

THE ROLE OF THE TOURIST POTENTIAL OF PREDOMINANTLY RURAL AREAS AND THE IMPACT OF NEIGHBOURING AREAS ON THE EVALUATION OF THEIR TOURIST AND INVESTMENT ATTRACTIVENESS

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Abstract. *The objective of the study was the evaluation of tourist attractiveness of counties from the Olsztyn sub-region and the identification of external impacts resulting from location with respect to other areas. The study encompassed counties located within the Olsztyn sub-region in the Warmia and Mazury Province. For the purpose of delimiting the space, the method of multi-dimensional comparative analysis was used. As a result of the conducted study, the attractiveness of areas on account of favourable features of the natural and cultural environment (tourist attractiveness) and features of the social and economic environment (investment attractiveness) were determined, and the role of the impact of the neighbouring areas was identified.*

Introduction. The term tourist potential encompasses a set of factors that determine the possibilities of tourism development. However, when choosing these elements for evaluation, it is necessary to consider which of them may be used, in a given place, for practicing tourism or the organization of tourism. Therefore, it is necessary to determine the structure of the potential, and even mutual dependencies or ranks of individual elements. When choosing the components of tourist potential, it is necessary to take into account the variety of groups of potential tourists. Identification of tourist potential requires conducting a comprehensive evaluation and acknowledgement of objective and subjective premises determining the possibilities of tourism development. In present-day economic conditions, it is also worth examining tourist potential taking into account an analysis of the impact of competition, or the use of the possibilities of geographic (neighbouring) areas, including strategies consistent for the region with respect to development (Zajadacz, Śniadek 2009).

Tourism is an important economic activity, stimulating the social and economic development of areas. It unites urban and rural areas, activates villages, and provides new meaning to suburban areas with recreational and tourist functions. The idea of sustainable development of tourism assumes, *inter alia*, the participation of the local population in all stages of its implementation, and the creation of new sources of income, especially in predominantly rural areas without industry (Sikora, Wartecka-Ważyńska 2009). Tourism in rural

areas is often related to the most valuable assets and natural features, and their utility determines the development of specific forms of tourist traffic. Among the basic and attractive – from the point of view of a potential tourist – components in rural areas are: surface water bodies, vegetation, lie of the land, and climate. Analysis of the spatial distribution of tourist traffic in Poland has shown that 50% of tourists spend their free time by the water, and approx. 30% in the mountains (Dubel 2002).

For the purpose of delimiting a rural recreational area, it is possible to use commonly applied methods for designating touristically attractive areas by an evaluation of the tourist potential of areas. One of the methods for the evaluation of tourist potential is multi-dimensional comparative analysis, where numerous variables (at least two) are subject to simultaneous analysis. Its application for the use of complex non-measurable phenomena was discussed by Zajadacz and Śniadek (2009), following Łuniewska and Tarczyński (2006). Nevertheless, it is necessary to draw attention to emerging doubts with respect to difficulties in the objectivity of studies on tourist potential. Eberle (1979) claimed that with respect to tourism, it is difficult to remain objective; Krzymowska-Kostrowicka (1997) even says that: “we see what we want to perceive.” Therefore, in the course of a comparative analysis, it is therefore necessary to aim at the minimization of subjectivity, choosing definitely clear situations, i.e. indisputably positive or negative (Bellinger 1994).

In spite of such doubts, the choice of the method of multi-dimensional comparative analysis in the presented study was determined by issues related to the evaluation of predominantly rural areas adjoining one another. Such analysis was applied in numerous studies, e.g. Gołębski (1999), Łuniewska and Tarczyński (2006). Zajadacz and Śniadek (2009) quote numerous studies with the use of multi-dimensional comparative analysis.

Study Methodology. The objective of the study was the evaluation of the tourist attractiveness of counties in the Olsztyn sub-region, and the identification of external impacts resulting from location with respect to other areas.

On account of the initial assumption that only counties with predominant rural areas would be subjected to the study, a city with the rights of county (i.e. Olsztyn) was excluded from the study. On the basis of the study, areas attractive from the point of view of potential tourists and investors were designated. Sources of data were data from the Local Database, the Central Statistical Office, and strategic documents determining the directions of the development of counties.

Having examined the structure of study potential of the area, the first stage of the multi-dimensional comparative analysis was the selection of features for comparison, on the basis of which indices were created and weights determined for every zone, every division (Table 1) and every index.

Table 1 – The number of indicators and weight in different areas and departments

Tourist attractiveness	The number of indicators	Weight	Investment attractiveness	The number of indicators	Weight
		0.5			0.5
Effects touristic	7	0.6	Service infrastructure	3	0.3
The state and the protection of the environment	4	0.2	Technical infrastructure	3	0.3
The availability of communication	4	0.2	Demographics	5	0.2
Total	15	1.0	Finance local authorities	4	0.2
			Total	15	1.0

Source: the author, based on Golebski 1999

When choosing the features, the following assumptions were adopted:

- Measurability: features were determined in measure units;
- Comparability: data were available for all study areas;
- Variety in intensity: no features of the same intensity for selected areas were chosen;
- Division of features into stimulants and de-stimulants (Zajadacz, Śniadek 2009),
- Varied significance: on the basis of the available literature features were assigned weights (Regionalne...1999).

With respect to the attractiveness of areas from the point of view of a potential tourist, 15 indices were selected and assigned weights:

• **Tourist values:**

- 1) Share of forests within the area of the county (%): 0.3;
- 2) Share of water bodies within the area of the county: (%) 0.3;
- 3) Share of protected landscape areas in the county area (%): 0.1;
- 4) Share of green areas within the area of the county: (%) 0.05;
- 5) Saturation of area with tourist routes (km/km²): 0.05;
- 6) Number of cyclical events, fairs (number of events/365 x100): 0.1;
- 7) Number of monuments, museums and nature assets (number /10 km²): 0.1;

• **Condition and protection of environment:**

- 1) Emission of pollution in the county in general, Poland =100 (%): 0.2;
- 2) Population using sewage treatment plants (%): 0.3;
- 3) Mass of generated waste per surface area of county (t/ha): 0.2;
- 4) Share of waste subject to utilization in total waste (%): 0.3;

• **Transport availability:**

- 1) Saturation with public roads (km/100ha): 0.3;

- 2) Number of registered vehicles per inhabitant: 0.2;
- 3) Buses(number/10km²): 0.3;
- 4) Saturation of surface with cycling paths (km/10,000 km²): 0.2.

With respect to the attractiveness of an area from the point of view of a potential investor, 15 indices were selected and assigned weights:

• **Service infrastructure:**

- 1) Saturation with shops (number/10,000 inhabitants): 0.3;
- 2) Saturation with health protection facilities: (number/10,000 inhabitants): 0.3;
- 3) Saturation with group accommodation facilities (number/100km²): 0.4;

• **Technical infrastructure:**

- 1) Share of people using water supply network (%): 0.3;
- 2) Share of people using sewage discharge network (%): 0.3;
- 3) Share of people using gas network (%): 0.2;

• **Population:**

- 1) Population density (number of people/km²): 0.3;
- 2) Unemployment rate (%): 0.2;
- 3) Share of people working in trade and services (%): 0.3;
- 4) Share of people working in agriculture and forestry (%): 0.1;
- 5) Share of people working in industry and construction (%): 0.1;

• **County finances:**

- 1) Income per inhabitant (PLN): 0.3;
- 2) Share of subsidies in total income (%): 0.2;
- 3) Share of investment expenses in total expenses(%): 0.3;
- 4) Funds procured from the EU for investment financing per 1 inhabitant (PLN): 0.2.

Subsequently, the direction of preference was made uniform by adopting the formulas below. When the initial feature x_j is a stimulant, it transforms directly into y_j :

When the initial feature x_j is a de-stimulant, the following transformation is used:

where:

- i – number of county ($i = 1, \dots, m$),
- j – number of feature ($j = 1, \dots, n$),
- x_{ij} – size of j initial feature in icounty,
- y_{ij} – size of j feature with stimulant character in icounty,
- $x_j \max$ – maximum size of j feature in counties.

Among the selected features there were four de-stimulants: emission of pollution in the county in general, mass of generated waste per county area, density of population and unemployment rate.

Subsequently, features were normalized according to the formula:

where:

n_{ij} – normalized size of j feature in icounty,

y_j max – maximum size of j feature with stimulant character in counties,

y_{ij} – size of j feature with stimulating character in icounty.

Synthetic indicators were calculated for individual divisions:

where:

M_{di} – synthetic indicator for d division in county,

n_{ij} – normalized size of j feature in icounty,

w_j – weight of j feature in d county.

Synthetic indicators were calculated for the zone, which are the weighted average of synthetic indicators of divisions making up the zone:

where:

M_{si} – synthetic indicator for the zone in icounty

k – number of division ($k=1, \dots, l$)

w_k – weight k of division

M_{di} – synthetic indicator in icounty

General synthetic indicator was calculated:

where:

s – number of zone ($s=1, \dots, c$)

w_s – weight s of zone,

M_{si} – synthetic indicator for zone in icounty,

O_{ms_i} – general synthetic indicator for icounty.

For more in-depth recapitulation, attractiveness indicators were calculated, where the arithmetic mean of indicators in counties was adopted at 100. Therefore, an indicator above 100 means evaluation of a given county above the average value in the sub-region, and below 100 means that the attractiveness of the county was evaluated at a level below average.

Evaluation of Tourist Attractiveness of Counties in the Areas of the Olsztyn Sub-Region in the Warmia and Mazury Province. The Warmia and Mazury Province is an area with unique nature and landscape assets. In the area of the province there are numerous legally protected sites, making up over 46% of the surface area. The province is divided into three sub-regions: Elk, Elbląg and Olsztyn.

The Olsztyn sub-region is located in the central part of the province and is distinguished by a significant variety and richness of the natural environment in comparison to the rest of the country. Forestation of the sub-region reaches 31%; the lie of the land is strongly diversified, with rich flora and fauna. Additionally, numerous lakes predestine the area to the development of adventure tourism. Areas with special natural assets occupy an area of 434,990.9 hectares, which constitutes 42% of the total area. Administratively, the area of the sub-region encompasses the following counties: Bartoszyce, Kętrzyn, Lidzbark,

Mrągowo, Nidzica, Olsztyn – rural county, Szczytno, and the city of Olsztyn with county rights. In the comparative analysis, the city of Olsztyn was not taken into account due to methodological reasons.

As a result of the conducted study, the synthetic evaluation of attractiveness in individual divisions was obtained (Table 2). The most attractive in the “tourist value and service infrastructure” division was Mrągowo county. These values in the study were provided with high rank by the assignment of high weights. In the “condition and protection of the environment” division, the most attractive were the following counties: Kętrzyn and Bartoszyce, whereas Nidzica county had best transport connections. In the “technical infrastructure” division, the highest grade was assigned to Kętrzyn county, and with respect to demography to Bartoszyce county. The finance division was evaluated best in Szczytno county.

Table 2 – Synthetic evaluation of the attractiveness of the departments

Counties	Tourist attractiveness			Investment attractiveness			
	Effects touristic	The state and the protection of the environment	The availability of communication	Service infrastructure	Technical infrastructure	Demographics	Finance local authorities
Szczytno	0.27	0.16	0.11	0.20	0.16	0.17	0.18
Olsztyn	0.32	0.12	0.13	0.12	0.13	0.13	0.11
Nidzica	0.24	0.18	0.15	0.10	0.12	0.13	0.17
Mrągowo	0.43	0.21	0.13	0.26	0.11	0.15	0.15
Lidzbark	0.20	0.25	0.09	0.14	0.14	0.12	0.16
Kętrzyn	0.23	0.26	0.12	0.12	0.18	0.12	0.13
Bartoszyce	0.13	0.26	0.12	0.12	0.14	0.18	0.12

Source: the author, based on BDL, Mielnik 2012, Koczergo 2012

The results of the conducted study show that the examined area is more attractive from the point of view of future investors than tourists (fig. 1). Analysing the results in individual divisions in the area of attractiveness evaluated from the point of view of a potential tourist, the most attractive was Mrągowo county, which results from the presence of numerous lakes in this area, as well as forests and a tourist industry which has been developing for a number of years, especially in the summer period. From the investor’s point of view, the most attractive county was Szczytno on account of its good provision of technical infrastructure, and county finances that were evaluated best. Szczytno county belongs to a group of counties in the province which, between 2004 and 2011, recorded the highest increase in the percentage of inhabitants using the sewage discharge network (by 5%, whereas with respect to the water

supply network – by 3%). It is necessary to draw attention to the fact that the length of the water supply network constructed in this period puts the county in the lead in the country (approx. 400 km, 8th position), whereas sewage discharge – in the lead in the province (158 km, which means that the network grew twice).

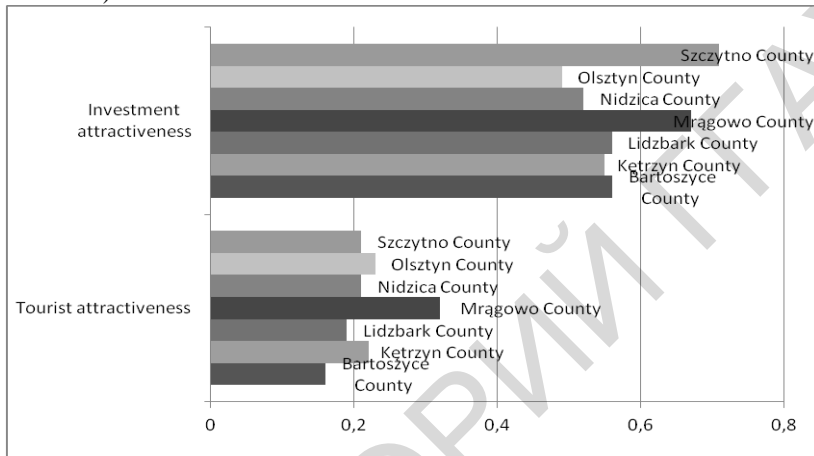


Fig. 1 – Synthetic gauge for areas

Source: own work based on the studies

It turned out that Olsztyn rural county, without taking into account the city of Olsztyn, is less attractive for potential investors than other counties in the sub-region. However, it is necessary to emphasize that in the case of Olsztyn rural county, strategic development plans are closely related to the functional area of Olsztyn. The “Strategy of Municipal Functional Area of Olsztyn”¹⁶ is being prepared now (it is possible to submit remarks by April 25). The document is a response of local governments to challenges brought by the new financial perspective of the EU budget for the years 2014 – 2020. Apart from the city of Olsztyn, this area includes the communities of Olsztyn rural county: Barczewo, Dywity, Gietrzwałd, Jonkowo, Purda and Stawiguda, thence exclusively adjoining the city of Olsztyn. Analyzed in this manner the area clearly changes the outlook on its potential. The increase in the number of inhabitants of communities neighbouring Olsztyn as a result of migration is particularly important (the sub-urbanization phenomenon is a natural process of the development of a city and its functional area). Migration of young people from Olsztyn to the communities surrounding the city translates to high population

¹ Municipal Functional Area: MFA

growth in these communities and the “ageing” of the structure of the Olsztyn population.

The tourist industry, in spite of location in a region that is attractive and in spite of its natural and cultural assets, constitutes a supplementary activity in comparison to other branches of the economy. This is testified to by a lower share of economic entities conducting activity related to accommodation or the provision of gastronomic services than on average in the country and in the province.

In the institutional dimension, the social activity of MFA inhabitants is above-average (there are more non-governmental organizations per 10,000 inhabitants, (i.e. 44) than in comparison to the province – 31 or the country – 28), which is to be connected to the presence of a large urban centre, i.e. Olsztyn. Non-governmental organizations, but also business environment institutions, show a natural tendency for concentration in cities. The preparation of this document is a result of the new financial perspective of the EU budget for the years 2014 – 2020. The strategy consists in a synthetic diagnosis along with a strategic plan designating the main framework of its implementation. The chapter describing integrated territorial investments (ITI) in the MFA area of Olsztyn constitutes the specification of selected priorities and has an operational character. This fragment functions as the so-called ITI Strategy (Strategy of the Municipal Functional Area of Olsztyn, status as of 01.04.2014).

Taking into account both spheres, a general synthetic indicator for the attractiveness of areas was obtained, which may indicate a predisposition for the development of tourism. The most attractive is Mrągowo county, which definitely surpasses the others (fig.2).

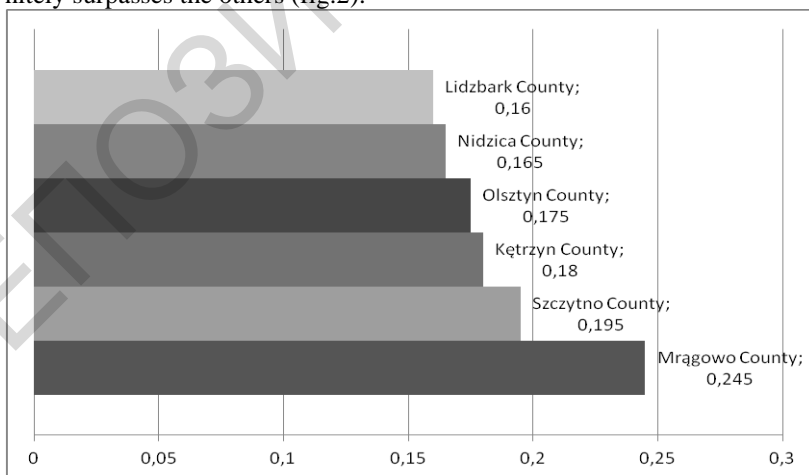


Fig. 2 – A general synthetic gauge

Source: own work based on the studies

Mra̧gowocounty, in contrast to the others, is in the functional area of the Great Masuria Lakes, and it is necessary to expect greater consistency with Pisz, Giżycko and Węgorzewocounties than with the counties of the Olsztyn sub-region. This is confirmed by the Strategy of Integrated Development of Great Masuria Lakes²⁷ prepared in 2014. The advantage of this functional area is its relatively high consistency with respect to assets of the natural environment, and the history and character of the local economy.

Szczytnocounty loses with respect to competition for tourists with the Land of Great Masuria Lakes, located nearby (fig. 3).

A better position in this respect is occupied by its neighbours: Pisz and Mra̧gowocounties (area of Great Masuria Lakes). Furthermore, the second listed county, together with Giżycko, constitutes the main place of stay of foreign guests in the province (next to Olsztyn and Elbląg). Just like in the case of the entire province, arrivals of tourists take place in the relatively short season of the summer holidays. The common problem of the local governments of Szczytno Land is also the insufficient number of “indoor” attractions which tourists could enjoy in the case of bad weather. Similarly to other factors, this insufficiency is a common disadvantage of the province. This state of affairs can also be considered a certain opportunity for the creation, in Szczytno Land, of such a centre with a supra-local scale of impact (Strategy of Szczytnoland until 2020, 2013).

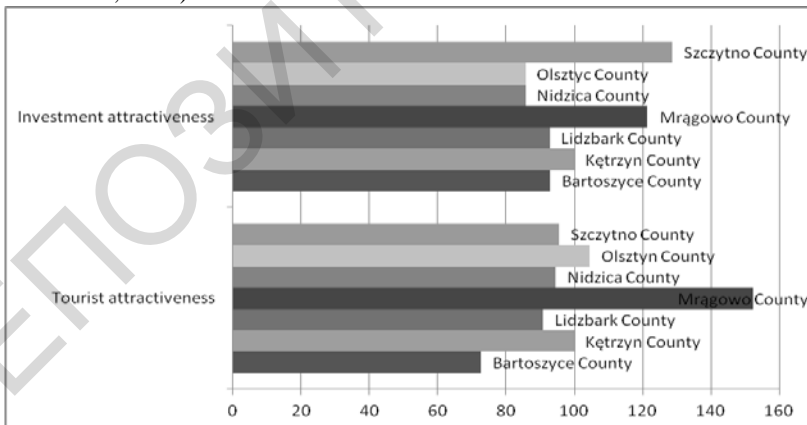


Fig. 3 – The tourist and investment attractiveness(%)

² Great Masuria Lakes – GML.

Source: own work based on the studies

Fig. 2 Tourist and investment attractiveness of counties (%)

Similarly, Kętrzyn county, neighbouring the area of Great Masuria Lakes, sees its chance in the development of tourism in cooperation with other counties of tourist character, adjoining the GML. Additionally, as a border county, it sees its potential in contacts with the Kaliningrad District of the Russian Federation. In the evaluation of potential investors, Kętrzyn county is not perceived as an attractive area for investments. To a definite degree, the absence of areas with utilities offered to potential investors, and difficulties related to transport are the main barriers. The bad condition of roads and significant distances from urban agglomerations discourage investments and the conduct of economic operations in the area of the county. This may be improved by greater promotion of the county and potential new border crossings with the Kaliningrad District of the Russian Federation (Local Development Plan, Potential of Kętrzyn county, Taking Into Account Planned Investments for Years 2007 – 2013). Lidzbark county, in its development strategy, forecasts promotion focused on attracting both investors and tourists. In order to attract tourists it is necessary to develop tourist infrastructure and prepare preferential conditions for tourist investments. An additional advantage could be the development of cultural events and extension of tourist information about the county (Development Strategy of Lidzbark county for Years 2001 – 2016, 2000).

Nidzica county is the first county in the Warmia and Mazury Province which tourists travelling from the south of Poland and Europe encounter along their way. The county wishes to make use of this very fact, in particular because its main advantage is transport accessibility. The tourist assets of Nidzica county predestine the area to a significant increase in tourist traffic, on the condition of undertaking activities aimed at the professionalization of tourist traffic servicing (starting from the collection of data and coordination of services, and ending with the level of direct tourist services), and the integration of entities (persons and institutions) involved in development of the tourist offer. Nidzica county is mainly focused on promoting an integrated tourist product (active tourism, cultural, business and conference, rural tourism). This requires significant effort with respect to working out the details, which is going to depend on the efficient and systematic implementation of the priority related to integration and partnership: awareness of inhabitants, cooperation of entities involved in tourism, information, as well as the establishment of a brand: “Nidzica Land: the Gateway to Masuria” (Development Strategy of Tourism in Nidzica County, Strategic Development Plan of Nidzica County, 2003).

The results of studies confirm that areas with a rich potential, and attractive from the point of view of a potential tourist, have to search for other advantages to enable the development of tourism and to compete with others.

Each of the examined counties included the development of tourism in its development strategies, including adventure tourism, and almost all of them, in spite of the awareness of their respective advantages and weak sides, encountered difficulties related to the proper promotion of the idea of tourism development. An additional difficulty in the examined area is the short tourist season, and problems in working out changes that could extend the season, without even mentioning year-round stays.

Conclusion. On the basis of the conducted study, the attractiveness of areas was determined on account of features of the natural and cultural environment (tourist attractiveness), and features of the social and economic environment (investment attractiveness) were specified. From the point of view of a tourist, the most attractive county is Mrągowo, on account of its tourist assets, which were evaluated as of the highest level (Land of Great Masuria Lakes). From the investor's point of view, the most attractive county is Szczytno, on account of its highest position in the evaluation of financial standing, and high grades with respect to technical infrastructure. Mrągowo county had the highest results in the area of tourist attractiveness, exceeding the average in the sub-region by over 50%; Szczytno county was the best with respect to investment attractiveness, exceeding the average by over 30%. The lowest results in the sub-region in both spheres were recorded in Bartoszyce, Lidzbark and Nidzica counties.

Analysis of the strategic documents of individual counties and calculated synthetic indicators allow for ascertaining that the location of specific areas with respect to the centres of cities, areas with special tourist values, lakes, tourist attractions and international impact – the vicinity of state borders, international transport routes – is significant for the attractiveness of predominantly rural areas as far as tourism and investments are concerned.

The results of the study have shown that in the procedure of separating tourist areas, it is necessary to assess communities forming a part of individual counties and even neighbouring counties. It is necessary to apply two approaches: a synthesis and an analysis. A synthesis is a generalization which is going to be used for the separation of areas predestined for the development of specific tourist products. The basis for evaluation is the synthetic index, which not only allows for the evaluation of individual units, but also for the separation of dense complexes of local government units where synthetic indices were at a high level. The analysis consists in the use of individual indices for the purpose of justifying the selection of new possibilities for the development of a tourist product. The selection of a tourist product and the determination of the direction of the development of the tourist infrastructure are to be treated as inseparable.

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