# Some premises for balanced development of ecotourism on the territory of Lithuania

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The growing local and international tourism gives a good opportunity to develop the tourism market in Lithuania. However, the increasing nature tourism involves inevitable negative environmental impacts. Authors have tried to analyse the possibilities to develop nature-friendly ecotourism in Lithuania as an opportunity for sustainable development of Lithuanian territory. The popularity of ecotourism in the world is constantly growing, suggesting the possibilities to extend this activity in Lithuania. Authors have revealed the existing variety of concepts and definitions of ecotourism, trying to find the most suitable one for Lithuania. The distribution of various forms of nature tourism, which have close similarities with ecotourism, were analysed. Authors have tried to find out the distribution of existing resources for the development of ecotourism in Lithuania. The distribution of these resources on the Lithuanian territory isn't even. The best possibilities to develop ecotourism have been found in the territories that at present are used most intensively for nature tourism. On the other hand, from the point of view of sustainable development of the whole country, special attention should be paid to the territories that are used less intensively at present. The study has shown that almost all regions of Lithuania are promising for the development of ecotourism. The possible factors and conditions for the future development of ecotourism were revealed as well. Most serious problems of ecotourism development are related to the lack of effective marketing and purposive information as well as the lack of experience. Authors have also proposed certain measures for the future development of ecotourism in Lithuania.

Key words: ecological tourism, sustainable tourism, Lithuanian tourism

#### INTRODUCTION

Tourism is one of the fastest growing sectors of economy throughout the world. Such trends present a good opportunity to develop the tourism market and to increase incomes from this branch of economy in various countries, Lithuania included. On the other hand, the increasing nature tourism involves inevitable negative environmental impacts. Authors have tried to analyse the possibilities to develop nature-friendly ecotourism in Lithuania as an opportunity for the sustainable development of Lithuanian territory. The popularity of ecotourism in the world is constantly growing, suggesting possibilities to extend this activity in Lithuania. Ecotourism itself is a complex, interdisciplinary area, which involves economic business and ecological interests. The first Baltic Ecotourism Forum took place in Latvia in 2005. Various problems of ecotourism development and forthcoming projects were discussed during the event, which illustrated the growing potential of this field in our region as well.

According to the data of the World Tourism Organization (WTO), ecotouristic journeys comprised up to 7% (45 millions) of all journeys, while it is expected that the number will increase up to 70 millions per year in 2010. Other calculations show that

the share of ecotourism journeys reaches 20–60% of all journeys (Ceballos-Lascurain, 1996).

It should be stressed here that the planning and research of ecotourism on state level are rather rare today, though researches of ecotourism activities are expanding rather quickly. Even the specialized scientific publication "Journal of Ecotourism" has appeared in the beginning of the 21st century, which illustrates the growing importance of this field of research. Studies on ecotourism development in different countries appeared (Dowling, 2002; Buckley, 2002). Specialized studies on the problems of development of ecotourism are published as well (Fennell, 2002).

Researchers of the Institute of Geology and Geography have carried out a pioneer study of ecotourism development in Lithuania. The research was carried out by the order of the State Tourism Department. This is one of the first attempts to assess the possibility of ecotourism development in Lithuania. The aim of the present article is to reveal mostly natural conditions for the development of ecotourism in Lithuania. The article is based on the results of the study.

We also briefly introduce the phenomenon of ecotourism as well as various physical and human resources and the infrastructure that exert the greatest effect on the development of ecotourism.

#### **ECOTOURISM - MEANING AND CONCEPTS**

We have analysed the existing variety of concepts and definitions of ecotourism and tried to find the one most suitable for Lithuania.

The term of Ecotourism appeared and became popular at the end of the 20th century. Its ideas were formed in the 70s when it became evident that mass tourism had negative impacts on nature and local communities. The main idea of the new branch of tourism was to find a balance between the income generated from recreation activities in nature and their impact on nature and society. The German futurologist R. Junk has formulated the concept and principles of "soft" tourism, which should equipoise mass tourism (Junk, 1980). The ecologist from Mexico H. Ceballos-Lascurain offered the concept of ecological tourism or ecotourism (Encyclopedia..., 2000). Later various authors have been changing the meaning and content of the term "ecotourism". As a consequence, today plenty of various concepts and definitions of ecotourism coexist (Drumm, Motore, 2005; Fennell, 1999; Lindberg ir kt, 1998; Valentine, 1993; http://www.ecotourism. org; http://www.world-tourism.org.).

We have analysed the variety of conceptions of ecotourism in the world and defined the one most appropriate in our circumstances:

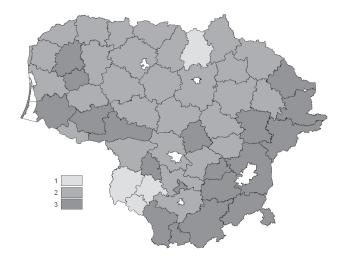
Ecological tourism (ecotourism) is a branch of tourism, which is favourable for sustainable development and is based on purposive cognition of natural environment and on motivated development of ecological consciousness.

Ecotourism is strongly related to other branches of tourism (nature tourism, nature-based, nature-oriented tourism, wildlife tourism, green tourism, etc.). The link to the tourism that meets the principles of sustainable development is of utmost importance (sustainable tourism) because ecotourism is part of sustainable tourism. In fact, ecotourism is part of sustainable tourism because not all kinds of sustainable tourism can be regarded as ecotourism. Ecotourism first of all has to do with ecologic motivation, ecologic purposefulness. A study in Sweden tried to find differences in the ecological behaviour of three different groups of tourists. Authors have found that in fact nature tourists and ecotourists have very similar motivations and ecological background, while city tourists are less interested in ecological concerns (Wurzinger, Johansson, 2006).

## NATURAL ENVIRONMENT AND CONDITIONS FOR THE DEVELOPMENT OF ECOTOURISM IN LITHUANIA

#### Naturality of the territory (proportion of natural territories).

Having in mind the definition of ecotourism, it is logical that resources for ecotourism are mainly related to the natural or relatively natural environment which involves various components of nature. It is obvious that the eastern part of Lithuania has exceptionally good conditions for the development of this activity (Fig. 1). A similar situation can be found in some districts of Žemaitija (Samogitia). The indicators of territory naturality are the highest there (the share of natural lands is more than 10 times higher than of built up areas, and forests comprise more than 40% of the whole district). The least favourable territories



**Fig. 1.** Proportion of natural and semi-natural territories in municipalities (1 - <20%; 2 - 20 - 40%; 3 - >40%)

are in South-western and Northern Lithuania where the same indicators are less than 5 and 20%.

A very similar situation was found when analysing the proportion of forests in the land use of municipalities of Lithuania (Fig. 2). Also, it was established that even in municipalities with the lowest indicators of naturality (Vilkaviškis and Kalvarija) areas suitable for ecotourism development could be found.



**Fig. 2.** Proportion of forests in the municipalities of Lithuania (1 - <20%; 2 - 20 - 40%; 3 - >40%)

Spatial distribution of ecotourist objects. Ecotourist objects are the objects of nature that have a higher or exceptional cognitive value. These objects are included into the lists of state-protected objects of nature heritage. According to the data of Cadastre of Protected Territories, there are 453 state-protected objects of nature heritage; 159 of them are declared to be nature monuments. The spatial distribution of these objects is very uneven (Fig. 3); e.g., 63 such objects can be found in Varena and 26 in Švenčionys municipalities. There are two municipalities (Rietavas and Kazlų Rūda) with no such objects. Objects of natural heritage greatly influence the conditions of ecotourism development. The interesting feature of the distribution of

these objects is that a rather considerable number of them can be found in areas lacking usual tourist attractiveness. Northern Lithuania from this point of view has a rather favourable conditions for the development of ecotourism: there are 12 such objects in Joniškis, 10 in Pasvalys; Pakruojis, Radviliškis, and Panevėžys municipalities have 9 such objects each.



Fig. 3. Number of objects of natural heritage under state protection in municipalities

Territorial complexes of ecotourism resources. Natural resources of ecotourist value can be and should be understood not only as separate objects but also as complexes of objects. The distribution of various territorial complexes of ecotourist value is best illustrated by the distribution of the network of protected territories, which is actually designed for the protection and cognition of valuable natural heritage.

National and regional parks are most complex preserved territories. These parts of Lithuania are exceptionally rich in unique and attractive natural objects, and their high environmental quality has an exceptional status. The majority of state parks were established in 1992 and already have the infrastructure favourable for the development of ecotourism. The legal environment also favoured the development of ecotourism there. One of the tasks of the state parks, declared in the Law on protected territories of Lithuanian Republic, should be providing conditions for recreation and first of all for cognitive tourism. State parks comprise the biggest part of protected territories in Lithuania, and they are distributed so as to represent the variety of Lithuanian landscape. All these premises allow to state that territories of state parks are definitely most favourable areas for the development of ecotourism.

The situation in protected areas, where conservation of some natural values is the most important priority, is somewhat different. There are 254 State restricts in Lithuania, and the same law also declares that cognitive tourism should be promoted there. We assume that the network of such preserved territories is dense enough, and also its spatial pattern is sufficient for the development of ecotourism.

The conditions in natural reserves are even stricter. There are three natural reserves in Lithuania, and tourism is not permitted in these territories by the same law. We assume that limited cognitive tourism under surveillance of the staff of the reserve could

be permitted there as well. Actually, at present the Čepkeliai and Kamanos reserves already have cognitive pathways which exert no negative impact on the environment.

There are also preserved territories where the main priority is regeneration. Parcels with the regenerative purpose could be important for the development of cognitive ecotourism. At present , there are no territories under regeneration prepared for exhibition. Potentially, there are three such parcels established in 2004, suitable for development of ecotourism activities (Kalviai in Klaipėda, Pabradė in Švenčionys and Sulinkiai in Radviliškis municipalities).

Ecotourist regions in Lithuania. Though the spatial distribution of ecotourist resources and the distribution of the general recreational resource have a rather similar pattern, in some cases they differ a lot. According to the spatial patterns of distribution of recreational and ecotourist resources, there are five ecotourism regions: Seacoast, Samogitian highlands, Central Lithuania, Northern Lithuania and Baltic highlands.

The Costal and Eastern regions have a great recreational and ecotouristic potential, Žemaitija has a high ecotourist and a medium potential for general recreation; Northern and Central Lithuania have a weak recreational potential, but there are a lot of ecotourist resources which can be prepared for exhibition, and so the general attractiveness of the territory for tourists, and ecotourists in particular, can be increased.



**Fig. 4.** Ecotourist regions in Lithuania (I — Seacoast, II — Samogitian highlands, III — Northern Lithuania; IV — Central Lithuania; V — Baltic highlands)

Technogenic objects and ecologic activities. According to the definition of sustainable tourism, some technogenic or manmade objects also should be regarded as ecotourism objects. These are objects that are of exceptional importance for the cognition of changes in the ecological environment. That's why some technogenic objects, which can illustrate the human impact on the ecology of environment, should be used as ecotourism objects. Various kinds of facilities used to control the quality of the environment could also be used for ecotourism activities. Some examples of such objects could be parks of wind power plants, ecological farms, peat bogs under renaturalisation, water treatment facilities, etc. The same applies to the objects that can potentially have a great impact on the quality of the environment, such as the Ignalina nuclear power plant, other electric power plants, big pits, etc.

**System of ecotourist resources.** Summarising the above ideas, one could elaborate a system of physical ecotourist resources. Table presents one simple way of classification of physical ecotourist resources according to their type. This table presents a variety of objects which could be used in ecotourist activities as a cognitive value.

### HUMAN RESOURCES AND ECOTOURISM SERVICES IN LITHUANIA

One of the most important premises permitting to use ecotourist resources according to their possible function is the quality and quantity of human resources in a territory. Human resources include organizers and providers of ecotourist services, researchers of ecotourism as well as teachers of ecotourism specialists, managers and marketing specialists of ecotourist companies, spatial planners and finally actual or potential users of ecotourist services.

The assessment of human resources has shown that:

Table 1. Groups of physical resources of ecotourism

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Group	Main resources
Geological resources	Objects with the cognitive value of
	geological processes (exposures, boulders,
	karsts, geological formations)
Relief	Highest mountains, pits, valleys,
	lowlands, highlands, etc.
Pedological	Soil layers prepared for exhibition
resources	
Water resources	Sea and sea landscape, lakes, rivers, springs
	Flora and fauna, ecosystems
Resources of	(including protected territories such
biodiversity	as NATURA 2000 and similar), forests,
	fields, water ecosystems, wetlands
Ethno-cultural	Mounds, mythological stones, trees, etc.
resources	
(related to nature	
use)	
Technogenic	Objects which effectively
objects	protect or rehabilitate nature
Territorial	Territories which have a cognitive value as
complexes of	a whole complex or system of objects of
resources	ecological importance

- The growing emigration, natural decrease of population and the deteriorating general demographic situation decrease population density in territories favourable for the development of ecotourism. This situation has its positive and negative sides for ecotourism development.
- The population structure according to age and the growing proportion of elderly people in rural and preserved territories do not favour the development of ecotourism there. The decreasing unemployment characterises the growing demand of working force and the decreasing amount of free labour force. This also has a rather negative impact on development of the tourism sector.
- Though the general level of education in Lithuania is good, it is worse in rural territories. The employees working in pre-

served territories have abilities to organise ecotourism there, however, their qualification is not sufficient. There are no ecotourism study programs in Lithuania's higher schools, although it is a possible to gain knowledge necessary for organising ecotourism in the Klaipėda and Vilnius Pedagogical Universities which offer tourism study programmes. Also, there are a lot of study programs for rural tourism in the colleges and schools around the country.

Analysis of the existing ecotourist activities and infrastructure in Lithuania was the next task of the research. We have tried to find out which ecotourism services are offered at present in Lithuania and to establish which infrastructure could play a positive role in the future development of this kind of activity.

Distribution of cognitive pathways. Cognitive pathways are among the most important objects of ecotourist infrastructure. According to data of the State Service of Protected Territories, there are more than 80 cognitive pathways in Lithuania. Actually, part of these pathways do not function any more or aren't finished yet, or are designed for cognition of cultural heritage. In fact, we were able to find data on 71 cognitive pathways suitable for ecotourism.

The network of such pathways is densest in Klaipėda, Vilnius and Alytus counties. There are also territories where such pathways do not exist or their network is not dense enough. First of all this applies to Northern Lithuania and also to plain agricultural regions of Central Lithuania and Suvalkija. In some cases the lack of such pathways could be found even in districts that in general are very suitable for the development of ecotourism or tourism in general (Molėtai, Utena, Alytus, Druskininkai, Ukmergė municipalities). It should be stressed that most of such pathways were installed in state parks.

Rural tourism services. The majority of rural or countryside farmsteads are located in relatively natural landscapes. Their location is usually rather close to ecotourism objects. In some cases rural farmsteads may also be regarded as ecotourism objects and they provide ecotourism services, although in rather rare cases.

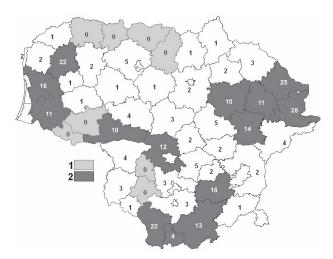
The Association of Rural Tourism has 978 members and approximately 400 of these are rural farmsteads. Approximately 290 participate in the market actively advertising their services.



**Fig. 5.** Ecotourist services and infrastructure: the number of cognitive pathways (1-n) data on existence of any cognitive pathways)

The constantly growing popularity of rural tourism is evident during the last few years in Lithuania. There were 164.1 thousand visitors of rural farmsteads in 2003, while in 2004 this number increased to 196.6 thousands and reached 215 thousands in 2005. According to the information of the Association, approximately 12–13% of the visitors were foreigners.

The spatial distribution regularities of rural tourism farms are the same as of the whole tourist infrastructure. The highest numbers of such farms can be found in the districts with old tourism traditions (South-eastern, North-eastern and Western Lithuania). Very few of them are in Northern and Central Lithuania.



**Fig. 6.** Ecotourist services and infrastructure. Rural tourism services – number of rural farmsteads (1– there are no advertising farmsteads; 2 – municipalities with the highest number of farmsteads)

#### **CONCLUSIONS**

- 1. According to the naturality of the territory, possibilities to develop ecotourism are the best in Eastern Lithuania and some Samogitian regions, but actually even in municipalities with the worst indicators there are territories suitable for ecotourism.
- 2. The distribution of important objects of natural heritage is very uneven, and this limits the possibility to develop ecotourism throughout the whole country.
- 3. The network of preserved territories is rather sufficient in Lithuania, and the development of ecotourism should be first of all oriented to the territories of state parks.
- 4. The network of ecotourism objects should involve the technogenic objects that are related to the actual or possible impact on ecology or on environment quality.
- 5. Five different ecotourism regions can be distinguished in Lithuania: Seacoast, Samogitian highlands, Central Lithuania, Northern Lithuania and Baltic highlands. The costal and eastern regions have a great recreational and ecotourist potential, Žemaitija has a high ecotouristic potential and a medium potential for general recreation, Northern and Central Lithuania has a low recreational potential, but there are a lot of ecotouristic resources which can be prepared for exhibition, and so the general attractiveness of the territory for tourists, and ecotourists in particular, can be increased.
- 6. The demographic trends show a decreasing population density and a growing share of elderly population in the terri-

tories most suitable for development. This can exert a negative impact on the development of ecotourism in these areas.

- 7. At present, the spatial distribution of ecotourism services and infrastructure is similar to those of the whole nature tourism industry of Lithuania and confirms the idea, that ecotourism should be developed in the context of the whole tourism sector.
- 8. Objects and territories suitable for the development of ecotourism can be found in all municipalities of Lithuania, although their density is very different. The conditions are better in the territories with better conditions for all kinds of nature tourism and recreation. Nevertheless, the governmental policy should promote ecotourism in areas less suitable for recreation and thus to dislocate ecotourism services closer to users; this is rather important considering the educational purposes of the ecotourism.

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#### KAI KURIOS SUBALANSUOTOS EKOTURIZMO PLĖTROS LIETUVOS TERITORIJOJE PRIELAIDOS

Santrauka

Ekologinis turizmas šiandien – tai kompleksinė, tarpdisciplininė sritis, siejanti turizmo verslo ir aplinkosaugos interesus. Pastaraisiais metais visame pasaulyje didėja ekoturizmo reikšmė, taip pat jo dalis pasaulio turizmo rinkoje, o tai sudaro palankias sąlygas šios veiklos plėtrai Lietuvoje. Šios veiklos plėtra padėtų sumažinti neigiamą augančio gamtinio turizmo įtaką aplinkai.

2005 m. Valstybinio turizmo departamento prie LR Ūkio ministerijos užsakymu Geologijos ir geografijos instituto Visuomeninės geografijos skyriuje atlikta "Ekoturizmo plėtros galimybių studija". Remiantis rengiant šią studiją surinkta medžiaga, straipsnyje analizuojamos ekologinio turizmo plėtros sąlygos Lietuvoje.

Ekoturizmui tinkančių teritorijų ir objektų yra visose Lietuvos savivaldybėse, tačiau fiziniai ekoturistiniai ištekliai pasiskirstę netolygiai. Geresnes sąlygas plėtoti ekoturizmą turi tos teritorijos, kuriose yra daugiau kitų turistinių ir rekreacinių išteklių. Tačiau siekiant išlyginti turistų srautus, taip pat priartinti "ekoturizmą" prie vartotojo, valstybiniu mastu tikslinga skatinti ekoturizmą mažesnę turistinę paklausą turinčiose teritorijose.

Demografinės tendencijos ekoturizmo plėtros atžvilgiu nėra vienareikšmės: emigracija ir natūralus gyventojų skaičiaus mažėjimas mažina gyventojų tankumą ekoturizmui palankiose teritorijose, tačiau gyventojų sudėtis pagal amžių, gyventojų senėjimas kaimo, retai gyvenamose, saugomose teritorijose nėra palanki aplinka turizmo verslo plėtrai.

Ekoturistinių paslaugų ir infrastruktūros teritorinio pasiskirstymo dėsningumai iš dalies pakartoja bendrąsias Lietuvos turistinės infrastruktūros pasiskirstymo tendencijas – daugiausia tokių objektų yra senas turistinio naudojimo tradicijas turinčiuose rajonuose: Pietryčių, Šiaurės Rytų ir Vakarų Lietuvoje, o mažiausiai – Šiaurės ir Vidurio Lietuvos rajonuose.

Konstatuojama, kad ekoturizmo informacija ir rinkodara Lietuvoje nėra pakankamai išplėtota. Ekologinio turizmo paslaugų rinka Lietuvoje kol kas tik formuojasi.

Taip pat straipsnyje pristatomi Lietuvos teritorijos ekoturistinio naudojimo ypatumai, teisinės aplinkos sąlygos bei pasiūlymai ekoturizmo plėtros sąlygoms gerinti.

Raktažodžiai: ekoturizmas, subalansuotas turizmas, turizmas Lietuvoje