EVALUATION AND DEVELOPMENT POSSIBILITIES OF RECREATION AREAS AND TOURISM OBJECTS IN LITHUANIA

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Abstract

The aim of the article is to assess tourism and recreation resources and possibilities of their development in the selected areas in Kretinga, Trakai and Kaunas district municipalities.

Natural and separate zones' landscape complexes in Lithuania are favourable for recreation and tourism. Although Lithuania's territory in comparison with other countries is not large, it is characterized by a huge variety of geographical complexes and landscapes. By recreational potential Lithuania surpasses even numerous European countries, which are arranged along the northern coastline. Rivers, lakes and forests constitute 25 % of the total Lithuania's area. Forests, parks, sea, other water reserves, geomorphological structures are aesthetically valuable landscape complexes in the Republic of Lithuania and make up one third of the total area.

Having conducted assessment of the landscape in the selected territories and analysed territory-planning documents of Kretinga, Kaunas and Trakai municipalities with regard to recreation and tourism, it has been identified that although the main kind of recreational activity in the analysed municipalities is educational recreation, tourism infrastructure is not sufficiently developed and there is a shortage of accommodation-providing companies. After assessment of the landscape in recreational objects, it has been noticed that the assessed objects are characterized by high spatial flora variety, prevailing greenery and plants. In addition, landscapes are varied and not fully adjusted to recreation and tourism.

Key words: landscape, recreational objects, assessment.

Introduction

Due to rapid globalization, the society and its values change as well. The speed of life is becoming more rapid; work productivity and information flows are increasing too. Therefore, people suffer more tension and stress and, thus, the issues of recreation and tourism are becoming more relevant. Recreation zones are mostly found within protected territories or nearby. Protected territories are land or water zones with clear boundaries, which have the acknowledged scientific, ecological, cultural and other value, for which special protection and use procedure is applied (Pankauskyte et al., 2019).

Development of this activity is important for different age groups, families and communities. Each individual perceives recreation differently: for some it is walk in nature, for others it is riding a bike, jogging, climbing mountains or various games, swimming, etc. Experience abroad shows that recreation and tourism make a positive impact on physical and spiritual individual's well-being, help relax and reduce tension.

The topics of recreation and tourism are analysed by numerous Lithuanian and foreign authors since the issue is very important in today's society due to increase of the population and inhabitants' needs. According to Riepšas et co. (2012) recreational resources include natural resources (forests, green areas, water reservoirs, their banks, which are adjusted to people's rest and entertainment, reservoirs of mineral water and applied mud, objects of natural heritage), objects of cultural heritage (real estate values), buildings and objects of tourism and recreation infrastructure found in resorts, recreation and protected territories, touristic routes, observation towers and other territories designated for recreation.

According to Beržanskienė (Beržanskienė et al., 2015) recreation and entertainment concepts are not identical: we could define leisure as the time during which we do not work whereas recreation could be indicated as the content of one's leisure. USA authors C. Goeldner and J. R. Brent (2009) describe tourism as the result of purposeful interaction between tourists, tourism organizations and service companies as well as hosting administration and company in certain environment. In the law of the Republic of Lithuania "On Approval of Recreation Territories Use, Planning and Protection Regulations" it is stated that recreation territories are defined within the general plan of Lithuania's territory, in general plans of state territory parts, municipalities or their parts, tourism and recreation schemes, in general plans of national parks and their zones, biosphere reserves and their zones as well as other documents of special territory planning. By implementing strategic planning documents, municipalities solution of general plans of the municipality and its parts, tourism and recreation schemes

at the municipal and local level, other special territorial planning documents establish recreation zones designated for public recreation and rest. In the development of recreation, it is accepted that attention is mostly paid to locations with high recreational potential, i.e., recreational areas of national and regional importance and the zones of their impact (Goeldner et al., 2012). Conditions for recreation and tourism development in Lithuania are favourable, especially in the districts where soil is not fertile enough for intense agriculture. In addition, in Lithuania there are plenty of valuable histories and culture heritage objects (Indriūnas, 2015). Heritage is one of the most significant factors for development of recreation. Abundance of natural and cultural resources allows promoting active rest, cultural, educational, rural and ecological tourism.

The aim of the article is to assess tourism and recreation resources and possibilities of their development in the selected areas in Kretinga, Trakai and Kaunas district municipalities.

Objectives of the article are as follows:

1. to analyse territory planning documents in Kretinga, Kaunas and Trakai municipalities with regard to recreation and tourism.

2. to conduct the assessment of the landscape in the selected recreational objects.

3. to introduce the possibilities of recreation territories' development.

More and more people are annually concerned with the environment where they live and rest. Cities are more and more extending. Less space for public and open areas is left, whereas the city is planned regarding urban elements without paying enough attention and creative potential to areas (Piekienė, 2015). Growing attention to protection of nature and preservation of biodiversity all over the world encourages to establish new protected territories, to maintain the state of current territories and increase forest cover (Juknevičiūtė, 2012). The most valued and picturesque territory of each country, i.e. country's pride and input into protection of world heritage is found in protected areas. Lithuanian system of protected territories includes a wide range of protected territories for both protection of landscape and biodiversity as well as preservation of natural and cultural heritage (Sakalauskaitė, 2010).

Methodology of research and materials

The article uses the methods of scientific literature analysis, object assessment, and data summarizing. Landscape management, recreation and tourism drawings as well as 2014-2020 development plans in the selected municipalities found within the National supervision information system of Lithuania's territory planning documents preparation and territory planning process were used for more detailed introduction of analysed territories and objects. Moreover, assessment of the selected objects was conducted. Pursuing the assessment of the landscape in the selected objects, 3 recreational objects in Kretinga municipality were selected (Kartena mound, Jaurykla park, Prystovai exposure), 4 territories in Kaunas district municipality (Kaunas 5th Fort architectural reserve, Dubrava marsh reserve, Pažaislis architectural ensemble, Kaunas Reservoir Regional park observation point) and 5 objects situated in Trakai municipality (Trakai Vokė Manour, Trakai Island Castle, Užutrakis Manour, Varnikai cognitive trail, Asaidė cognitive trail). The objects were assessed following A. R. Budriūnas and K. Ėringis "Methodology of landscape and aesthetic recreation assessment" (2000). According to A. R. Budriūnas and K. Eringis assessment methodology, landscape can be assessed in any territory but most and foremost such investigations should be carried out in recreational zones, protected and unique territories, reservoirs of regional and national parks and other areas of important purposes. However, it is emphasized that this methodology cannot be applied in the seaside and sightings of Curonian Lagoon coastline because the sight length is very distant while the view to the sea is the same along the coast. In addition, elements of Curonian Lagoon coastline landscape are only the details of the total coastline view.

Tha data concerning the assessed objects was collected following the pre-designed questionnaire of landscape assessment. The territories visited by a huge number of individuals in the summer were selected for the investigation. By conducting field investigation, the selected territories were assessed by 4 criteria (table 1).

Seasons have impact on the scenery of the territory. This investigation was conducted in autumn when the background is blurred while flora has neither leaves nor blossom. Before undertaking the assessment of recreational objects, they were visited and the point (sight) from which the most spectacular landscape could be seen was chosen. Landscapes were selected in favourable air conditions when there was no fog or strong wind. In addition, no investigations were carried out in the sun. Possibilities of developing recreation territories were defined having analysed general plans of municipalities and conducted interviews with local inhabitants, visitors of objects and employees of protected territories' directions.

Criteria for Landscape Assessment

Assessment	Maximum	Short description of the assessment
criteria	assessment	•
General impression of the landscape	21	Assessment was conducted following 11 criteria: landscape brightness, transparency, striped shape, planning, colourfulness, seasonal aspects, dynamic contrasts, naturalness, and other characteristics provided in the assessment methodology. Maximum points could be given to colourfulness of the landscape while minimum points could be provided for background brightness.
Relief expressiveness	49	24 criteria were used for the assessment: general landscape hilliness, abundance of hills and slopes, blurred hills and slopes, abundance of hills in the horizon, abundance of valleys and hollows, existence of blurred valleys and hollows, abundance of valley bends, brightness of exposures, and other characteristics as indicated in the assessment methodology. Maximum points could be given for abundance of valleys, hollows and hills in the horizon whereas the minimum points could be provided for their blurriness.
Spatial diversity of flora	58	24 characteristics were used for the assessment: flora, highlighting the relief, trees and herbaceous vegetation, fields in wooded landscape, abundance of different land plant communities, diversity of forest and greenery top line, existence of blurred tree objects, abundance of hills and slopes with wooded tops, brightness of tree lines and stripes along the coast (abundance of separate objects) and other characteristics indicated in the assessment methodology. The most important assessment parts are abundance of solid vegetation on the hills and slopes with wooded tops as well as flora highlighting rivulets and mountains.
Diversity of anthropogenic objects	42	21 criteria were used for the assessment: landscape urbanization, abundance of architectural highlights, relationship between settlements and buildings and the environment, adaptation of agricultural fields, adaptation of engineering equipment, existence of blurred anthropogenic objects, variety of protected natural objects, brightness of mounds and castles and other characteristics indicated in the assessment methodology. Architectural highlights as well as abundance of separate buildings collect the maximum points while the minimum number of points could be ascribed to landscape design of settlements and buildings.

Discussions and results

Although Lithuania's territory is relatively not large, is it characterized by a variety of geographical complexes and landscapes. With regard to geographical aspects, landscapes of 22 types can be found here. From aesthetic point of view it was found that even 27 % of Lithuania's territory is picturesque and highly spectacular. There are plenty of objects in Lithuania (fig. 1), which have historic, cultural, natural potential and attraction for tourists. It allows developing cultural, educational, and medical tourism in regions where there are many of such objects whereas in non-fertile lands establishing rural tourism, water attractions and other forms of active tourism due to appropriate water and natural resources is possible.

In order to ensure sustainable development of the recreation system certain measures are predicted in the general plan of Lithuanian districts' municipalities: extension of recreational forest potential, development of passive rest zones near water reserves within the district, natural tourism development, adjustment of cultural heritage to society's recreational needs, development of cycling infrastructure and motor-tourism as well as the use of recreational potential within protected territories. Forests, parks, sea and other water reserves, geomorphologic structures, aesthetically valuable landscape complexes in Lithuania constitute around one third of the area. Visiting of areas suitable for tourism and recreation is assessed roughly by 60 mln days per year for an individual. Suburban recreational areas are also highly popular.



Fig. 1. Arrangement of Lithuania's recreational and tourism objects (available at: www.pamatyklietuvoje.lt) and extract from Kretinga district landscape, recreation and tourism drawing (available at: www.kretinga.lt/node/318)

These include parks, forest parks, rivers, lakes, other picturesque locations. Picturesque locations the natural components of which (water, forests, relief) are suitable for various recreation purposes constitute around 7.6 % of Lithuania's total area (Beržanskienė et al., 2015). They are composed of visual landscape areas that mostly reflect kinds of country's landscape, nature, culture and history. According to the statistical information, Vilnius Gediminas hill, Klaipėda Kopgalis, Kaunas Aleksotas Slope, Trakai square in front of the castle, Palanga bridge to the sea, a spot in dunes in Nida, Merkinė mound, Ladakalnis hill in Aukštaitija National Park, Šatrija Hill are among mostly visited objects. In 2014-2020 development plans of the analysed Kaunas, Trakai and Kretinga district municipalities, the analysis of the current situation is conducted. In addition, the existing development of recreation and tourism is analysed. Following this development plan, the sector of tourism services in the municipalities consists of catering, accommodation, active leisure services, museums and entertainment events. Having compared development plans of Kaunas, Trakai and Kretinga municipalities, certain differences were identified (table 2).

In the general and developmental plans of Kretinga district, regional tourism is assessed as the one that has big opportunities in comparison with other districts analysed. Analysing the plans of these municipalities, it was found that in Kretinga district development plan the most serious problem addressed is the accommodation sector since Kretinga district accommodates the smallest number of tourists both from abroad and locally (in comparison with other districts). From the table above we can see that comparing strengths of Kretinga district recreation and tourism with the neighbouring districts, it is characterized by high forest coverage, the number of cultural heritage objects and natural resources. The biggest weaknesses of the analysed districts are not developed cycling tracks and a small number of tourists. By increasing the attractiveness of tourism within the district, all recreational resources must be more prominent. Moreover, potential threats were identified, i.e. insufficient attention for dissemination of tourism information, insufficient involvement into activity of regional tourism, and not intense activity of tourism centres nearby. In the general plan of development in Kretinga district tourism is assessed as having huge potential in comparison to other districts analysed. Although one of the most popular resorts in Lithuania (Palanga) is situated nearby, which attracts a part of income to Kretinga district, the district itself is an attractive location regarding both natural and cultural-educational resources. In order to attract more tourists to the analysed municipalities, it is essential to intensify the dissemination of information about recreation objects, to establish the image of district tourism, reinforce accommodation and leisure services, especially the sector of active tourism.

Country's tourism resources are one of the most significant competition advantages seeking to attract tourists and increase the economic benefit of tourism. Natural and cultural resources of Lithuania's tourism as well as the structure of their attractiveness completely comply with the market of Northern and Central Europe tourism resources. Abundance and variety of Lithuania's natural and cultural tourism resources allows establishing active rest, cultural and educational as well as ethnic, rural and ecological tourism taking into consideration separate segments of the market. Value of Lithuania's landscape and market competitiveness for recreation and tourism is two-fold: providing physical value

such as comfort for recreation and psychological as well as emotional value like aesthetics. While analysing plans of Trakai municipality, it was also observed that in numerous places of Trakai municipality it is sought to maintain and preserve the view of the existing landscape as natural as possible.

Table 2

	SWOT statements	Kretinga district	Kaunas district	Trakai district
	Favourable geographical position	+	+	+
S	Abundant cultural heritage objects	+	+	+
Strengths	Abundant natural recreational resources	+	-	-
	Slightly industry-affected environment	+	-	+
	Good air quality	+	-	+
	High forest coverage	+	-	-
	Not developed cycling tracks	+	+	+
sse	Low number of tourists	+	+	+
Weaknesses	Not developed touristic demand in protected territories	+	+	+
/ea	Poorly used recreational potential	+	+	+
×	Insufficient use of rural tourism	+	+	+
	Rural development using district traditions	+	-	-
ties	Development of tourism services	+	-	-
Opportunities	Increase in prominence of tourism resources	+	-	+
ort	Legalising the sector of accommodation	+	-	+
dd(Promoting possibilities of active leisure	+	+	+
0	Increasing the staff of tourism information centre	+	-	+
ts	Insufficient dissemination of tourism information	+	+	+
Threats	Intense activity of tourism centres nearby	+	-	-
Th	Too low involvement into the regional tourism activity	+	+	+
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SWOT comparison of Kretinga, Kaunas and Trakai district municipalities

However, numerous cultural, historic objects and settlements are not adjusted to touristic visits. Business infrastructure is not sufficiently developed (namely, catering and accommodation). The same could be said about physical infrastructure (access to touristic objects: road network, cycling tracks, information references, road signs). There is not enough support for tourism objects as well.

Due to huge amount of recreational resources, a part of recreation objects in the analysed locations has been forgotten or abandoned though they have favourable landscape for recreation and tourism. In order to assess attractiveness and sustainability of territories, the assessment of objects was conducted (table 3).

Having conducted the assessment, it was found that the objects which scored most points were located in Trakai municipality whereas the objects of Kretinga municipality scored the smallest number of points. Landscapes of the assessed objects are not very spectacular but they can all be adjusted to recreation. For instance, Jaurykla park in Kretinga district within the territory of the city can be fully arranged and adjusted to recreational needs of Kretinga town inhabitants while Kartena mound and Prystovai exposure can be included in natural routes of the recreational purpose as both these objects are within the territory of Salantai regional park.

Speaking about development possibilities of recreational territories in the analysed municipalities, different needs were noticed in each municipality. Having conducted the analysis of Kretinga district planning documents concerning recreation and tourism development and assessed recreational objects as well as having interviewed district inhabitants and specialists, it has been found that within the investigated district there is not enough adjustment of recreational infrastructure development and recreational objects to visiting as well as not enough information concerning recreational objects while further from Kretinga district centre there is a shortage of accommodation and catering institutions.

Table 3

Summarized data of the assessed objects	,
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Assessment characteristics	Kartena mound	Prystovai exposure	Jaurykla park	Trakų Vokė manour	Trakai island castle	Užutrakis manour	Varnikai cognitive trail	Saidė cognitive trail	Kaunas 5th Fort architectural reserve	Kaunas Reservoir Regional nark	Pažaislis architectural ensemble	Dubrava marsh reserve
General impression of the landscape	11	14	8	9	14	15	12	17	14	14	14	16
Relief expressiveness	19	27	14	9	21	19	17	29	15	13	15	16
Spatial diversity of flora	30	28	21	33	27	38	34	35	28	29	27	22
Variety of anthropogenic objects	21	11	13	22	30	25	12	12	17	28	29	27
Total:	81	80	56	73	92	97	75	93	74	84	85	81

Due to this reason foreign and local tourists' interest in the district is limited. There is the river Minija in Kretinga district, which is appropriate for water tourism. However, the potential of the river is not widely used. It is assumed that natural environment near the river Minija could be adjusted to extensive rest and recreation in nature. As well as this, development of campsites and temporary spots could be pursued. Moreover, establishment of rural tourism near Minija village could be encouraged, which should accommodate holidaymakers. In Minija ichtiological reserve development regarding natural tourism is possible. Infrastructure for visiting could be developed within the reserve and the park. Other natural objects could be adapted to visiting. In order to compete with other districts with regard to recreation and tourism, Kretinga district is supposed to pursue development within the district by directions of the towns, establish there tourism and information centres, to take care of the state of recreational objects and to prepare them for visiting. In addition, in order to become more prominent and disemminate information more intensely, the district should cooperate with neighbouring districts. Abundance of natural recreational resources, high forest coverage and low development of industry make favourable conditions for recreational tourism. Thus, it is reasonable to devote attention to improvement of recreational infrastructure and its developmnent. In order for Trakai district municipality to become the most competetive point with regard to tourism and recreation, development towards directions of district towns should be pursued. There tourism and information centres should be established. The districts should take care of the state of recreational objects and to prepare them for visiting. Moreover, seeking higher prominence of the district and more intense information disemmination, the district should cooperate with the neighbouring districts.

Abundance of natural recreational resources establishes especially favourable conditions for the development of recreational toruism. Thus, it is reasonable to pay attention to improvement of recreational infrastructure and its development in all analysed municipalities.

Conclusions and proposals

1. Having analysed general and development plans of Kretinga, Kaunas and Trakai municipalities, it was discovered that the main kind of recreational activity is educational recreation. However, in the analysed municipalities tourism infrastructure is not sufficiently developed and there is a shortage of companies providing accommodation.

2. Having assessed landscapes of recreational objects, it was noticed that in the objects assessed there is a big spatial diversity of flora and greenery prevails in the landscape. Landscapes are different but not very spectacular (the impression of object landscape does not exceed 50 points possible). They are also not fully adjusted to recreation and tourism.

3. In order to increase attractiveness of Kretinga, Kaunas and Trakai municipalities, the already established tourism and recreation spots should be maintained. Moreover, abandoned and forgotten territories should be established and prepared for visiting. Rural tourism spots, campsites and other accommodation places should be arranged.

References

- Beržanskienė, M., Jakštienė, V., ir kt. (2015). Liudvinavo rekreacinių išteklių panaudojimas bendruomenės socialinių – kultūrinių poreikių teikimui. Laisvalaikio tyrimai: elektroninis mokslo žurnalas, 1(5). (In Lithuanian)
- 2. Budriūnas, A. R., Ėringis, K. (2000). Kraštovaizdžio estetinio rekreacinio vertinimo metodika. Vilnius: Botanikos instituto leidykla, 11 23 p. (In Lithuanian)
- 3. Dėl Rekreacinių teritorijų naudojimo, planavimo ir apsaugos nuostatų patvirtinimo: Lietuvos Respublikos aplinkos ministerijos įsakymas 2004 m. sausio 20 d. Nr. D1-35. Teisės aktų registras, 2004, Nr. 18-554, i. k. 104301MISAK000D1-35. (In Lithuanian)
- 4. Goeldner, C.; Brent Ritchie, J.R. (2012). Tourism: Principles, pratices, philosophies. USA: John Wiley_& Sons, INC, 4 p.
- 5. Indriūnas, G. (2015). Turizmo planavimas: nota bene. Vilnius: UAB Ciklonas, 52-60 p. (In Lithuanian)
- Juknevičiūtė, A., Mierauskas, P. (2012). Saugomų teritorijų plėtra Lietuvoje: valdymo iššūkiai. Darnaus vystymosi strategija ir praktika NR. 1(6), adopted: 21-01-2021. Available at: https://etalpykla.lituanistikadb.lt/object/LT-LDB-0001:J.04~2012~1370506866539/J.04~2012~1370506866 539.pdf. (In Lithuanian)
- Lietuvos Respublikos teritorijų planavimo dokumentų rengimo ir teritorijų planavimo proceso valstybinės priežiūros informacinės sistema (Kretingos, Kauno, Trakų savivaldybių 2014 – 2020 metų plėtros planai), adopted: 21-01-2021. Available at: www.tpdris.lt. (In Lithuanian)
- Pankauskyte D., Valčiukiene J., Kuklys I., Kukliene L. (2019). Study of the Natural Heritage Condition of the Kursiu Nerija National Park Using Lidar Technology (Case Study of Agila Dune). DOI: 10.22616/j.balticsurveying.2019.005. BALTIC SURVEYING INTERNATIONAL SCIENTIFIC JOURNAL 2019 Volume 10, adopted: 21-01-2021. Available at: http://www.balticsurveying.eu/
- Piekienė, N. (2015). Viešosios erdvės Lietuvos saugomų teritorijų kūrimo kontekste. Miestų želdynų formavimas Nr. 1(12), adopted: 21-01-2021. Available at: http://www.krastotvarka.vho st.lt/ resea rch_activities/23.pdf. (In Lithuanian)
- 10. Riepšas, E., Armanaitienė, A. (2012). Rekreacijos reikšmė Lietuvos miškuose. Miškininkystė, 2 (72), 38–42. (In Lithuanian)
- 11. Sakalauskaitė, J. (2010). Žemės saugomose teritorijose teisinis režimas, adopted: 21-01-2021. Available at: http://vddb.laba.lt/obj/LT-eLABa-0001:E.02~2010~D_20100224_102211-08542 (In Lithuanian)

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