support local businesses and generate alternative income for locals. Table 1 illustrates holiday activities dedicated to rural geotourism.

The European Geoparks Network is a pioneer in the development of rural geotourism and exchanging ideas and experiences for promoting geological awareness and sustainable development in villages and rural areas (Zouros & Mckeever, 2009; Mckeever et al., 2010).

Jones (2008) argued that the philosophy behind the geopark concept was first introduced at the Digne Convention in 1991. The planned name “reserve” was changed to “geopark” based on the Decision of Earth Sciences of UNESCO in 1997. After that, the European Geoparks Network was established in 2000 as an international LEADER Program activity (Zouros & Martini, 2003). The European Geoparks Network was set up by four regions of different European Countries – France, Germany, Spain and Greece – with similar natural and socioeconomic characteristics.

**Table 1** Holiday activities which are usually specifically rural geotourism-based

Geo-site sightseeing
Geo-Sport (Sports which are related to earth topography and integrated with geo-educational activities)
Geo-study in outdoor settings , including geo heritage observation, photography of geo-landscapes, field trips for geology, etc.
Workers often live close to workplace and with a background in geo-sciences or are familiar with geological features in their territory
Rural geotourism supports other tourism products such as ecotourism , adventure tourism etc.
Relaxation in stone buildings, geo-villages, rocky villages, geo-restaurants, geo-bakeries, rural accommodation built with stones or located in rocks
Geo-conservation and geo-education
Special appeal such as geo-festivals, geo-products, etc.
Special facilities such as self-guided geotours, geotourism maps, geo-tours
Integrating geo-knowledge into the local atmosphere
Health and Wellness geotourism such as spa therapy, stone therapy, mud therapy, salt therapy, halo-therapy, etc.



**Fig. 2** Kandovan Rocky Village, Iran

(Source: <http://www.environmentalgraffiti.com/travel/news-kandovan-stone-village>)

These four regions are rural areas, with a particular geological heritage, natural beauty, and high cultural potential, all facing problems of slow economic development, unemployment, and a high level of emigration. Faced with these problems, the managing authorities of the geological parks and museums in these regions decided to strengthen their collaboration, and as a result the European Geoparks Network was established (Zouros, 2004; Zouros & Mckeever, 2009).

In Portugal, the Schist Villages Program (Portugal) was implemented in 2001 by the Commission for Coordination and Regional Development Centre (CCDRC). This program involved twenty-four villages which were built in schist, and was aimed at rural development. Regarding this, they established a local network, rural accommodation, and designed a logo which was inspired by schist stones (Figure 3) for use with local products. Organizing tours, preparing a calendar and opening a shop “Loja do Xisto” (for supplying local products) were other activities for local development through tourism (Agência

Desenvolvimento Turístico, 2008). In these geo-villages the visitors can observe the schist landscapes and gain new experiences from staying in schist accommodation. Moreover, visitors can discover the role of schist landscapes in the rural culture and lifestyle. It can be said that visiting the schist villages in Portugal is a form of rural geotourism.

The visitors of geo-heritage such as geo-villages, geoparks, geo-sites, caves, mine, etc. are named geotourists or geotravellers (Robinson, 2008). According to National Geographic (2010), Geotravellers “go local.” They support locally owned businesses and guides. They buy from local craftspeople and eat at local restaurants serving regional cuisine. They look for traditional music and dance. As a result, the money they spend helps local people earn a living and preserves their authenticity and landscapes.

Geo-villages especially stone villages as new rural geotourism destinations are idea for those who are interested in local culture and natural and geological sciences, in particular lithology and mpetrology, and for



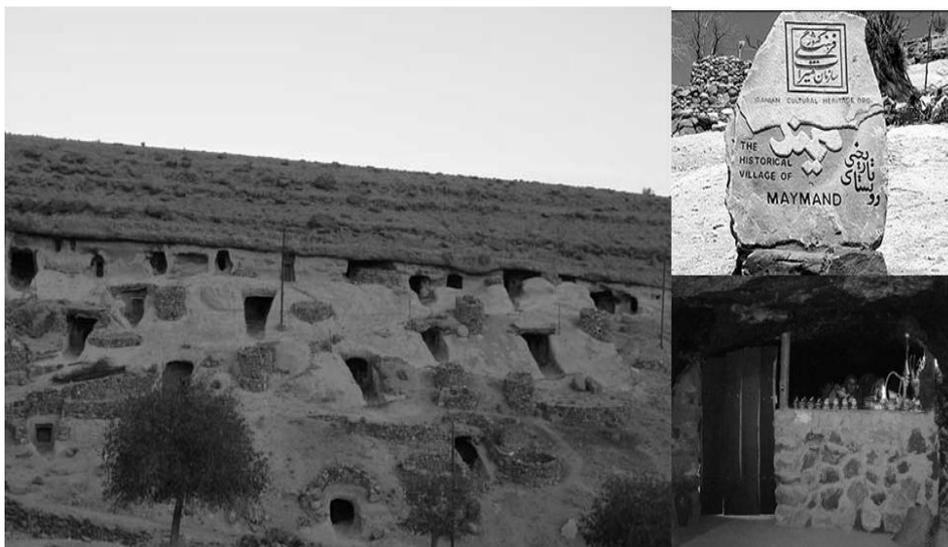
**Fig. 3** Schist Villages Logo, Portugal (Source: <http://www.aldeiasdoxisto.pt/>)

those willing to learn more about their place in our dynamic earth. Stones and rocks are known as man's first weapon against the difficulties and perils of their environment and helped man step onto the road to civilization (Paleolithic era). Therefore, stones and rocks were the first settlement of cavemen. Stone has had a certain divinity for human beings and created a variety of beliefs throughout history (Fadaei Tehrani, 2010). It can be said that stone and rocks are interwoven with human culture. There are many villages around the world which are built with stone or located/dug in rocks. As is well known, the geological processes

on rocks and stones have created beautiful landscapes all over the world especially in rural areas which are introduced as tourist attractions. The Alps and the American and Canadian Rockies were early rural tourism destinations (Feifer, 1985; Runte, 1990).

Nowadays, with the emergence of geotourism it can be said that Geo-villages (such as stone villages and rocky villages) are geotourism destinations that transfer the knowledge of geology (e.g. lithology and petrology) to schoolchildren and visitors. In the stone villages visitors can not only be educated and touch the stones, but can observe the use of stones in architecture and culture as well.

It is noteworthy that there are many stone villages which are the symbols of three groups of rocks—igneous, sedimentary, and metamorphic—. Stone villages built with basalt “as a common extrusive volcanic rock”(e.g. Xujiashan village in Ninghai County, southeast China's Zhejiang Province); schist villages as a symbol of metamorphic rocks (e.g. Piódão village in Portugal); villages built on granite, “a type of intrusive, felsic, igneous rock” (e.g. Monsanto village in Portugal); and Maymand village in Iran as a village for observing andesite – extrusive igneous – and cretaceous limestone can be good examples in this regard.



**Fig. 4** Maymand Rocky Village, Iran  
(Source: [http://geography.kermanedu.ir/en\\_k\\_shahrbabak.htm](http://geography.kermanedu.ir/en_k_shahrbabak.htm))

In addition, there are some villages with hand-dug houses amidst the rocks like Cappadocia (Turkey); Kandovan village (Iran) and Maymand village (Iran) (Figure 4). These rocky villages are rural geotourism destinations which can offer different experiences like rocky hotels, stone accommodation, cave restaurants, living like a caveman and living in the Stone Age, etc. to visitors.

The next section focuses on the development of network activities in geovillages for fostering rural geotourism, geoknowledge transfer and promoting the rural economy.

## NETWORK ACTIVITIES AND RURAL GEOTOURISM

Knoke and Kuklinski (1983:12) explained networks as “a specific type of relation linking a set of persons, objects or events”. Porter (1998:78) described clusters as “geographic concentrations of interconnected companies and institutions in a particular field, linked by commonalities and complementarities”. The benefits of networks are classified into three categories: learning and exchange; business activity; and community (Lynch, 2000; Morrison et al., 2004).

Networks not only facilitate the exchange of knowledge, but strive to support small and medium-sized enterprises (SMEs) and develop the local economy. Lowe et al. (1995) described interconnection between areas and networks as an important factor in rural development. In addition, network activity in rural areas of Wales (United Kingdom) increased economic activities and sustainability at a local level (Day, 1998). Murdoch (2000) noted that the network approach in rural areas as a new paradigm of rural development is useful because it links together development issues which are internal to rural areas with problems and opportunities that are external.

Novelli et al. (2005) noted that networks

and clusters as a framework can provide small and medium-sized enterprises (SMEs) with innovative opportunities to operate in a competitive tourism environment. In a number of European countries and in Australia, network and cluster projects are used to boost management innovation. Australia's rural areas, with the intention of solving challenges in social, economic and environmental terms take advantage of networks in rural areas (Sobels et al., 2001). According to Lee et al. (2005) the results of a European pilot project in rural areas of six different countries – Finland, Ireland, Italy, Norway, Scotland and Sweden – illustrated that fostering networks can have long-term beneficial results. Indeed, networks create opportunities for learning and local development (High et al., 2005). The Schist Villages Program (Portugal) was implemented in 2001 by the Commission for Coordination and Regional Development Centre (CCDRC). This program involved twenty-four villages and was aimed at rural development (Agência Desenvolvimento Turístico, 2008). Consequently, network activity in rural areas increased economic activities and sustainability at a local level, as well as exchange of knowledge (Lowe et al., 1995; Day 1998; Novelli et al., 2005; Breda et al., 2006).

According to Costa et al. (2008) the existence of tourism networks can increase competitiveness, promote innovation and facilitate internationalization. Breda *et al.* (2006) argued that the Caramulo area (Portugal) was suffering from being somewhat peripheral and having little role in tourism in the central region of Portugal; aiming to achieve sustainable development in this territory they suggested constituting the foundation of a tourism cluster and a very comprehensive network. The majority of Portuguese SMTEs (Small and Medium-sized Tourist Enterprises) consider the development of an organisational network crucial in their business area, which is in accordance with the enormous importance

they attach to networks and partnerships as a means to gain competitiveness, innovate and become international in their operations (Breda et al., 2008).

It is noteworthy that there are some formal networks around the world such as GEN (Global Ecovillage Network); (RTI-TN) Rural Tourism International – Training Network; Genuineland (European Network of Village Tourism) (Figure 5) which, by organising training courses, conferences, projects and emphasizing on ecotourism and rural tourism, strive for sustainability, development of the local economy and improvement of the quality of life.



Fig. 5 GEN; RTI-TN and Genuineland logo

It can be said that the creation of informal and formal networks is an important factor in rural tourism development. Engaging local communities in network activities can promote the creation of new products and service innovation as well as the generation of new social economic and intangible capital that can lead to a regional competitive advantage (Hall, 2005). Based on the results of Romeiro and Costa (2010) in the Valle del Jerte (Spain) a rural tourism network helps to maximize the sustainability of employment and stimulate processes of social innovation. Consequently, local networks contribute to learning and exchange of knowledge for development of rural areas.

Recently, the world community has been faced with several environmental problems such as global warming, air pollution, etc. The growing concern within earth sciences

and governments demonstrates the importance of earth preservation. For instance, governments try to minimize the negative impacts of industrial and economic sectors on the environment, as do earth scientists, NGOs and tourism sectors. Thus, universalization and popularization of earth sciences appears to be a prerequisite for preserving the natural, geological heritage and environment. Nowadays, geotourism as a new niche market and network activity have emerged as promising approaches to facilitate the universalization and exchange of knowledge from the professional level to public level.

Partnerships and collaboration can contribute to sustainability (Selin, 1999). One of the best-known forms of collaboration in terms of network activity in earth science and sustainability has been developed in the GEN (Global Ecovillage Network) (Dawson, 2006), EGN (European Geoparks Network) GGN (Global Geoparks Network) and APGN (Asia Pacific Geopark Network) (Zouros & Martini, 2003). These networks can be a strategy for sharing ideas, experiences and technologies for sustainable living and earth protection (McKeever et al., 2010). They also act as a solution for eliminating geographic and politic borders in order to implement sustainable development principles. In the GGN, APGN and EGN, network activity concentrates on geoparks around the world. UNESCO introduced the geopark as a nationally protected area including a number of geological heritage sites of particular importance (geosites), rarity or aesthetic appeal. A geopark attains its goals through conservation, education, and geotourism (UNESCO, 2006a). Therefore, all geoparks have a common language, and can preserve the earth.

As a result, in the last decade, the establishment of three formal social-scientific networks (the GGN, the EGN, and the APGN) are a novel paradigm for rural geotourism development and exchange of knowledge in geo-sciences (geology, geomorphology geography and

geo-conservation) through the establishment of geoparks and promotion of the new niche tourism market “geotourism”.

According to the EGN and UNESCO’s recommendations, the criteria for the development of a geopark include (UNESCO, 2006b): size and setting; management and local involvement; economic development; education; protection and conservation; and membership of the Global Network. Meanwhile, there are many geosites and geo-villages (e.g. stone villages and rocky villages) which are not included within the boundaries of geoparks or do have not enough surface area to become a geopark, but they comprise unique geological and geomorphological heritage and they are well-positioned for development of rural geotourism and geo-knowledge transfer. Therefore, establishment of a Geo-Villages Network (GVN) under the umbrella of GGN or National Geoparks Network in each country is a key issue for future rural geotourism management and geo-knowledge management.

According to Dowling (2009) partnership in geotourism is welcomed because it makes good economic sense and can benefit all partners. Hence, Geo-Villages Network (GVN) can create opportunities for visitor exchange programs among geo-villages. The visitor exchange program promotes mutual understanding between the local people of the geo-villages and the people of other countries by earth science educational and cultural exchanges. Moreover, establishment of a GVN provides volunteering opportunities for teenagers and for adults to train local communities and local authorities for the development of geotourism and preparing interpretative and service facilities needed for transferring geo-sciences and local knowledge to visitors and schoolchildren (e.g. geotourism maps, geo guides, interpretative panels, geo-tours, etc.). In addition, the GVN open a gateway for the geo-village authorities to exchange knowledge regarding geo-

conservation methods and sustainable tourism and innovative strategies. Stone villages and rocky villages which become members of the GVN are open air museums and attractive conference destinations for those who are interested in geology (especially lithology and petrology), physical geography, archaeology (e.g. Maymand village (Iran), a rocky village, is an ancient settlement in Iran, more than 2500 years old (National Geoscience Database of Iran, 2008), rural architecture, rural social sciences and rural tourism. Besides, building a geographic database for geo-villages on the GVN website or on an official tourism website of each country can be a strategy for introducing these rural areas as new geotourism destinations.

## CONCLUSIONS

Rural geotourism as a new geotourism product not only encompasses characteristics of rural tourism, but also, with an emphasis on geology and geography, is known as a strategy for universalization of earth sciences. Rural geotourism strives to explore and revive cultural identities and integrates them with geo-knowledge for educating locals and transferring knowledge to visitors. Creating handicrafts which are symbols of trilobite fossils in the rural area of Arouca Geopark can be a good example in this regard. In addition, this new niche market integrates rural tourism holidays activities with earth sciences (e.g. geo-sports).

Fassoulas and Zouros (2010) noted that geoparks especially act for the benefit of local communities through the development of geotourism and educational activities in rural areas. Rural geotourism creates new job opportunities for local communities – especially local women and graduates in earth sciences and tourism – such as geotourism outdoor activities: geo-tours; geo-restaurants; family guest houses built of stones or located in rocks; geo-guides; geo-museums; geo-health centres; etc. This,

therefore, can be a solution for reducing the unemployment rate and migration rate from rural areas. Establishing a geo-network at national or international level in geovillages can be another solution in order to support local businesses and products through certifications, geo-brands, transferring innovative ideas to locals, and exchange of knowledge. Furthermore, rural geotourism not only transfers geoknowledge from the professional to local level, schoolchildren, and visitors, but is also a way for implementing sustainable principals and geo-conservation methods.

Lastly, rural geotourism is a gateway for the entrance of public and private infrastructures and educational facilities into rural areas particularly in developing countries.

## REFERENCES

- Agência Desenvolvimento Turístico** (2008) Aldeias do Xisto. Available at: <http://www.aldeiasdoxisto.pt/index/5>. (30. September 2010).
- Beeton S., Bergin-Seers S. and Lee C.** (2007) Environmentally sustainable practices of Victorian tourism enterprises, A Sustainable Tourism CRC. Available at: <http://www.linkbc.ca/torc/downloads/BeetonPracticesVictorianTourism.pdf?PHPSESSID=0cf903e84ceaabf7cd37ce53ee1939ef>. (02. February 2009).
- Breda Z., Costa R. and Costa C.** (2006) Do Clusters and Networks Make Small Places Beautiful? The Case of Caramulo (Portugal) In: Lazzarotti L. Petrillo C.S. (Eds.), Tourism local systems and networking .Elsevier, The Boulevard, Langford Lane, Kidlington.Oxford.UK, pp. 67-82.
- Breda Z., Costa R. and Costa C.** (2008) Helping small businesses getting bigger: The role played by networks and partnerships in the internationalisation of small tourism enterprises. In: Richards G. Wilson J. (Eds.), From cultural tourism to creative tourism: Changing structures of collaboration .Proceedings of the ATLAS International Conference 2005. Arnhem: ATLAS (ISBN 978-90-75775-31-0). Vol. 2, pp. 53-64.
- Costa C., Breda Z., Costa R. and Miguéns J.** (2008) The benefits of networks for small and medium sized tourism enterprises. In: Cooper C Scott N. Baggio R. (Eds.), Network analysis and tourism: From theory to practice. Aspects of Tourism Book Series. Channel View Publications, an imprint of Multilingual Matters. (ISBN 978-1845410872), pp. 96-112.
- Costa C. and Buhalis D.** (2006) Introduction. In: Buhalis D. Costa C. (Eds.), Tourism Management Dynamics Trends, management and tools Elsevier, Oxford, UK, pp. 1-7.
- Dawson J.** (2006) Ecovillages: New Frontiers for Sustainability. Schumacher Briefings, Green Books, UK.
- Day G.** (1998) Working with the Grain? Towards Sustainable Rural and Community Development. Journal of Rural Studies 14(1), pp. 89-105.
- Dowling R.** (2009) Geotourism's contribution to local and regional development. In: Neto de Carvalho C. Rodrigues J.C. (Eds.), Geotourism and local development. Geopark Naturtejo , Idanha-a-Nova, Portugal, pp. 15-37.
- Fadaei Tehrani A.** (2010) Stone; Silent Presence in Old Iranian Beliefs. International Society for Iranian Studies Conference, Santa Monica, United States. May 2010.
- Fassoulas C. and Zouros N.** (2010) Evaluation the Influence of Greek Geoparks to the Local Communities. Proceedings of the 12th International Congress Planet Earth: Geological Processes and Sustainable Development, Patras, May 2010, XLIII( 2), pp. 896-906.
- Feifer M.** (1985) Going places: The Ways of the Tourists from Imperial Rome to the Present Day. London: Macmillan.
- Garofano M. and Govoni D.** (2012) Underground Geotourism: a Historic and Economic Overview of Show Caves and Show Mines in Italy. Geoheritage (2012) 4, pp. 79–92.
- Hall M.** (2005) Rural wine and food tourism cluster and network development. In: Hall D.R.Kirkpatrick I Mitchell M. (Eds.), Rural tourism and sustainable business. British Library Cataloguing. UK, pp. 149-164.
- High C., Pelling, M. and Nemes G.** (2005) Understanding informal institutions: Networks and communities in rural development. In: Transition in Agriculture, Agricultural Economics in Transition II, Institute of Economics, Hungarian Academy of Science, 28-29 October, Budapest, Hungary. Available at: <http://www.eldis.org/assets/Docs/39960.html>. (01. March 2011).
- Hose T.A.** (2003) Geotourism in England: A two-region case study analysis. Birmingham, unpublished PhD thesis, University of Birmingham, Birmingham.
- Ibáñez Palacios G. P., Ahumada A. L. and Páez S.V.** (2012) Geological heritage in a region of the Sierra de Aconcagua, Provinces of Tucuman and Catamarca, Argentina. PASOS: Revista de Turismo y Patrimonio Cultural (10) 1, pp. 75-87.
- Jones C.** (2008) History of Geoparks. In: Burek C.V. Prosser C.D. (Eds.), The history of

- geoconservation. The Geological Society, London, UK, pp. 272-276.
- Knoke D. and Kuklinski J.** (1983) Network analysis. Sage Publications, Inc, Los Angeles, United States of America.
- Lane R.** (1994) What is Rural Tourism. *Journal of sustainable Tourism* vol. 2 (1&2), pp. 7-21.
- Lee J., Arnason A., Nightingale A. and Shucksmith M.** (2005) Networking: Social Capital and Identities in European Rural Development. *Sociologia Ruralis* vol. 45(4), p. 270-283.
- Lowe P., Murdach J. and Ward N.** (1995) Networks in rural development: Beyond Exogenous and Endogenous Models. In: Ploeg J.D.VDijk G.V (Eds.), *Beyond modernization: the impact of endogenous rural development*. Van Gorcum and Comp. Netherland, pp. 87-104.
- Lynch P.A.** (2000) Networking in the homestay sector. *The Services Industries Journal* vol. 20 (3), pp. 95-116.
- McKeever P., Zouros N. and Patzak M.** (2010) The UNESCO Global Network of National Geoparks. In: Newsome D. Dowling R.K. (Eds.), *Geotourism: The tourism of geology and landscape*. Good fellow publishers, Oxford, UK, pp. 222-230.
- Moffet B. and Moody J.** (2008) 5 U.S. Agencies sign agreement to embrace geotourism, expanding conservation efforts. Available at: <http://www.doi.gov/bia/docs/press>. (08. July 2008).
- Morrison A., Lynch P. and Johns N.** (2004) International tourism networks. *International Journal of Contemporary Hospitality Management*, vol. 16 (3), pp. 197-202.
- Murdoch J.** (2000) Networks- a new paradigm of rural development. *Journal of Rural Studies*, vol. 16, pp. 407-419.
- National Geographic** (2010) Geotraveler Tips, Center for Sustainable Destinations, Programs , Available at: [http://travel.nationalgeographic.com/travel/sustainable/geotraveler\\_tips.html](http://travel.nationalgeographic.com/travel/sustainable/geotraveler_tips.html). (21. August 2012).
- National Geoscience Database of Iran** (2008) National Geotourism Program of Maymand. Available at: <http://www.kerman.medu.ir/3836/3836Docs/mis/maymand.pdf>. (11. August 2012).
- Nekouie Sadry B. and Hajalilu B.** (2009) Fundamentals of geotourism: with a special emphasis on Iran . Samt Publisher, Tehran. Iran.
- Novelli M., Schmitz B. and Spencer T.** (2005) Networks, Clusters and innovation in tourism: A UK experience. *Tourism management*, vol. 27 (2006), 1141-1152.
- OECD** (1993) What Future for our Countryside: A Rural Development Policy. Paris, OECD.
- OECD** (1994). *Tourism Strategies and Rural development*. Organization for Economic Co-Operation and development. Paris 1994.
- Porter M.E.** (1998) Clusters and the New Economics of Competition. *Harvard Business Review*, pp. 77-90.
- Robinson A.M.** (2008) Geotourism: who is a geotourist?. Paper presented at the Inaugural National Conference Green Travel, Climate Change and Ecotourism, Edith Cowan University, Australia, 18 November.
- Robinson G.M.** (1990) Conflict and Change in the Countryside. London, Belhaven.
- Romeiro P. and Costa C.** (2010) The potential of management networks in the innovation and competitiveness of rural tourism: a case study on the Valle del Jerte (Spain). *Current Issues in Tourism*, vol. 13 (1), pp. 75-91.
- Runte A.** (1990). Conflict and Change in the Countryside. London: Belhaven.
- Selin S.** (1999) Developing a Typology of Sustainable Tourism Partnerships. *Journal of Sustainable Tourism*, vol. 7(3&4), pp. 260-273.
- Sobels J. Curtis A. and Lockie S.** (2001) The role of Landcare group networks in rural Australia: exploring the contribution of social capital. *Journal of Rural Studies*, vol. 17, pp. 265-276.
- UNESCO** (2006a) Global Geoparks Network. UNESCO Division of Ecological and Earth Sciences Global Earth Observation Section Geoparks Secretariat. Available at: <http://unesdoc.unesco.org/images/0015/001500/150007e.pdf>. (17. November 2009).
- UNESCO** (2006b) Guidelines and Criteria for National Geoparks seeking UNESCO's assistance to join the Global Geoparks Network, Paris, January 2006. Internal document, 10.
- Zouros N.** (2004) The European Geoparks Network - Geological heritage protection and local development. *Episodes*, vol. 27 (3), pp. 165-171.
- Zouros N. and McKeever P.** (2009) Tools for Earth Heritage Protection and Sustainable Local Development, European Geoparks. In: Zouros N. Ramsay T. McKeever P. Patzak M. (Eds.), *European Geoparks, earth heritage protection and sustainable local development* The Natural History Museum of the Lesvos Petrified on behalf of the European Geoparks Network, SIGRI LESVOS, Greece GR-81103, pp. 15-30.
- Zouros N. and Martini G.** (2003) Introduction to the European Geoparks Network. In: NHM of Lesvos Petrified Forest. Proceedings of the 2nd Inter. Symposium of Natural Monuments and Geological Heritage. Lesvos, Greece, pp. 17-21.