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SPATIAL CHARACTERISTICS OF EU-FUNDED TOURISM INVESTMENTS IN THE NORTHERN GREAT PLAIN REGION (HUNGARY) IN THE 2014-2020 BUDGET PERIOD

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Abstract: The aim of this paper is to present the territorial characteristics of explanation of European Union funding for tourism-related developments in the Northern Great Plain region (Hungary) in the 2014-2020 programming period of the European Union. We relied fundamentally on the website "palyazat.gov.hu" as our source, which provides information on the number of grant applications submitted and those that were successful. There are very significant differences between counties and settlements in terms of the application activity and the focus of the applications. Firstly, the specificities of the counties that make up the Northern Great Plain region had a significant impact on the region's performance in case of national-level projects. Secondly, hand the influencing factors include the commitment of the leaders of the individual counties and settlements to tourism, the impact of the conditions set out in the calls for applications, as well as the role of political lobbying.

Key words: European Union, Northern Great Plain region, tourism, investments, settlements

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INTRODUCTION

Today, tourism is one of the fastest growing and highly diversified sectors of the economy (Drotár and Kozma, 2021a; Drotár and Kozma, 2021b; Klamár and Kozon, 2022; Mátyás et al., 2022; Tóth et al., 2022), despite the downturn caused by the Covid-19 pandemic (Škare et al., 2021; Pramana et al., 2022; Roman et al., 2022). However, achieving a competitive edge in the international arena requires constant innovation on the part of all players. To this end, priority investments (so-called flagship developments – see Kozma, 1995; Kozma, 2010; Kozma et al., 2014; De Frantz, 2018; Sochacka and Rzeszotarska-Pałka, 2021; Nod and Aubert, 2022) increase the attention of the wider public toward a given region/settlement, and tourism-related developments in rural areas play an important role in the economic diversification of the areas concerned (Rytkönen and Tunón, 2020; Tătar et al., 2020; Terzi et al., 2020; Nooripoor et al., 2021; Gorjanc et al., 2022; Ospanova et al., 2022; Plokhikh, 2022). At the same time, tourism can also be regarded as a high-risk economic sector: natural (e.g. volcanic eruptions – Medeiros et al., 2021; earthquake – Huang and Min, 2002; the rise in temperature caused by global warming – Carrillo et al., 2022) and socio-political (e.g. epidemics – Ambaw et al., 2022; Choe et al., 2021; Fekete-Fábián and Jánosi, 2022; Imeri and Gil-Alana, 2022; Ozbay et al., 2022; political instability – Omer and Yeşiltaş, 2020; Sass, 2020; Shaari et al., 2022) events have a major impact on the situation of tourism operators and thus on the regions that rely on the sector. As a result, the various players (businesses, local authorities), in order to reduce the risk of the investments made, are seeking to use, in addition to their own financial resources, also public funding (Ballesteros and Hernández, 2019; Jarábková, 2016; Kumar, 2020), which may come from the central budget of the given country or also from outside the country (e.g. from the European Union). Researches analysing the use of EU funds can basically be divided into two major groups: on the one hand, it has sought to identify the impact of the financial supports and, on the other, it has examined their territorial characteristics.

The studies in the first group showed, among other things, that for Objective 1 regions, funds mainly contributed to employment growth and less to income growth. A further problem was that the positive effects of cohesion funds were short-lived, and their impact diminished considerably during the crisis in the second half of the 2000s (Becker et al., 2018).

Secondly, it has been found that there is no clear link between the effectiveness of regional policy and the amount of funds received (Di Caro and Fratesi, 2022): in the Mediterranean (e.g. Spain, Italy, Greece) and in several regions of several Central European countries (e.g. Hungary, Romania, part of Poland), it has been shown that a significant amount of

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financial supports was not associated with a positive growth effect. In contrast, regions in Germany and France that received little funds were able to show significant growth. An important conclusion of the analyses was the distinction between old and new Member States (Vedrine and Le Gallo, 2021), which showed that in the latter region, while Structural Funds had a positive impact on economic growth, it contributed to widening regional disparities (Medve-Bálint et al., 2022).

Among the results of the research on the regional characteristics of European Union subsidies in Hungary, the following can be highlighted. On the one hand, natural conditions were an important determinant for renewable energy sources (Badar and Kozma, 2021), and there were significant differences between the different Operational Programmes (Territorial and Settlement Development Operational - regional decentralization, Environment and Energy Efficiency Operational Programme - regional concentration). In the case of subsidies for economic development (Badar and Kozma, 2020), the impact of the size of settlements (smallest settlements were in an unfavourable position), the favourable position of district seats and the role of the socio-economic situation of settlements (more unfavourable position of less developed settlements - lower success rate of subsidy applications) were identified. The very significant role of tourism potential and the moderate role of the socio-economic situation (degree of underdevelopment) were important research findings in the case of tourism subsidies (Gyurkó, 2000). The study focusing on the Lake Balaton region (Horváth and Alpek, 2020) also revealed significant spatial differences, which were due to natural reasons: settlements closer to the lake were able to obtain much higher subsidies than the so-called background settlements, with the exception of Zala County with its significant health tourism centres (e.g. Hévíz, Kehidakustány and Zalakaros). The conditions for the use of European Union development funds available for tourism development in Hungary in the period 2014-2020 are regulated by three operational programmes: GINOP (Economic Development and Innovation Operational Programme), Rural Development Programme (VP) and Territorial and Settlement Development Operational Programme (TOP).

Priority axis 7 of GINOP (Economic Development and Innovation Operational Programme) included ideas for the development of tourism, with the following four priority areas:

- Network-based thematic development of natural and cultural heritage sites of national and international importance
- The development of attractions of international importance ("magnets"), which attract new target groups and reduce the territorial concentration of tourism.
- Experience-centred presentation of natural values as tourist attractions.
- The creation of an internationally competitive environment and offering for spas.

Sub-measure 4 (Support for investment in the creation and development of non-agricultural activities) of measure 6 (Development of agricultural holdings and enterprises) of the Rural Development Programme (VP) aims to develop tourism. This sub-measure considered tourism as a means of diversifying economic activity in rural areas and, in this respect, gave priority to the development of new places of accommodation and the expansion of existing capacities in the countryside.

Measure 2 (Socially and environmentally sustainable tourism development) of Priority axis 1 (Development of the regional economic environment to promote employment) of the Territorial and Settlement Development Operational Programme (TOP) also dealt with tourism and focused on the development of tourist attractions of regional importance, which are mainly owned by settlements.

Of the three operational programmes, the calls for applications launched by GINOP and VP were open to applications from all over the country, and so applicants in the region faced a strong competition. By contrast, in the case of TOP, the amounts available for tourism development were determined at county level (these were contained in the County Integrated Programmes adopted by the County Assembly) and, as a result, only operators from the settlements of the county concerned were allowed to submit applications. Within TOP, there was a separate category for the county seats, which received separate development funds under priority axis 6 of the operational programme, and so in their case there was no competition.

In this context, the aim of this paper is to present the territorial characteristics of European Union funding for tourism-related developments in the Northern Great Plain region (Figure 1) one of the least developed regions of Hungary, in the 2014-2020 programming period of the European Union. In the framework of the above, we will highlight the situation of the region and the counties that it includes, and the differences between the individual settlements. We want to answer, among others, the following questions:

- what differences exist at regional and county level in terms of application activity for each operational programme?
- what differences can be observed between municipalities in terms of application activity and winning rates?
- what factors are responsible for the differences and which characteristics of the counties influence them?

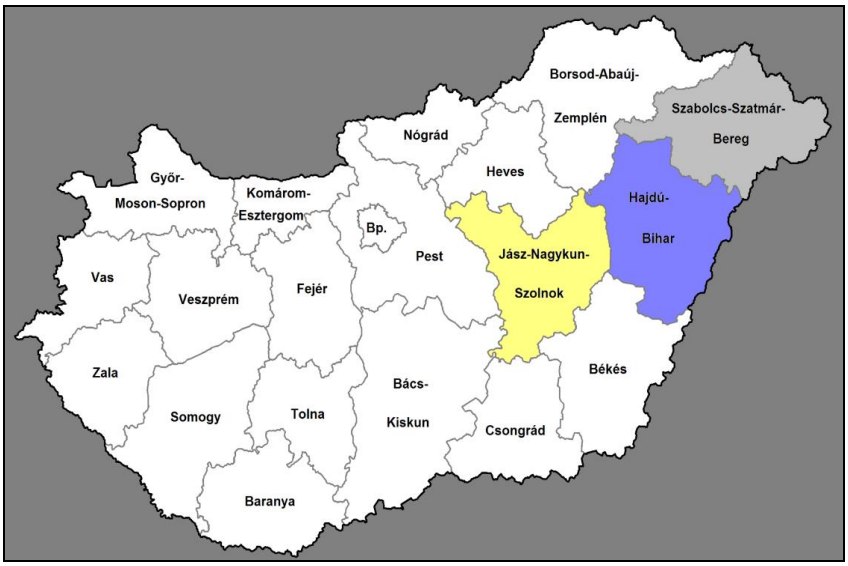

Figure 1. Location of the Northern Great Plain region in Hungary and the counties that make up the region (Source: own work)

MATERIALS AND METHODS

In the course of writing this paper, we relied fundamentally on the website "palyazat.gov.hu" as our source, which provides information on the number of grant applications submitted and those that were successful, as well as the amounts of aid applied for and granted, in a breakdown according to county. On the other hand, it also provides information on which the settlements with winning applications were, what the total amount of the awarded grants and projects was, as well as on the implementation process. In addition to the above, we also used information from the website of the Central Statistical Office of Hungary (KSH), which provided data on the population of each settlement. On the other hand, it also provides information on which the settlements with winning applications were, what the total amount of the awarded grants and projects was, as well as on the implementation process. In addition to the above, we also used information from the website of the Central Statistical Office of Hungary (KSH), which provided data on the population of each settlement.

Two things can be mentioned as shortcomings of the databases. On the one hand, only county-level data were available for the applications submitted, so we were not able to carry out analyses at the level of municipalities. On the other hand, the expenditure for the budget period in question was not yet fully recorded in the information system and therefore not enough information was available on which funded projects had been implemented and how much was actually spent.

In the course of the processing of the data, we relied on the possibilities offered by Excel and various statistical programs (e.g. SPSS). In this way we compared the data of the three counties to the national values, and with the use of various statistical indicators (ratios, relative values) to identify differences within the counties (Figure 2).

RESULTS AND DISCUSSION

When analysing the grants announced for the whole country, the picture is mixed for the Northern Great Plain region. In the case of GINOP (Table 1), which mainly supports the development of tourist attractions of national importance, the region's application activity was slightly lower than the national average, and this was also observed for the individual counties. The reason for this, in our opinion, is that the region has only limited attractions that would appeal to more tourists, even from abroad, and would therefore need to be developed. The rest of the table shows more or less the same picture: the region is close to the national average, with Jász-Nagykun-Szolnok County having the worst figures, while the other two counties are in a better position. The situation is different for the tourism-related grant applications supported under VP, but essentially positive (Table 2) the region scores better than the national average for almost all relative indicators, which we believe is due to two factors. Firstly, the economic structure of the region should be mentioned: both in terms of gross value added and the employment structure, agriculture in the North Great Plain region has higher values than the national figure (Table 3), and since rural tourism, which is a priority in the context of the grant, is closely linked to this economic sector, the region's high values cannot be considered a coincidence.

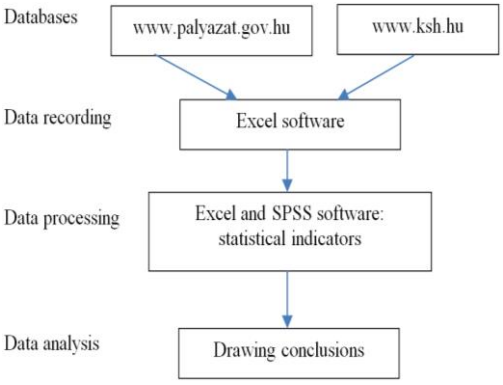

Figure 2. The methodology used to prepare the artice (Source: own work)

Table 1. The situation of the Northern Great Plain region for the GINOP Priority 7 funding schemes in the 2014-2020 budget period (Source: own work relying on the website "palyazat.gov.hu)

	Hajdú-Bihar County	Jász-Nagykun-Szolnok County	Szabolcs-Szatmár-Bereg County	Northern Great Plain region	Hungary
number of applications submitted (pieces)	8	3	9	20	164
application activity (applications submitted per 100,000 inhabitants)	1.50	0.80	1.60	1.36	1.67
number of winning applications (pieces)	5	1	6	12	102
winning rate (%)	62.5	33.3	66.7	60.0	62.2
amount of aid applied for (billions HUF)	11.83	2,88	9.73	24.44	200.74
amount of aid granted (billions HUF)	8.31	0,40	6.73	15.44	136.97
winning rate (%)	70.3	13.9	69.2	63.2	68.2
the amount per winning application (million HUF)	1,662	400	1,121	1,286	1,342

Table 2. The situation in the Northern Great Plain region for the VP-6.4.1. funding scheme in the 2014-2020 budget period (Source: own work relying on the website "palyazat.gov.hu)

	Hajdú-Bihar County	Jász-Nagykun-Szolnok County	Szabolcs-Szatmár-Bereg County	Northern Great Plain region	Hungary
number of applications submitted (pieces)	110	48	298	456	1,401
application activity (applications submitted per 100,000 inhabitants)	20.7	12.8	53.0	31.1	14.3
number of winning applications (pieces)	47	20	141	208	577
winning rate (%)	42.7	41.7	47.3	45.6	41.2
amount of aid applied for (billions HUF)	4.65	1.90	12.70	19.25	56.36
amount of aid granted (billions HUF)	2.10	0.90	6.03	9.03	23.72
winning rate (%)	45.3	47.1	47.4	46.9	42.1
the amount per winning application (million HUF)	447.6	448.4	427.4	434.0	411.1

Table 3. The role of the agriculture, forestry and fishing sector in the Northern Great Plain region based on different indicators (%)(Source: own work relying on the website "ksh.hu", 2020 – Dissemination database, 2016 – microcencus)

	Hajdú-Bihar County	Jász-Nagykun-Szolnok County	Szabolcs-Szatmár-Bereg County	Northern Great Plain region	Hungary
share of gross value added (2020)	10.31	8.22	10.19	9.72	4.02
share of the workforce (2016)	7.55	7.07	6.00	6.84	4.59

Another important factor, which explains the high values of Szabolcs-Szatmár-Bereg County in particular, is the characteristics of settlements (Table 4). An important characteristic of the county is the high number of settlements, which results in a low average population and a very high density of settlements. In the case of rural development tenders, preference was given to settlements with a smaller population (settlements with more than 10,000 inhabitants were only exceptionally eligible), which explains the good performance of the county's settlements. Looking at the success of individual settlements in the counties (Table 5), a double picture emerges: there are not very large differences in the overall number of applications, but there are significant differences between the individual operational programmes. For the reasons mentioned above, Hajdú-Bihar and Szabolcs-Szatmár-Bereg counties had higher-than-average scores for GINOP and VP, while the same is true for Jász-Nagykun-Szolnok County for TOP (the reasons will be discussed a little later).

Table 4. The characteristics of settlements in the Northern Great Plain region in 2017 (Source: own work relying on the website "ksh.hu")

	Hajdú-Bihar County	Jász-Nagykun-Szolnok County	Szabolcs-Szatmár-Bereg County	Northern Great Plain region	Hungary
number of settlements (pieces)	82	78	229	389	3,155
average population of the settlements	6,493	4,790	2,454	3,774	3,105
number of settlements per 1000 km^2	13.2	14.0	38.6	21.9	33.9

Table 5. The success rate of county settlements in tourism-related projects in the different operational programmes in the 2014-2020 budget period (percentage of winning applications by settlements in the given county - %) (Source: own work relying on the website "palyazat.gov.hu)

	GINOP	VP	TOP	all applications
Hajdú-Bihar County	3.7	35.4	13.4	43.9
Jász-Nagykun-Szolnok County	1.3	16.7	30.8	37.2
Szabolcs-Szatmár-Bereg County	2.6	37.6	5.2	40.6
Northern Great Plain region	2.6	32.9	12.1	40.6

Looking at TOP, the more favourable indicators of Jász-Nagykun-Szolnok County can be highlighted (Table 6): this county had the highest application activity, the highest winning rate and the highest grant per inhabitant. This is most likely due to the fact that the county's leaders were aware that the less favourable conditions would allow the county to compete less successfully in the nationally competitive GINOP and VP tenders, and therefore provided more substantial support for tourism development, which among other things led to higher application activity.

Table 6. Characteristics of the Territorial and Settlement Development Operational Programme in the Northern Great Plain region in the 2014-2020 budget period * the analysis does not include the county seats, as these settlements had dedicated resources (i.e. they did not have to compete with other settlements) (Source: own work relying on the website "palyazat.gov.hu)

	Hajdú-Bihar County	Jász-Nagykun-Szolnok County	Szabolcs-Szatmár-Bereg County	Northern Great Plain region
number of applications submitted (pieces)	32	39	28	99
application activity (applications submitted per 100,000 inhabitants)	6.01	10.44	4.98	6.74
number of winning applications (pieces)	14	29	12	55
winning rate (%)	43.8	74.4	42.9	56.5
amount of aid applied for (billions HUF)	8.37	10.31	13.88	32.53
amount of aid granted (billions HUF)	4.34	7.58	9.69	21.63
winning rate (%)	52.4	73.5	69.8	66.5
the amount per winning application (million HUF)	8,205	20,287	17,233	14,736

When analysing the situation within the counties, in most cases only the TOP and VP grants were examined, as the low number of applications for GINOP would not always have allowed for drawing sound conclusions. In terms of the size of the settlements in which grants were awarded (Table 7), there were very significant differences between the two operational programmes: in the case of the VP, smaller settlements dominated, for two reasons. Firstly, as mentioned above, the call for applications stipulated that applications from settlements with populations of more than 10,000 could only be submitted in exceptional cases, and secondly, the creation/development of rural accommodation, which was considered as the main objective, was also mainly concentrated in smaller settlements.

By contrast, in case of TOP, the domination of larger settlements can be observed. In terms of the distribution of winning applications by county and by size of settlement (Table 9), the main effect is due to the characteristics of the settlements. Szabolcs-Szatmár-Bereg County is characterised by a predominance of smaller settlements (less than 2,000 inhabitants): the share of these exceeds 70%, compared to around 50% in the other two counties. By contrast, both Hajdú-Bihar and Jász-Nagykun-Szolnok counties have an above-average proportion of settlements with larger populations.

Table 7. Distribution of winning grant applications by settlement size in the Northern Great Plain region for the 2014-2020 programming period for VP and TOP (%) (Source: own work relying on the website "palyazat.gov.hu)

number of inhabitants	Rural Development Operational Programme	Territorial and Settlement Development Operational Programme
less than 1,000	22.3	5.6
1,000 - 2,000	23.3	9.9
2,000 - 5,000	33.5	19.7
5,000 - 10,000	13.6	16.9
10,000 - 50,000	4.4	23.9
more than 50,000	2.9	23.9
total	100.0	100.0

There were significant differences in the size of the winning applications between the three operational programmes (Table 8). In the framework of the GINOP programme, as mentioned above, the creation/development of attractions of national importance was the main focus, requiring substantial amounts of investment. By contrast, the development of accommodation facilities, which is in the focus of the VP grants, was concentrated mainly in smaller settlements, where it was not practical and efficient to carry out larger-scale and therefore more costly investments. The effect of the size of the settlements is only discernible in the case of VP: in case of settlements with larger populations, investments requiring higher amounts of aid were most likely made because of the need for own financial resources and the greater potential opportunities.

Table 8. The average size of winning grant applications in settlements of different sizes in the Northern Great Plain region for the 2014-2020 programming period for VP and TOP (Source: own work relying on the website "palyazat.gov.hu)

number of inhabitants	Rural Development Operational Programme	Territorial and Settlement Development Operational Programme	Economic Development and Innovation Operational Programme
less 1,000	40.58	341.5	n.e.
1,000-2,000	42.18	280.6	n.e.
2,000-5,000	44.03	410.4	n.e.
5,000-10,000	46.01	361.1	n.e.
10,000-50,000	47.07	457.6	n.e.
more 50,000	46.38	872.6	n.e.
Northern Great Plain region	43.30	507.4	1,275.0

n.e. – not interpretable due to the low number of elements

Table 9. The share of settlements of different sizes in the population of the county in 2017 (%) (Source: own work relying on the website "ksh.hu" - Dissemination database)

number of inhabitants	Hajdú-Bihar County	Jász-Nagykun-Szolnok County	Szabolcs-Szatmár-Bereg County	Northern Great Plain region
less than 1,000	24.4	20.5	41.0	33.4
1,000 - 2,000	24.4	29.5	30.1	28.8
2,000 - 5,000	25.6	23.1	22.3	23.1
5,000 - 10,000	14.6	16.7	3.9	8.7
10,000 - 50,000	9.8	9.0	2.2	5.1
more than 50,000	1.2	1.3	0.4	0.8
total	100.0	100.0	100.0	100.0

In light of the above, it is not surprising that in the case of the Rural Development Operational Programme (VP), the share of successful applications from settlements with less than 2,000 inhabitants was very high (Table 10), above 50%. In Jász-Nagykun-Szolnok County, the scores were particularly high for settlements with 2,000 to 5,000 inhabitants, mainly due to the fact that Abádszalók, one of the centres of tourism at Lake Tisza, performed exceptionally well. In the case of Hajdú-Bihar County, the proportion of winning grant applications from settlements with larger populations is surprisingly high, mainly due to places of accommodation being built on the outskirts of the settlements concerned (e.g. Berettyóújfalu, Debrecen).

Table 10. Distribution of winning applications by settlement size in each county of the Northern Great Plain region for the 2014-2020 programming period for VP (%) (Source: own work relying on the website "palyazat.gov.hu)

number of inhabitants	Hajdú-Bihar County	Jász-Nagykun-Szolnok County	Szabolcs-Szatmár-Bereg County	Northern Great Plain region
less than 1,000	12.5	9.6	26.8	22.3
1,000 - 2,000	12.5	19.0	26.9	23.3
2,000 - 5,000	27.5	52.4	32.4	33.5
5,000 - 10,000	27.5	19.0	9.0	13.6
10,000 - 50,000	15.0	0.0	2.1	4.4
more than 50,000	5.0	0.0	2.8	2.9
total	100.0	100.0	100.0	100.0

In case of TOP (Table 11), all three counties are characterised by the very good performance of settlements with larger populations (more than 10,000 inhabitants), the reasons for which have been discussed above. Nyíregyháza has a particularly high score in this category (10 of the 23 winning applications in the county are linked to the county seat),

which is the result of the intention to develop the complex, multi-element Sóstófürdő area, located in the north of the settlement and offering a wide range of recreational activities (Open Air Musem, Aquarius Experience and Park Bath, Zoo). In the group of settlements with 5,000 to 10,000 inhabitants, Hajdú-Bihar County has very high values compared to the other two counties, with strong lobbying activities by the mayors of some of the settlements (e.g. Vámospércs, Nyíradony) in this group.

Table 11. The distribution of winning applications by size of settlement in each county of the Northern Great Plain region for TOP in the 2014-2020 programming period (Source: own work relying on the website "palyazat.gov.hu)

number of inhabitants	Hajdú-Bihar County	Jász-Nagykun-Szolnok County	Szabolcs-Szatmár-Bereg County	Northern Great Plain region
less than 1,000	0.0	6.5	8.7	5.6
1,000 - 2,000	5.9	12.9	8.7	9.9
2,000 - 5,000	5.9	29.0	17.4	19.7
5,000 - 10,000	35.3	16.1	4.3	16.9
10,000 - 50,000	29.4	29.0	13.0	23.9
more than 50,000	23.5	6.5	47.8	23.9
total	100.0	100.0	100.0	100.0

CONCLUSIONS

The chief findings of the present paper could be summarised as follows. On the one hand, the specificities of the counties that make up the Northern Great Plain region (lower number of major tourist attractions, higher than average role of agriculture, higher settlement density) had a significant impact on the region's performance in case of national-level projects (GINOP - worse performance; VP - better performance).

On the other hand, when analysing the relations within the region, the influencing factors include the commitment of the leaders of the individual counties and settlements to tourism (Jász-Nagykun-Szolnok County - TOP preference, high TOP values of Nyíregyháza), the impact of the conditions set out in the calls for applications (VP - Szabolcs-Szatmár-Bereg County's privileged position and the more favourable data for settlements with smaller populations), as well as the role of political lobbying (good results of some settlements in Hajdú-Bihar County).

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REFERENCES

Ambaw, Z.G., Nigatu, T.F., & Masrie, F.A. (2022). Multidimensional impacts of COVID-19 Pandemic on cultural heritage management (CHM) and conservation pratices in North-Central Ethiopia. ETHIOPIA. *GeoJournal of Tourism and Geosites*, 45(4spl), 1552–1559. https://doi.org/10.30892/gtg.454spl03-974

Badar, Z., & Kozma, G. (2020). The territorial characteristics of European Union subsidies for economic development used by local authorities in the Észak-Alföld (North Great Plain) region of Hungary between 2014 and 2020. *Romanian Review on Political Geography*, 22(2), 48-60. https://doi.org.10.30892/rrgp.222101-336

Badar, Z., & Kozma, G. (2021). Spatial characteristics of tenders involving renewable energy sources in the Northern Great Plain Region during the 2014-2020 budget period. In *Europe in a changing word: opportunities and challenges*, 253-264, Oradea – Debrecen.

Ballesteros, J.G., & Hernández, M.H. (2019). Promoting tourism through the EU LEADER programme: Understanding Local Action Group governance. *European Planning Studies*, 27(2), 396-414. https://doi.org/10.1080/09654313.2018.1547368

Becker, S.O., Egger, P.H., & Von Ehrlich, M. (2018). Effects of EU regional policy: 1989-2013. *Regional Science and Urban Economics*, 69, 143-152. https://doi.org/10.1016/j.regsciurbeco.2017.12.001

Carrillo, J., González, A., Pérez, J.C., Expósito, F.J., & Díaz, J.P. (2022). Projected impacts of climate change on tourism in the Canary Islands. *Regional Environmental Change*, 22(2), 61. https://doi.org/10.1007/s10113-022-01880-9

Choe, Y., Wang, J., & Song, H. (2021). The impact of the Middle East Respiratory Syndrome coronavirus on inbound tourism in South Korea toward sustainable tourism. *Journal of Sustainable Tourism*, 29(7), 1117-1133. https://doi.org/10.1080/09669582.2020.1797057

De Frantz, M. (2018). Tourism marketing and urban politics: cultural planning in a European capital. *Tourism Geographies*, 20(3), 481-503. https://doi.org/10.1080/14616688.2017.1354392

Di Caro, P., & Fratesi, U. (2022). One policy, different effects: Estimating the region-specific impacts of EU cohesion policy. *Journal of Regional Science*, 62(1), 307-330. https://doi.org.10.1111/jors.12566

Drotár, N., & Kozma, G. (2021a). A New element of tourism in North-eastern part of Hungary – steps to attract Jewish pilgrims to Tokaj-Hegyalja regions. *Folia Geographica*, 63(1), 19-39.

Drotár, N., & Kozma, G. (2021b). New tendencies in wine tourism in Tokaj wine region (Hungary): the decreasing role of Tokaji Aszú as a dominant brand. *GeoJournal of Tourism and Geosites*, 34(1), 197-201. https://doi.org/10.30892/gtg.34126-637

Fekete-Fábián, Z., & Jánosi, D. (2022). A 2008. és a 2020. évi válság hatása a hazai munkaerőpiacra és turizmusra. *Területi Statisztika*, 62(2), 135-165. https://doi.org/10.15196/TS620201

Gorjanc, S., Simončič, T., Poljanec, A., Kuslits, B., Arany, I., Tanács, E., Vári, Á., Aszalós, R., Drasovean, A., Mos, A., Velasco, L.M., Reuter, A., & Gattenlohner, U. (2022). A new ecosystem services approach to enable identification of pro-biodiversity businesses of protected karst areas in Central and South-Eastern Europe. *Hungarian Geographical Bulletin*, 71(2), 181-195. https://doi.org/10.15201/hungeobull.71.2.6

Gyurkó, Á. (2020). *General characteristics and changes in the structure of tourism in the statistical region of Norhern Hungary in the light of EU tourism development funds 2004-2019.* PhD-thesis, Debrecen (in Hungarian).

Horváth, Z., & Alpek, B.L. (2020). Spatially balanced or unbalanced tourism development – Tourism resource allocation investigation at Lake Balaton. *Turizmus Bulletin*, 20(2), 33-41, (in Hungarian). https://doi.org.10.14267/TURBULL.2020v20n2.4

Huang, J.H., & Min, J.C. (2002). Earthquake devastation and recovery in tourism: The Taiwan case. *Tourism Management*, 23(2), 145-154. https://doi.org/10.1016/S0261-5177(01)00051-6

Imeri, A., & Gil-Alana, L.A. (2022). The impact of COVID-19 on the tourism sector in Bosnia Herzegovina. *GeoJournal of Tourism and Geosites*, 44(4), 1397–1402. https://doi.org/10.30892/gtg.44426-958

Jarábková, J., Majstríková, L., & Kozolka, T. (2016). Financial supporting tools of rural tourism development in Nitra self-governing region. *European countryside*, 8(2), 123-134. https://doi.org/10.1515/euco-2016-0010

Klamár, A.R., & Kozoň, J. (2022). Cross-border shopping tourism – case study to compare two regions of the North-eastern Slovakia. *Folia Geographica*, 64(2), 46-85.

Kozma, G. (1995). First steps of local government of Debrecen in place marketing. *Comitatus – Önkormányzati Szemle*, 5(5) 15-21. (in Hungarian).

Kozma, G. (2010). Sport as an element in the place branding activities of local governments. *GeoJournal of Tourism and Geosites*. 3(2), 133-143. http://gtg.webhost.uoradea.ro/PDF/GTG-2-2010/03_GTG-64-Kozma.pdf

Kozma, G., Teperics, K., & Radics, Zs. (2014). The Changing Role of Sports in Urban Development: A Case Study of Debrecen (Hungary). *The International Journal of the History of Sport, 31(9), 1118-1132.* https://doi.org/10.1080/09523367.2013.865119

Kumar, V. (2020). Indian tourism industry and COVID-19: present scenario. *Journal of Tourism and Hospitality Education*, 10, 179-185. https://doi.org/10.3126/jthe.v10i0.28768

Mátyás, Sz. M., Nagy-Tóth, N.Á., Dávid, L.D., Gogo, A.F.C., & Bujdosó, Z. (2022). The role of sports policing and tourism safety at the Summer Olympics. *Sustainability*, 14(10), 5928. https://doi.org/10.3390/su14105928

Medeiros, J., Carmo, R., Pimentel, A., Vieira, J.C., & Queiroz, G. (2021). Assessing the impact of explosive eruptions of Fogo volcano (São Miguel, Azores) on the tourism economy. *Natural Hazards and Earth System Sciences*, 21(1), 417-437. https://doi.org/10.5194/nhess-21-417-2021

Medve-Bálint, G., Martin, J.P., & Nagy, G. (2022). Unintended consequences? The absorption of EU funds in Hungary. In Social Report (pp. 33-51). TÁRKI, Budapest (in Hungarian).

Nod, G., & Aubert, A. (2022). Methods for measuring the spatial mobility of tourists using a network theory approach. *Hungarian Geographical Bulletin*, 71(3), 287-299. https://doi.org/10.15201/hungeobull.71.3.5

Nooripoor, M., Khosrowjerdi, M., Rastegari, H., Sharifi, Z., & Bijani, M. (2021). The role of tourism in rural development: Evidence from Iran. *GeoJournal* 86, 1705–1719. https://doi.org/10.1007/s10708-020-10153-z

Omer, A.M., & Yeşiltaş, M. (2020). Modeling the impact of wars and terrorism on tourism demand in Kurdistan region of Iraq. *Portuguese Economic Journal*, 19(3), 301-322. https://doi.org/10.1007/s10258-020-00178-0

Ospanova, G.S., Saipov, A.A., Sergeyeva, A.M., Saparova, K.T., Omirzakova, M.Z., & Nurymova, R.D. (2022). Potential for the development of agritourism in the food supply zone of Republic of Kazakhstan Nur-Sultan city. *GeoJournal of Tourism and Geosites*, 44(4), 1253-1259. https://doi.org.10.30892/gtg.44409-941

Ozbay, G., Sariisik, M., Ceylan, V., & Çakmak, M. (2022). A comparative evaluation between the impact of previous outbreaks and COVID-19 on the tourism industry. *International Hospitality Review*, 36(1), 65-82. https://doi.org/10.1108/IHR-05-2020-0015

Plokhikh, R., Fodor, G., Shaken, A., Berghauer, S., Aktymbayeva, A., Tóth, A., Mika, M., & Dávid, L.D. (2022). Investigation of environmental determinants for agrotourism development in Almaty region of Kazakhstan *GeoJournal of Tourism and Geosites*, 41(2), 354–361. https://doi.org/10.30892/gtg.41203-837

Pramana, S., Paramartha, D.Y., Ermawan, G.Y., Deli, N.F., & Srimulyani, W. (2022). Impact of COVID-19 pandemic on tourism in Indonesia. *Current Issues in Tourism*, 25(15), 2422-2442. https://doi.org/10.1080/13683500.2021.1968803

Roman, M., Roman, M., Grzegorzewska, E., Pietrzak, P., & Roman, K. (2022). Influence of the COVID-19 Pandemic on Tourism in European Countries: Cluster Analysis Findings. *Sustainability*, 14(3), 1602. https://doi.org/10.3390/su14031602

Rytkönen, P., & Tunón, H. (2020). Summer farmers, diversification and rural tourism—challenges and opportunities in the wake of the entrepreneurial turn in Swedish policies (1991–2019). *Sustainability*, 12(12), 5217. https://doi.org/10.3390/su12125217

Sass, E. (2020). The impact of Eastern Ukrainian armed conflict on tourism in Ukraine *GeoJournal of Tourism and Geosites*, 30(2spl), 880–888. https://doi.org/10.30892/gtg.302spl14-518

Shaari, M.S., Mahyudin Rafei, A.A., Nangle, B., Esquivias, M.A., & Hussain, N.E. (2022). The impact of violent crime on tourism arrivals in Malaysia. *GeoJournal of Tourism and Geosites*, 43(3), 1148–1154. https://doi.org/10.30892/gtg.43336-930

Škare, M., Soriano, D.R., & Porada-Rochoń, M. (2021). Impact of COVID-19 on the travel and tourism industry. *Technological Forecasting and Social Change*, 163, 120469. https://doi.org/10.1016/j.techfore.2020.120469

Sochacka, E., & Rzeszotarska-Pałka, M. (2021). Social Perception and Urbanscape Identity of Flagship Cultural Developments in Szczecin (in the Re-Urbanization Context). *Land*, 10(4), 398. https://doi.org/10.3390/land10040398

Tătar, C.F., Studzieniecki, T., Czimre, K., & Pénzes, J. (2020). Marketing awareness of crossborder destination-the case study of Bihor-Hajdú-Bihar Euroregion. *GeoJournal of Tourism and Geosites*, 28(1), 95-103. https://doi.org/10.30892/gtg.28107-454

Terzi, A., Drobnjakovi, M., & Petrevska, B. (2020). Traditional Serbian countryside and second-home tourism perspectives. *European Countryside*, 12(3), 312-332. https://doi.org/10.2478/euco-2020-0018

Tóth, B., Papp, S., Hegedűs, G., & Nagy, G. (2022). Geographical features of Hungarian food festivals, 2019. *Területi Statisztika*, 62(2), 190-217, (in Hungarian). https://doi.org/10.15196/TS620203

Vedrine, L., & Le Gallo, J. (2021). Does EU Cohesion Policy affect territorial inequalities and regional development? In *EU Cohesion Policy and Spatial Governance: Territorial, Social and Economic Challenges (pp. 156-170)*. Edward Elgar Publishing

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