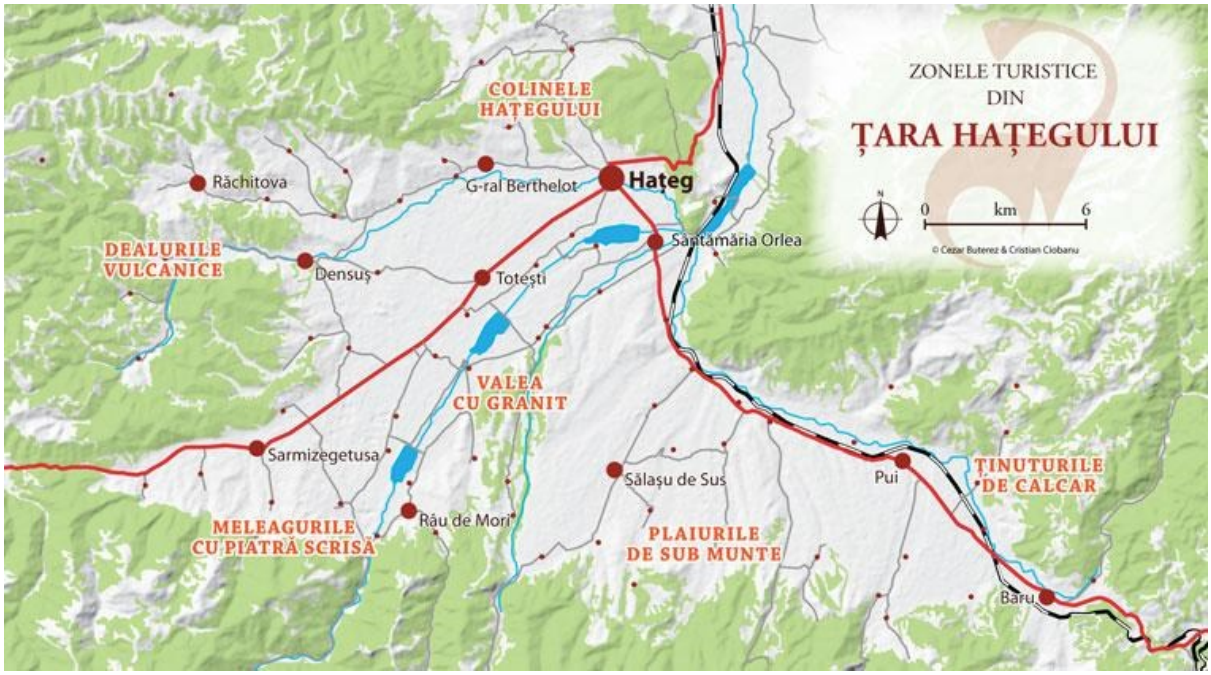
Geoconservation in Hateg Country Dinosaurs Geopark

Sustainable Tourism in Hateg Country Dinosaurs Geopark. Identifying Characteristics of Sustainable Ecotourism and Geotourism Applicable in Hateg.



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Foreword

This research group report was written by several students who participated in the European Virtual Seminar of the Open University. Authors are students from different countries, with different background, to form a multidisciplinary team. The students never met each other in real life before, nor during the seminar. Two students live in the study subject area in Romania. For the others the subject was totally new and for most of our group members it was also their first online seminar. Some background information was given by the tutors. A special thanks goes to the team members: Florian Freidorfer (University of Graz, Austria), Horea Grosan (Lucian Blaga University of Sibiu, Romania), Beatrice Peinsipp (University of Graz, Austria), Laure Lydia Poupou (University of the Aegean), Maria Tanasescu (University of Bucharest, Romania), Valérie Vandenbussche (Master Environmental Sciences OU Netherlands-Belgium) and special thanks to our tutor Gabriela Iftode from Hateg Country Dinosaur geopark and geopark expert Alexandru Andrasanu .

The EVS GEO study group of 2016/17

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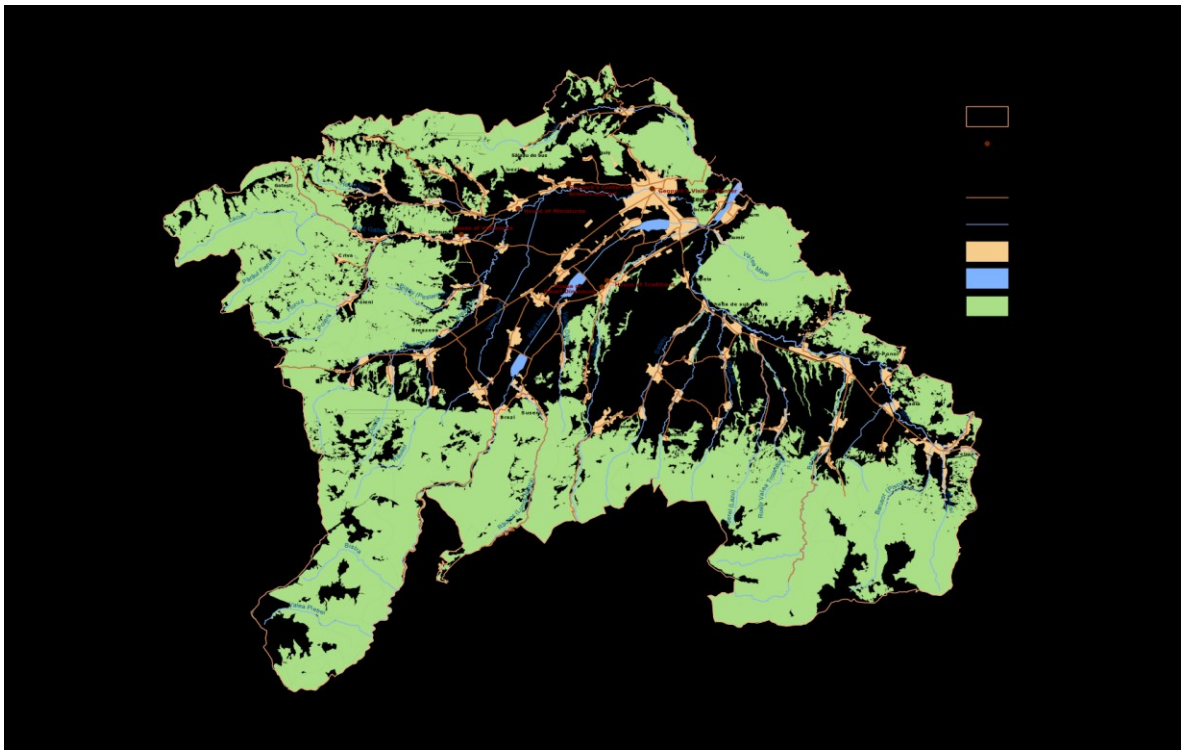

Figure 1: Map of Hateg Country Dinosaurs Geopark

Summary

This case study has been conducted by a group of students from all over Europe in the field of sustainable development. The research area is Hateg Country Dinosaurs Geopark in Romania, which was declared as a protected area in 2004 and became member of the EGN and GGN in 2005.

A geopark is an area with a lot of interesting features or phenomena and is used for educational, scientific or touristic purposes. Tourism is changing rapidly as nature and heritage destinations become more and more important, but increased tourism to sensitive natural areas without appropriate planning and management can threaten these areas enormously. The problem definition of this case study is to set up a research study that will lead to innovative recommendations on how sustainable development can be improved in Hateg Country Dinosaurs Geopark. The focus of this study lays on geotourism, as the development of sustainable tourism in this area is a major goal in order to protect its natural, geological and cultural heritage. The central research question is: ”How can potential (local) stakeholders apply sustainable eco- and geotourism in Hateg Geopark?“. In order to answer this question, we came up with four derived research questions, which include a question concerning the potential stakeholders with focus on geotourism in Hateg Country Dinosaurs Geopark, criteria on how to make ecotourism sustainable over time, the characteristics of geotourism and how sustainable eco- and geotourism could be developed in Hateg Geopark.

In our research we included different steps and phases during which we used different methodologies. In order to come up with innovative recommendations for the sustainable development of the park, we did literature study of existing scientific research studies and public documents on eco- and geotourism, as well as nature- and geoconservation. Our research also includes research opinion through interviews with experts in the field of sustainable tourism linked to nature- and/or geoconservation, and unstructured interviews with local stakeholders and the local population of the research area. In order to conduct a research that has a sufficient scientific outcome, we also a provided a list with examples of European “sustainable tourism projects”. Some of them could even be adopted to Hateg Country Dinosaurs Geopark.

The results of our research show that Hateg Country Dinosaur Geopark offers a lot of potential in the field of geotourism and ecotourism. Nevertheless, we also found out that other geoparks are more successful in implementing sustainable touristic activities and

projects in real life, as Hateg does not have enough financial resources to do so. Although it’s hard to implement geotouristic activities and sustainable development in real life, it can have positive effects on the local population and tourists, but most importantly on the geological, natural and cultural heritage of Hateg Country Dinosaurs Geopark.

It is recommended that stakeholders of Hateg Country Dinosaurs Geopark do something more in the direction of the geotourism and the development of a sustainable business. Therefore, we provided a list with different examples of future investments for touristic activities in the geopark. This includes the protection of nature, the involvement of tourists and the local population, and an evaluation of each activity. Another approach could be to test the framework also on other geoparks where tourism is already growing, to calculate the impact of this possible frame on making existing geotourism more sustainable. The comparison with other Geoparks from Europe helped us adapt some of their ideas to Hateg Country Dinosaurs Geopark and created the possibility to offer stakeholders a model of sustainable development to implement it to Hateg Geopark.

Table of Contents

1. Introduction: Geoparks, Global Networks and UNESCO

1.1 What is a geopark?

According to UNESCO, “Global Geoparks are single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education and sustainable development.” (UNESCO) A geopark primarily lays its focus on the following components: (1) protection and conservation; (2) tourism-related infrastructural development; and (3) socio-economic development using a sustainable territorial development strategy (Jaafar et al., 43). Ranging from different kinds of species and fossil findings, up to a unique cultural heritage of the area, geoparks consists of different sites with geological, natural and cultural interest.

“A UNESCO Global Geopark uses its geological heritage, in connection with all other aspects of the area’s natural and cultural heritage, to enhance awareness and understanding of key issues facing society, such as using our earth’s resources sustainably, mitigating the effects of climate change and reducing natural disasters-related risks. By raising awareness of the importance of the area’s geological heritage in history and society today, UNESCO Global Geoparks give local people a sense of pride in their region and strengthen their identification with the area. The creation of innovative local enterprises, new jobs and high quality training courses is stimulated as new sources of revenue are generated through geotourism, while the geological resources of the area are protected.” (UNESCO)

1.2 European Geoparks Network (EGN) and Global Geoparks Network (GGN)

The European Geoparks Network was established in 2000 by the four territories France, Germany, Spain and Greece, and now comprises 69 members from 23 European countries. According to Zouros et al. (2010), “The European Geoparks Network aims to protect geodiversity, to promote geological heritage to the general public, as well as to support sustainable economic development of Geopark territories, primarily through the development of geological tourism.“ One of the major goals of European geoparks is the improvement of the protection, recognition, conservation and promotion of geological and geomorphic features (Zouros et al.,). Hateg Country Dinosaurs Geopark was declared as a protected area in 2004 and became member of the EGN in 2005. The membership of each country

lasts four years and is then reviewed and assessed again. Hateg Geopark was revalidated in 2008, 2010 and 2014. The next revalidation will be in 2018. In 2005, Hateg Country Dinosaurs Geopark also joined the Global Geoparks Network. Such geoparks use their geological, natural and cultural heritage in order to enhance awareness and understanding of sustainable issues in society. According to UNESCO, European geoparks must fulfill certain criteria in order to become member of the Global Geoparks Network. The four most fundamental features are:

- **Geological heritage of international value:** In order to become a UNESCO Global Geopark, the area must have geological heritage of international value.
- **Management:** UNESCO Global Geoparks require a management plan, agreed upon by all the partners, that provides for the social and economic needs of the local populations, protects the landscape in which they live and conserves their cultural identity.
- **Visibility:** Visitors as well as local people need to be able to find relevant information on the UNESCO Global Geopark.
- **Networking:** A UNESCO Global Geopark is not only about cooperation with the local people living in the UNESCO Global Geopark area, but also about cooperating with other UNESCO Global Geoparks through the Global Geoparks Network (GGN), and regional networks for UNESCO Global Geoparks, in order to learn from each other and, as a network, improve the quality of the label UNESCO Global Geopark.(UNESCO)

1.3 Background of Hateg Country Dinosaurs Geopark

The aim of Hateg Geopark was to promote and develop a geopark in Romania with the EGN and GGN principles of geoconservation. The management of the geopark is assured by the University of Bucharest by partnerships at the local, national and international level. It’s aim is to promote local development in the field of nature conservation, heritage protection, traditional economic activities, ecotourism, social issues, and education and training in the park.

Hateg Country Dinosaurs Geopark is located in Southern Transilvania, in Hunedoara County and is an intramontane depression surrounded by mountains from all directions. This depression is also known as “Hateg County” and is well known for its historical, cultural, natural and geological heritage (Andrasanu et al., 2004). The geopark’s territory covers an area of 103,400 ha and comprises 78 villages, 11 communes (Baru, Berthelot, Densuș,

General Berthelot, Haţeg, Mare, Pui, Răchitova, Râu de Mori, Sălașu de Sus, Sântămăria Orlea, Sarmisegetuza, Toteşti) and one larger town, Hațeg (Andrasanu et al, 2008).

The Hateg Country Dinosaurs Geopark is also a natural park which includes eight national monuments in its territory, mentioned in Law 5/2000 regarding the approval of the National Territory Plan – section III – protected zones.

- **The Peşteana Marsh** – botanical reserve, with a surface of 2 ha, that is situated on the territory of Peşteana village, Densuş commune. It is one of the southeast oligotrophic marshes from Romania with the carnivorous plant Drosera rotundifolia, a glacial relict.
- **The Poienii Peak** – from the Ohaba de sub Piatră, is a botanical protected area with a surface of 0,8 ha, situated on the territory of Ohaba de sub Piatră village, Sălaşu de Sus commune. Here there can be found the only certain station for Plantago holosteum and a classical site for Astragallus onobrycnis var. lineariforicus.
- **The Slivuţ Forest** – botanical reserve, with a surface of 40 ha, situated on the territory of Haţeg town. In the grassy layer of the forest Croccus banaticus, Melampyrum bihariense and Lembotropis nigricans species have been identified. Since 1958, in the zone a European bison reserve has been created which attracts many tourists every year.
- **The Narcissus Hay Fields from Nucşoara** – botanical reserve, with a surface of 20 ha, on the range of Nucşoara village, Sălaşu de Sus commune. Here can be seen hydrophilical associations with the Peudedanum rochelianum and also populations of Narcissus stellaris.
- **The Hay Fields from Pui** – botanical reserve, with a surface of 5 ha, on the range of Pui communa. Floristic associations specific to the glacial period can be found here.
- **The continental deposits with dinosaurs from Sanpetru –** paleontological reserve, with a surface of 5 ha on the range of Sanpetru village, Santamarie Orlea commune. The continental deposits here are famous for the dinosaur fossils that were discovered more than a century ago.
- **The limestones from Fata Fetei** - botanical reserve, with a surface of 1 ha on the range of Rau de Mori commune.
- **The Superior Cretaceous continental deposits with dinosaur eggs from Tustea -** paleontological reserve, with a surface of 0,6 ha on the range of Tustea village, Berthelot commune. Dinosaurs nests with eggs were discovered here (Andrasanu et al, 2008).

The fossils of dwarf dinosaurs, dating from the Upper Cretaceous, are internationally unique and the reconstruction of the dinosaurs based on skeletal remains are the main attraction in the Geopark. In the sites distributed around the area there were also found dinosaur eggs and babies, fossils of crocodiles, turtles and small mammals.

The archeological, cultural and natural heritage, together with all the geological elements, made Hateg Country the perfect candidate for the Global Geoparks Network. The interpretation strategy takes into account how local people view their heritage in combination with the scientific research. The tagline, ‘Journey through Ages’, is combining two time scales, the geological and human time scale for a more understandable interpretation of the heritage found in the Geopark (Ciobanu, 2016).

The sites and trails are grouped in four categories:

(1)Terra – geodiversity sites
(2) Natura – biodiversity sites
(3) Aegis – historical and cultural monuments
(4) Fabula – local traditions and customs

The interpretation points are a series of houses that can be found inside local communities (House of Dwarf Dinosaurs, House of Volcanoes, House of Miniatures, House of Traditions) the permanent exhibition ‘Balaurs, Dragons, Dinosaurs’ at the Geopark’s Headquarters in Haţeg town and the Art and Science Center in General Berthelot village, where the nests with dinosaur eggs can be seen (Ciobanu, 2016).

2. Problem Definition

To be able to develop projects in Hateg Country Dinosaurs Geopark and to straighten the local identity, a volunteering program has started in 2013: Volunteers for Geopark. Since then many projects were implemented in the Geopark with the help of the young volunteers who live in the Geopark.

The locals are quite simple. A few years ago most of them were factory workers so introducing the idea of a personal, “boss-free” business it’s quite challenging. They were not raised as entrepreneurs and starting their own business sounds impossible for them. They are mostly farmers, too concerned by making a living for the next day and the socio-political environment is not helping them either. The ones who already started a business have chosen the service segment, offering accommodation and food to the visitors that come to visit the Hateg Country Dinosaurs Geopark without thinking about other types of services like horseback riding, guided tours, wildlife watching and so on. The visitors that come to the Geopark are searching for experiences they cannot find elsewhere and this can be an opportunity for the locals to start developing their own small business that can satisfy this necessity.

The geopark is an area with a lot of interesting features or phenomena and is used for educational, scientific or touristic purposes. Tourism is changing rapidly as nature and heritage destinations become more and more important and geoparks also promote local economic development mainly through it. Nevertheless, most tourism in natural areas today is not sustainable. Increased tourism to sensitive natural areas without appropriate planning and management can threaten these areas enormously. The increase of visitors to natural areas can lead to significant environmental problems and local communities and indigenous cultures can be harmed in numerous ways. Therefore, it is necessary to come up with innovative recommendations for the sustainable development of such parks. As the focus of our research lays on Hateg Country Dinosaurs Geopark in Romania, the development of sustainable tourism in this area is a major goal in order to protect its natural, geological and cultural heritage.

The International Year of Sustainable Tourism for Development 2017 (Gomez R., UNWTO 2017) is an incentive to a foster social and political dialogue towards sustainable development. Moreover, “The 2030 Agenda considers sustainable tourism as a vector of development, job creation and the promotion of local culture and products. Tourism is part of the Sustainable Development Goals and contributes decisively to almost all 17 Goals

through its impacts on fighting poverty, promoting decent jobs, improving gender equality and the livelihoods of young people or the fight against climate change" (Gomez R. UNWTO, 2017).

2.1 Sustainable development

Our case study group came up with the following definition of sustainable development relevant for Hateg Country Dinosaur Geopark:

"Sustainable development lays its focus on nature conservation and includes the protection of a territory's geological, natural and cultural heritage and also tries to improve the quality of life, without compromising the possibility of future generations to fulfill their needs. This can be achieved by integrating the results of interdisciplinary research studies in local strategies, so environmental issues can be solved, the state of conservation of protected sites can be improved and local people can develop small businesses to sustain ecotourism considering the importance of responsible use of natural resources. Sustainable development concerns everybody and needs to be taken up by the whole society."

Today's society must be aware of the area's geological history and it's situation today. It is important to integrate the local population in programs and projects to guarantee successful geoconservation in such parks; for example, mitigating the effects of increasing tourism in natural areas (UNESCO). Therefore, the participation of the local community, stakeholders, and other interest groups is very important in the decision-making process and in achieving the goals of sustainable development in such areas.

2.2 Geoconservation

The term "geoconservation" was probably used for the first time in the beginning of the 1990s reported by Sharples, a pioneer of Australian geoconservation, who mentioned that the forestry commission in Tasmania (Australia) prepared reports in order to conserve earth systems between 1993 and 1994 (Brilha, 2014). So obviously there was a need of a new term to describe the actions which were taken to fulfill their goals.

In general, geoconservation aspires to prevent or minimize depletion in order to protect the high value of the landscapes and soils, not only for humans and their use of the area (Andrasanu, 2006), but the idea of geoconservation does not only include the concept of conserving the different kinds of heritage of a region, but also to enhance geological,

geomorphological and soil features as well as processes and sites (Burek C.V. and Prosser C.D., 2008). This definition leaves open spaces about the implementation of such projects. So when geoconservation is practiced in different places around the world, there will be different kinds of realizations which depend on the presence or absence of geoconservation policies or frameworks, some kind of volunteers or a governmental lead (Burek C.V. and Prosser C.D., 2008). There are many different projects that happened a long time ago like the first example of the Baumannshöhle, a cave in the Harz Mountains in Germany, where the geological features were protected, which dates back to 1668 or legal actions which were taken, in 1819, to prevent damages on the city landscape because of the downsizing of stone from Salisbury Crags in Edinburgh, Scotland. During the nineteenth century the protection of some geological areas continued in a few countries of Europe like Germany, Denmark or Switzerland (Brilha, 2014).

Nowadays there is a general acceptance amongst scientists who work in the field of geology and other comparable sciences. Some may have already experience in losing their favourite exposure or are personally involved in geoconservation activities in their local areas (Burek C.V. and Prosser C.D., 2008).

To make geoconservation possible, there are different key players needed on different levels. Starting with the local communities, museums, cave owners, private companies and local authorities, who are the most important actors for geoconservation, because they provided different good examples that have been picked up at national and international levels. Also a robust national framework is essential so local delivery can take place. For example policies and legislations are needed to make such a framework possible (Burek C.V. and Prosser C.D., 2008).

3. Objectives

Main Goal: To come up with sustainable strategies to make Hateg Country Dinosaurs Geopark more attractive for ecotourism by including strategies from other geopark, increasing the awareness of the local population and maintaining or improving the current state of natural and cultural conservation.

Objectives:

1. To analyze the current situation of Hateg Country Dinosaurs Geopark.
2. To compare Hateg Country Dinosaurs Geopark to other geoparks and aspiring geoparks or regional development projects and find similarities, differences and/or even issues of improvement.
3. Contribution to the connection of local communities with their cultural and natural heritage.
4. To find solutions on how the current state of conservation can be improved or maintained.
5. To develop suggestions for the sustainable development of the Hateg Country Dinosaurs Geopark, including suggestions for the protection of a territory's geological, natural and cultural heritage.
6. To come up with possible actions to assure financial resources for the local population.

4. Relevance of this study (the GAP)

The Hateg Geopark has a significant heritage that should be preserved for the future generations. The Geopark consists of different sites with geological, natural and cultural interest, that may be attractive to tourists from everywhere in Europe (Andrasanu, A., Palcu, D., Oelerer, K., 2008).

It is the habitat of many species of plants, birds, amphibians, invertebrates and mammals such as the brown bear (Ursus arctos), the grey wolf (Canis lupus), the lynx (Lynx lynx) and many other species. The Hateg area includes important populations of plant species such as Drosera rotundifolia, Plantago holosteum and Narcissus stellaris as well five endangered bird species (Glaudicium passerinum, Ficedula parva, Lanius collurio, Lanius minor, Ciconia ciconia) and one bat species (Myotis nattereri). Additional it is known for the dinosaur fossils, and archaeological sites. Through the management projects the biodiversity as long as the geological sites and the historical, cultural heritage will be conserved.

The geopark isn't important just for scientific reasons but also for its cultural heritage and the benefits that the local communities will be offered. Projects for public awareness in schools and society in general, will provide information about various environmental issues and the historical and cultural elements of the area, will point out the importance of the protection of environment and will encourage them to actively participate to protect and improve the area. Also through the management of Hateg Geopark and ecotourism, sustainability will be promoted. Ecotourism has the potential to be a prosperous economic industry as well as delivering ecologically sustainable development to the Hateg region. Via ecotourism there is a chance for small businesses to develop, therefore the local economy will be improved. Finally the local society will be connected with their history and culture as well as with the environment in general.

But geotourism and also eco-tourism can also have a negative impact on the geolocation (Boley, Nickerson, Bosak, 2011). Literature study confirms that there is still a lack of local adapted criteria to measure the impact of geotourism and to check in how far new activities can be sustainable (Mergule & Beuter, 2010, Parc Naturel régional du Camargue 2010 and Miller 2011).

5. Research questions

By posing a question you have a degree of control of the research process. Also you have an influence of the methods which have to be used in the scientific process of writing a research report and to come to results (Andrews R.2003). We came up with the following question and subquestions:

1.How can potential (local) stakeholders apply sustainable eco- and geotourism in Hateg Geopark?

1.1 Who are the potential (local) stakeholders concerning tourism in Hateg?

1.2 What criteria can make eco-tourism sustainable over time?

1.3 What are the characteristics of geotourism?

1.4 What kind of sustainable eco- and geotourism could be developed in Hateg Country Dinosaur Geopark?

The answers on the subquestions will provide us the answers on the main question. A summary of the outcoming characteristics of the stakeholders, sustainable (eco)tourism and geotourism will be filtered or further developed by the answers on the fourth subquestion, namely concerning the specific situation in Hateg Country Dinosaurs Geopark.

6. Used methodology

To create a research with adequate scientific results the methodology has to be clear. Through the different stages of our research we use different methods to answer our research question. For this interdisciplinary research project we used integrated knowledge, expertise and skills of our group members (see attachment 2). The strengths of our group is that we have members with experience and knowledge in geography, in economics, nature conservation and -education and in sustainable development. We also have the opportunity to have some members living in Hateg and/or having already experience and knowledge of the local situation. This made it possible to involve locals or local situations in our case study. Knowledge of GIS can be an advantage to have access to databases.

6.1 Research approach, data sources and research methods

As a **method** we will first lead criteria and good examples of ecotourism off from

(1) **literature study** of existing scientific research studies and public documents on ecotourism, nature- and geoconservation, including the previous study on Hateg where different geoconservation projects were compared. Key words were criteria for ecotourism, sustainable tourism, geotourism, geoconservation and nature-conservation education (to locals, tourists and schools), ecovillage, sustainable village, cost/benefits of ecotourism, geopark tourism, etc.
Each member of our group started with different literature. As we are an international group, we could search literature in different languages, to find experiences from different countries.

(2) **expert opinion** through structured and unstructured interviews (Verhoeven, 2011) with 3 to 5 experts in eco/sustainable tourism projects linked to nature- and/or geoconservation projects. Expert opinion can deliver us important knowledge and experiences about what criteria are helpful to sustainable development and which are not (to do's and not to do's). To achieve an acceptable result we made up a questionnaire which contains the important subitems like the number of tourists and visitors of the geoparks in the region and their behaviour. Also the progress of starting a new project to increase the number of visitors, and what kind of programs already exist in other countries (Austria, Belgium, France, Greece and Netherlands) of the EU were part of the study.

(3) **a selection of examples** of European "sustainable tourism projects" contributing to our definition of sustainable development and to the criteria found in (1) , including projects

where a form of education on nature- and geoconservation can contribute to sustainable development through ecotourism, to prepare a presentation to (4):

(4) **a network of knowledge and opinions through unstructured interviews of local actors and stakeholders** in the local communities: presentation of our selection of good examples and criteria to get the opinion, suggestions and supplement criteria to make the projects acceptable and realistic someway in the case study area of Hateg geopark. This delivered us also interesting criteria to involve local actors in the framework. To start the discussion the examples as in attachment 3 were provided to the participants. The local actors were selected regarding their ability to represent the initial local support level for sustainable development and ecotourism projects. The interviews were organised by our members living in Hateg (personal contact to improve their involvement and participatory aspect).

Then (5) the criteria found on the basis of these four methods will lead us to **design** a **framework** for the implementation of sustainable tourism projects in Hateg.
This research project will have an inductive character, namely starting from literature and existing projects through a triangulation using expert- and local stakeholders- opinion to create a theoretical framework for possible ecotourism in Hateg.

Triangulation increases the quality and the reliability of the research results. This multiple approach is the most appropriate method for this qualitative research, where several possible answers per question portion. The subjectivity of the selection of the different criteria useful for the design of a frame is neutralized by means of triangulation (Verhoeven, 2011).

6.2 Theoretical and analytical framework

Scientifical researches need a set of systematic rules of procedure to ensure meaningful results (Newman and Benz, 1998). We have to differentiate between qualitative and quantitative collection of data. Using quantitative approaches of research means to explain phenomena by using mathematically based methods to analyze collected numerical data. Qualitative research means that the human actions are in the focus, especially in-depth information of human behaviour (Aliaga and Gunderson, 2005). To simplify the difference between qualitative and quantitative research you can say, if there are no numbers involved, then it is no quantitative research.

Because of our research questions it is obvious that we focus the methodology on a quantitative approach as well as a qualitative approach of research. By using a survey we tried to collect a lot of qualitative and quantitative data from experts as mentioned in 6.1. (for the questionnaire see attachment 4). The questionnaire includes a Likert-scale question concerning the relevance of geoconservation for new projects, which could be analysed by calculating the average of the answers of the experts. A Likert-scale is typically used to rate, how much someone agrees or disagrees with a statement or quote (Aliaga and Gunderson, 2005). Concerning the kind of programs we try to analyse, which of them are able to be realized in the Hateg Country Dinosaurs Geopark. We compare the natural conditions of other Geoparks with the conditions in Hateg Country Dinosaurs Geopark and decide, if the conditions are similar, so that a project is realizable. The main conditions we have to compare are the geological, natural and social factors that determine whether or not a project can be successful.

6.3 Target group

The target group of our research are in first case the local communities as they are in close contact with Hateg Country Dinosaurs Park and most of them even work there on a daily basis. Our research should help them to apply our recommendations for eco-touristic activities in real life. It's very important that they know how to participate in this program, and also learn about the benefits for the natural, geological and cultural heritage. Geoparks and other conservation areas will only survive if locals are encouraged to participate in this programs. The local community must be involved with and receive income and other benefits from the conservation area and its touristic facilities.

Another group we would like to address with our research are visitors to Hateg Country Dinosaurs Geopark and not to forget, responsible visitors. Ecotourism appeals to a wide range of travelers, of all ages and interests. Travelers who choose ecotourism are interested in social, economic and environmental sustainability. It is very important that visitors become aware of the uniqueness of the natural, geological and cultural heritage of the geopark. As visitors want to experience nature, they should try to do so in a way that it does not have any negative effects on the natural environment. It is very important to make them aware of what ecotourism means and how the nature can be conserved by implementing eco-touristic activities into real life.

Not only locals and responsible visitors are our target group, but also volunteers and individuals that are interested in the field of ecotourism and sustainable tourism should be

addressed with our research. Volunteering is one of the many ways in which the local community is encouraged to engage with their local area and become actively involved in the work of the geopark. Therefore, it is very important to help them to improve the state of Hateg Country Dinosaurs Geopark by actively participating in this program and eventually working as guides in this area.

Last but not least, with our research we also want to inform students of all ages about ecotourism and the sustainable development of Hateg Country Dinosaurs Geopark, as it gives them the opportunity to learn more about alternative ways of tourism and enables them to work on further projects in the field of sustainable development. To conclude, our target group also includes EVS students, tutors, experts and coordinators, as well as the Hateg Country Dinosaurs management and all who are interested in the field of sustainable development in Hateg Country Dinosaurs Geopark.

7. Expected outcome

We are trying to compare the Hateg Country Dinosaur Geopark to other Geoparks across Europe and we would like to transfer ideas of ecotourism from the compared Geoparks to the Hateg Country Dinosaur Geopark. Aspects that we try to include are the protection of the territory's geological, natural and cultural heritage, as well as the promotion of environmental issues to visitors and locals, to raise their awareness of sustainable development.

We expect, by setting a framework of criteria, which are possible to put into practice, to persuade the local population of the importance of sustainable development in the area. The Hateg Country Dinosaur Geopark should become a more attractive destination for ecotourists, like for example for bird lovers with bird watching sites. To be able to include local people we try to convince them of the economic advantages, which are the results of ecotourism, by including relevant aspects.

The local population should be aware of the heritage they have to protect and are also able to convince tourists of the importance of their cultural, geological and natural heritage. They should be able to generate an economical profit by implementing ideas from other Geoparks, which turned out to create economic success. We also hope to find more people, who like to volunteer, to ensure the protection of the Hateg Country Dinosaur Geopark, by using the area for educational purposes for schools, by planning projects that include the activity of students and pupils of the region and by supporting the Voluntariat Geoparc Hateg with project ideas.

A very important point we have to clear is the temporal aspect of the realization of such project ideas. First of all the acceptance of changing habits and trying something new is a very time-consuming progress, it's very typical for people to be skeptical about changing their behaviors, which worked for many years. The second Problem is that it takes time to generate profit with new touristic businesses and to attract more tourists than it does today.

8. Results

Every scientific research brings up different results. In that case five questions could be answered after different kinds of research approaches were used, like literature study and interviews with experts as well as the local population of the Hateg Country Dinosaur Geopark.

8.1 Who are the potential local stakeholders concerning tourism in Hateg?

In first instance the volunteers of the Hateg Country Dinosaurs Geopark and further some of the inhabitants of the region, mainly farmers and young students having interests to change their habits to more new and sustainable development activities beside farming. Finally also local schools, because scholar tourism can involve more people from all over the country.

8.2 What criteria can make eco-tourism sustainable over time ?

A Literature study delivered us these criteria:

Table 1. Criteria to make tourism sustainable

Author	Criteria environment	Criteria local development
Miller (2001)	air-pollution water-pollution and water-use	Importance of Local employment! Customer satisfaction
Hunter (2002)	Ecological footprint	Fossil Energy reduction, stimulate local green energy
Duong (2016) UNWTO	Ecological processes and biodiversity have to be maintained or further developed Be careful with natural resources: air, water, soil, energy, prevention of waste, … Offer tourists an enriching (authentic preserved nature-) experience Constant evaluation and correct immediately where necessary	Stimulate healthy behaviour (cfr. sports, nature, outside) and sustainable food Respect for socio-cultural authenticity Stimulate a sustainable local economic activity on long term Make tourists and locals conscience of the remaining problems concerning the environment and sustainability and propose them solutions through adopting a more responsible behaviour. A strong political orientation towards sustainable activities and professions/establishments, promoting preventive and corrective management.

8.3 What are the characteristics of geotourism ?

Characteristics of geotourism in other geoparks

Geotourism is an emerging niche market within sustainable tourism and is centered on sustaining and enhancing the geographical character of a place. In 1997, Jonathan Tourtellot, Senior Editor of National Geographic Traveler, defined the term geotourism as ”tourism that sustains or enhances the geographical character of the place being visited, including its environment, culture, aesthetics, heritage and the well-being of its residents.“ (Stokes et al., 2003). Geotourism incorporates sustainability principles, and instead of only following a ’do-no-harm’ ethic, this kind of tourism focuses on the place as a whole. It does not require untouched landscapes but also includes areas with historical or geological heritage; e.g. historic mining areas. Instead of being specifically tied to a protected area like ecotourism, geotourism is fluid and flourishes on the uniqueness of the entire geographical character of the destination visited (Robinson, A., 2008).
As can be seen from the previous examples, geotourism is defined by a number of different characteristics that differ it from other tourism concepts such as ecotourism.

Dowling suggests the following characteristics of geotourism:

1. It is geologically based and can occur in natural, rural or urban environments.
2. Fosters geoheritage conservation through appropriate sustainability measures.
3. Advances sound geological understanding through interpretation and education.
4. Generates tourist or visitor satisfaction (Dowling, 2006).

According to Andrasanu, Geotourism can have a number of advantages; for example, the creation of new products with geological connotation, new jobs linked to geology, guides or cottage industry, as well as support local development in the geotouristic area (Andrasanu, 2006). But also visitors benefit from the region itself as it provides them with an authentic experience while holistically sustaining the destination’s unique qualities (Boley, 2009).

After finding two experts who answered our questionnaire we came up with following summary. The top priority for new projects is the conservation of the geoparks in Austria and the sustainable development of the area (On Likert-scale a 9.5). The most financially successful projects are a high rope course with a few 3D archery sport courses and a rafting tour where you can explore the geological heritage of the area, also there is the concept of an adventure park in Carinthian. The problem of providing such projects is the very high financial input, which was given by a few local private sponsors, like banks and construction

companies. Concerning educational projects the geoparks provide the so called “GeoWerkstatt” and open land school room were visitors and especially students can collect fossils with professional support so they learn more about the geological heritage of the area as well. At the “GeoWerkstatt” work people with a special education in geology and also local volunteers who got trained by the people with the special education. Ecotourism projects are “Haflingerhof Gams” and “Reiterhof Laussabauer” where visitors can ride “Haflinger” and “Shetlandponys” on Tours and enjoy the landscape, which were funded by local villagers who opened hotels at their old farms.

One other, more unstructured expert interview concerned the impact of tourism in a 750 hectare nature reserve at the Belgian coast. There a nature-education centre has 80.000 visitors a year now. It opened in 2004 and works mainly on school-education programs and tourist education programs such as bicycle tours, guided excursions and connecting day-arrangements with local other touristic activities. It also has a yearly great nature-event to attract local people to be concerned to the local patrimony of dune reserves (natura 2000). Locals are very lucky with this education centre as tourists are now more guided. Tourism developed here in 1950 with an explosion in the 1970’s where the pressure on the habitats was very harmfull. Before local people were fishermen and farmers. Problems to take care are the many foreigners who want to start economic attractive attractions, what attracted first many not-at-all responsible tourists and activities, circulation problems (too much traffic on weekends), extremely high prices for houses and ground (locals can’t buy it anymore), many control and repressive reglements for waste-managing, etc. Now the education facilities made people more conscious and the pressure on the environment is more under control. If there had been first criteria for tourism and education programs, it would have been much more easier to attract only the responsible tourists and investors.

8.4 What kind of sustainable eco- and geotourism could be developed in Hateg ?

Results of the interviews with local stakeholders:

After interviewing some of the local actors regarding the tourism projects possible in Hateg Country Dinosaurs Geopark, we came to the following conclusions:
The majority of people interviewed are very interested in seeing something new happening in their village/region. They like the proposed activities and even came with new ideas that can be developed here by the local population.

Their business ideas were:

- Apiculture
- A factory that recycles plastic
- Guided tours (and the opportunity that people with a car can take tourists from place to place, offering different touristic packages)
- A shop where they can sell their products
- Bicycle renting centers

All these ideas came from the volunteers of the Hateg Country Dinosaurs Geopark and some of the inhabitants of the region.

The young locals interviewed were very interested in the guided tours and the suggestion of opening a new business after they finish school, whereas the people over 30 years old were more interested in doing the same thing but having somewhere to sell their products. Some of the educated people, who continued their education, said that they are interested in returning to their home village and open a rustic restaurant or a bed and breakfast type of accommodation, at some point in their future.

Very interesting was the fact that many locals liked all the ideas proposed, but when they were asked if they would implement one of the ideas in the future, they invented many excuses and said that they cannot do it, mainly because they do not have the time to fulfill their daily duties and that they do not have enough money. Telling them that some of the proposed activities would not cost them any money, such as acting as guides or organizing biking tours, their answer was that they do not have enough time to do it and that the ideas are very good, but someone else should do all these proposed activities. Even after

presenting them the advantages of doing something new, they were not really convinced to take action by themselves.

8.5 Answer on main question: How can potential (local) stakeholders apply sustainable eco- and geotourism in Hateg Geopark?

Summary of the answers on the sub questions delivered us following frame:

Table 2. Examples of future investments for tourism activities in the Geopark have to be tested first on all these criteria:

Nature/environment/ soil/geoconservation	**Tourist involvement of activity**	**Local involvement in activity**	**Evaluation/ measuring of each activity**
Inventory of current precious state	Educational function	Education of locals	Ecological footprint
Natural resources use	Customer satisfaction of the sustainable tourist	Local Employment :	Air pollution Water pollution Waste/soil pollution
Green Energy use	Health of activity	Sustainable economy	Biodiversity impact
Sustainable land use	Sustainable (bio)food	Participation of locals in decision making	Geological impact
Fosters geoconservation heritage	Encourages Socio-cultural respect	Activity offers solution or example for sustainable development	Cost of time versus economic rentability
Geological connotation	Flourishes on and sustaining the uniqueness of the entire geographical character	Well-beïng and health	**Quantity of criteria to which the activity is according to**

The answers on the subquestions provided us the answers on the main question. A summary of the outcoming characteristics of the stakeholders, sustainable (eco)tourism and geotourism were filtered or further developed by the answers on the fourth sub question, namely concerning the specific situation in Hateg Country Dinosaurs Geopark.

9. Relevance of the results

From university researchers, students, experts and responsible visitors up to the local communities, Geoparks encourage awareness of the current situation of geoparks and promote the links between geological, cultural and natural heritage of an area. With our research we wanted to show that the topics of sustainable development and geoconservation are not only of particular interest for Hateg Country Dinosaurs Geopark, but that it also has a scientific relevance, as well as provides benefits for society and us as a case study group.

9.1 Scientific relevance

With our research we tried to come up with innovative ideas for the sustainable development of Hateg Country Dinosaurs Geopark. As we decided to create a questionnaire for the local population and stakeholders of geoparks, our research provided us with new knowledge in the field of sustainable development; particularly with the focus on eco- and geotourism. Our aim was also to provide a list with business ideas and of how sustainable development can be arranged in Hateg Country Dinosaurs Geopark. Therefore we wanted to come up with innovative recommendations and a summarised framework of criteria on how to implement sustainable tourism in the park. The scientific relevance is based on the gap mentioned in several previous reports, namely to develop an overview of criteria to which new activities have to be evaluated on, to encourage sustainable development in a specific geopark (Mergule & Beuter, 2010, Parc Naturel régional du Camargue 2010 and Miller 2011). Nevertheless, any research that is carried out properly can be of great importance for the scientific community; particularly for stakeholders in the field of sustainability and geoconservation. As already mentioned, the results of this research project provide relevant suggestions for the implementation of sustainable tourism in Hateg Country Dinosaurs Geopark, so that scientist and other stakeholders (e.g. University of Bucharest) can use the new knowledge provided by our case study group for their work in the field of study.

9.2 Relevance to society

Our research can be enormous important for society. Particularly local communities might profit from our research in the field of sustainable geotourism with the focus on Hateg Country Dinosaurs Geopark as it provides recommendations for the conservation of the cultural, natural and geological heritage. Geoparks are areas that provide a lot of interesting features or phenomena and are used for educational, scientific or touristic purposes. Particularly tourism in nature and heritage destinations plays an important role nowadays, as

geoparks promote local economic development mainly through it. Therefore, geoparks are also relevant for tourists, as well. With our research we would like to make visitors aware of the unique cultural, natural and geological heritage of the area and come up with criteria to promote ecotourism in order to reduce the harm of tourism. The geopark is also important for its cultural heritage and the benefits that the local communities will be offered. Projects for public awareness in schools and society in general, will provide information about various environmental issues and the historical and cultural elements of the area, will point out the importance of the protection of environment and will encourage them to actively participate to protect and improve the area. To sum up it can be said that our research is relevant for any person reading it; students, volunteers, local population and various other stakeholders.

9.3 Relevance to group members

Concerning the relevance of the topic for our case study group, it can be said that it enabled us to get a deeper insight into the research field of sustainable tourism, sustainable development and geoconservation of geoparks. We also learned a lot about Hateg Country Dinosaurs Geopark in Romania and were able to come up with innovative recommendations for the sustainable development of the geopark.

As our group consists of six members from different European countries, it also allowed us to learn a lot from each other. We have members who live in the region of Hateg and therefore have already experience and knowledge of the local situation. It gave us the opportunity to learn more about the local population and how they deal with the current situation in the geopark. Another strength of our group is that we have members with experience and knowledge in geography, in economics, nature conservation and -education and in sustainable development. It gives us the opportunity to learn about different fields of research from different viewpoints and get an insight into the research of sustainable development in different countries. Besides all the new knowledge we gained in this project, it was also a great experience to work in groups with members from all over Europe in order to come up with innovative ideas for sustainable projects in Hateg. As the language we used for our communication was English, we could also benefit from an improvement in language skills. For all members of this research group, this experience was priceless, helping us to improve our knowledge on geodiversity and management as well to test our skills and group collaboration for future efforts.

10. Discussion

After working for over three months on the topic of geoconservation in Hateg Country Dinosaur Geopark we, the six members of the research group, were able to write this research report. By using the different ways of research, which are mentioned in subitem 6. we came to the results, which are quoted in subitem 8. We experienced that the Hateg Country Dinosaur Geopark offers a lot of potential in the field of geotourism and ecotourism. Geotourism is a kind of sustainable tourism and focuses on the geographical character of a place. It does not only require landscapes, which are never have been damaged by humans, but also includes areas with historical and geological heritage. To achieve a scientific relevant result we had to compare different projects of geotourism across Europe.

We managed to find three experts for interviews, which was the minimum number we set for ourselves at the beginning of the research report. It was a little bit difficult to generate research data with our assembled questionnaire, because of the short time window on the one hand and the lack of willingness to offer some time for an interview of a few respondents on the other. Also the experts seemed to be very careful with their answers, they tried to avoid speaking about problems that may occur in the geopark, they are active in. But the results of the interviews with the experts lead us to the following conclusions.

Beside the projects of other Geoparks in the EU, especially in Austria and Belgium, that are possible to realize in the Hateg Country Dinosaur Geopark, like geotrails, we came to the point, where the concepts of projects of other geoparks, became impossible to implement, because of an immense amount of money, which would be needed, but is not available in the region. This kind of projects, an adventure park for example, seem to be surreal to realize and will be pure lunacy in the near future, because they are funded by private investors. But of the results of the interviews with the local population of Hateg Country Dinosaur Geopark it is obvious, that they would like to see a change in the local area and an appreciation of the region itself. They even came up with own ideas for sustainable development. Especially the willingness of volunteers, who commit their time to come up with new business ideas to improve the value of the geopark, is impressive.

Another surprising result of our research is that even well educated people show interest in returning into their home villages and to open restaurants and hotels or rather bed and breakfasts as well as other kinds of accommodations at some point in their future. That kind of business idea is comparable with the value added activities of the local population of Austrian geoparks, who also organised, in a further step, guides for geotrails, and also

needed to upgrade their businesses step by step. Furthermore it shows how important the willingness of local actors is for sustainable development.

A setback we had to face was the excuses of many locals, who actually liked the ideas, but are not able to realize them, because of not having enough money or enough time, because they have only time to fulfill their daily duties. All these excuses are absolutely understandable, but they are not compatible with the wish of change in the region. The most disappointing was the moment we had to become aware that the ordinary local population could not be convinced to take action by themselves.

Some of these aspects have shown to us how contrary the attitude of the local players of the Hateg Country Dinosaur Geopark is. On the one hand they want change, they are inspired by some ideas and on the other hand they find many excuses so they can not realize the ideas they liked already. That leads us to the comparison of the expected outcome and the real outcome of our research. We tried to make locals aware of the heritage they have to protect, but they seem already aware of that. We also hoped to find more volunteers to ensure the protection of Hateg Country Dinosaur Geopark, but that is some kind of work which is not able to be done in a short time. It takes time to convince more and more people to join a community to protect the local heritage like the Austrian Alpenverein or Klim-en Bergsportfederatie in Belgium does.

As mentioned before time is a very important aspect of the outcome that could be expected. Not only finding new volunteers is very time-consuming, people need to be convinced and even the realization of projects of sustainable development, especially in geotourism and tourism at all, is taking a lot of time. The time that is needed to realize a project is something that could not be changed by us at the actual point of time.

Last but not least we have to accept, that the realization of projects and the improvement of geotourism in Hateg Country Dinosaur Geopark are not that close as we wanted them to be. The potential obviously exists but has to be promoted further but they are already on a good way.

11. Conclusion and recommendations

Hateg Country Dinosaurs Geopark is a territory with a rich natural and cultural heritage, a long history and unique dinosaur fossils. Even though the Geopark attracts many tourists here, the local community doesn't know how to take advantage of this opportunity. Creating a framework for sustainable tourism can help local people develop a sustainable business. The research encourages them to do something more and to offer other kind of services to the tourists that come in the Geopark, sell local products, learn more about the place they are living in the context of a sustainable development.

The comparison with other Geoparks from Europe helped us adapt some of their ideas to Hateg Country Dinosaurs Geopark and created the possibility to offer the stakeholders a model of sustainable development to implement already tested by other Geoparks.

This mainly qualitative study forms to claim an answer to the main question. With this framework, current and future geotourism projects in Hateg Country Dinosaur geopark can be tested on a set of criteria leading to sustainable tourism. The methodology using triangulation involving local actors as well as experts from different countries was extended but delivered us many different interesting and valid results on the sub questions. Recommendations are now to valid the framework for application. Further research would have to test the frame on the presented possible activities in order of sub question 4. Another approach could be to test the framework also on other geoparks where tourism is already growing, to calculate the impact of this possible frame on making existing geotourism more sustainable. It can be useful to get more specific practical normative measurement to the criteria too, comparing to already existing exemplary sustainable tourism activities in other countries.

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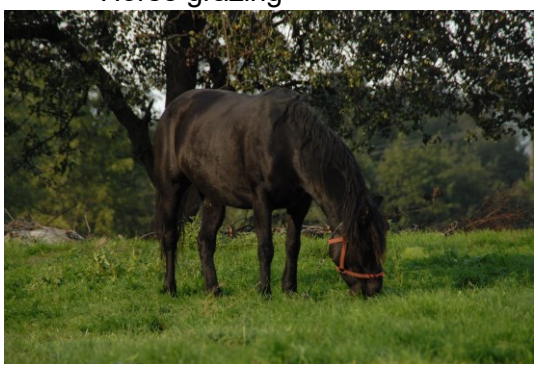
Attachment

Attachment 1: Pictures of Hateg

Day of Volcanoes

Nucsoara Village

Horse grazing



Roman Festival

Hateg Country Dinosaurs Geopark's Volunteers

Traditional Activities

Attachment 2: Experience/particular skills of the GEO group

Beatrice	In-depth knowledge about Hateg Country Dinosaurs Geopark, Knowledge about the ”European Geoparks Network” and aspects that are of great importance regarding geoparks (e.g. concerning geological, natural and cultural heritage)
Horea	Small businesses, low cost and easy start, Public Administration, sales and mobile support, Lives in Hateg
Maria	Lives in the case study area Hateg, GIS, Land use, GIS, environmental impact assessment, physical geography
Florian	GIS, financial resources, human geography and geography of economics, sustainable development
Laure	Environmental Sciences, Biodiversity, Conservation of species and habitats, sustainable development
Valérie	Environmental Sciences, Education projects, Tourism, eco-villages, volunteer organisations and guides, waste-management, nature development, sustainable development, sustainable educative events, area-specific policy projects

Attachment 3: Examples of sustainable tourism projects possible in Hateg

List of examples in other countries, responding to the criteria of sustainable touristic activities, used as proposal in the interviews with local actors.

Title activity and references	Description	Advice/opinion number
nature/geo guides (cfr. tourist offices of Belgian Westcoast or WWF Andasibe Madagascar)	School classes, tourists …: want to learn about and enjoy the nature and the geopark of Hateg. They pay for a guided visit of about two hours. The guides are by preference local people who followed an education program concerning sustainability, local nature and geo elements. The education program to become a guide takes about 120 hours in evening school or in weekend for the higher guides (experts) but only 20 hours for a starting guide (who guides only one educational lesson package for example, always the same in the museum part to start). Guides are paid 20 euros for two hours of guiding, once they get their short aggregation, and 30 euros after getting the full aggregation (then they can guide much more groups a week). Tourists pay to the geoparc, geoparc pays the guides.	1
nature-linked sports (cfr. Domincan republic Cabarete, Les 2 Alpes in France)	Biking tours, organized for example by town hall or geopark museum. Biking circuit pass by local farmers or customers, so tourists might buy some local products. Tours can be organized in group with a local guide too. Individual bikers can rent a bike and find their way through a biking map. Along the road, or on the map, information can be given about geography and nature, local products, history, places to admire, where to find trash bins, how to act on sustainable way. Other nature linked sports might be archery (of course not hunting but on artificial goals), Sustainable tourists like sports they can do in relation to nature. Thai chi or local tradition sports can also be successful. Trails and mountaineering too. People who lead the sport sessions also need to be trained to it, and know all principles for local sustainability.	
festivities: geo-weekend (cfr. Natuurfestival De Panne Belgium,	Organize a geo-day or weekend where all local organizations can promote their products, a kind of market day where nature and geo- organisations and sustainable objects/subjects are shown, promoted or tested. For local as tourists, just have to make enough publicity, find the	

Elfia or castlefest in Netherlands)	right channels to the target groups.	
eco-village camping (cfr. Domaine de la pierre ronde, France, ecodorp Netherlands)	A camping for camping cars (they pay 10 euros a night but the place offers them electricity, water and a toilet (compost toilets if possible). Campers may not use chemicals in their toilet. If they did, they have to leave their toilet waste in a special container for chemical toilet waste. Tourists can place their own tent too and pay for instance 5 euros a night. The camping can also provide tipis or yurts to rent (20 euros/night). Local people can provide sustainable food facilities: in a big yurt or , why not, in a kind of hobbit house, tourists can eat local fruit, soup, bread and vegetables, prepared by a local chief, or they can cook by themselves on sun-energy barbecues.	
farmer-shops at the farm	Selling local fruit in the farm, milk, cheese, eggs and other local products (only sustainable products, no meat!). Open the farm-shop for example every day between 2 and 4 pm or 8 and 10 am, or only in weekends. Farmers will be noticed on tourists maps for walking, biking, … or can sell their products to the camping (they can come to the camping place with soup for example or sell to the local sustainable (veggie) restaurant.	
nature expeditions (cfr. Saas Fee, Les 2 Alpes, Sosua, South Africa, Madagascar, De Panne trips to Calais and Bruges,…)	Trails of a half or a whole day, by (gass)bus or electric Dacia's for 7 persons. A guide takes you to protected places where you can spot bears or birds, stop to eat by locals, or help searching for bones with a geo-expedition, visiting neighbour villages and their culture,…. Of course again always considering sustainable principles.	
geo exploration with expert guide (cfr. France Guédelon)	idem, but live one day the life of a nature- or geo-explorer, or try to reconstruct a dinosaur simulation, or learn a local medieval job	
Sell hand made swords or local traditional attributes	Sell or teach how to make local attributes, workshops for schools and tourists	
Sustainable hotel for school classes and/or tourist families (cfr. Kinderboederij Pierlapont Belgium	There is already a wooden hotel, think don't need more, but school classes can also sleep in a big yurt for example or on the farm in the attic. or build wooden lodging in tree houses. Local people can offer a room for tourists and ask 20 euros/night/bedroom. Just offer them a bed and little breakfast or the possibility to eat with you too for a small price. You can ask them to bring their own sleeping bags,	

Loppem), guest houses at Belgian westcoast, gites de France, chambres d'hotes, ...	or offer them some hangmats to sleep in too. In France and Spain some people offer sleeping possibilities only if you help working on the field for a couple of hours.	

Attachment 4: Questionnaire used as support for expert interviews

Concerning park: ……. Country: …….
Expert name/function: ……...

1. How many people visited the Geopark last Year(s)?

2. Concerning the behavior of the Tourists. Do they keep the Park clean or does their behavior cost the Geopark money to keep it clean?

3. At the beginning of a new concept to attract more people, how important are geoconservation aspects in the planning? (Scale from 1 – 10, 10 first priority, 1 doesn't really matter as long as enough money comes in)

4. How do new projects get funded?

5. Was there ever a Project which got rejected because it would have damaged the heritage of the Geopark? (What kind of Project? 1 Example if there are more)

6. Does your Geopark have an educational program?

7. Does your Geopark have programs that promote sustainability and ecotourism?

8. Does your Geopark have programs or actions to support local economy and in which ways did they achieve that?

9. Who are the potential (local) stakeholders concerning tourism in the geopark?

10. What was the most successful/inefficient project to attract tourists?

11. What was the main occupation of the local people before ?