

ECONOMIC DEVELOPMENT OPPORTUNITIES IN THE HUNGARIAN-SLOVAKIAN CROSS-BORDER AREA – SZIGETKÖZ AND CSALLÓKÖZ (Žitný ostrov) ACCORDING TO DEVELOPMENT DOCUMENTS AND LOCAL STAKEHOLDERS PERCEPTIONS

Petra KINGA KÉZAI^{a*}, Mihály DÖMÖTÖR^b, Dávid FEKETE^c

^a Széchenyi István University, Kautz Gyula Faculty of Business and Economics Department of Leadership and Organizational Communication, H-9026 Győr, Egyetem Square 1., Hungary; e-mail: kezai.petra.kinga@sze.hu

^b Széchenyi István University, Doctoral School of Regional- and Economic Sciences, H-9026 Győr, Egyetem square 1., Hungary; e-mail: domotor.mihaly@sze.hu

^c associate professor, Széchenyi István University, Kautz Gyula Faculty of Business and Economics Department for Regional Sciences and Public Policy, H-9026 Győr, Egyetem Square 1., Hungary; e-mail: fekete.david@sze.hu

* Corresponding author

Cite this article: Kinga Kézai, P., Dömötör, M., Fekete, D. (2022). Economic Development Opportunities in the Hungarian-Slovakian Cross-Border Area – Szigetköz and Csallóköz (Žitný ostrov) According to Development Documents and Local Stakeholders Perceptions. *Deturope*, 14(1), 87-110.

Abstract

The current research investigates the Hungarian-Slovakian cross-border area of Szigetköz-Csallóköz in the context of new economic opportunities facilitated by water level regulation. The objective of the research is to unearth the potential economic opportunities triggered by the planned interventions and reveal the latent resources in the regional socio-economic fabric. The research employs two analytical methods: a situation analysis phase comprising an in-depth analysis of strategic documents that discuss various economic features of the Szigetköz – Csallóköz area, and a needs assessment phase based on in-depth interviews with decision-makers and institutional leaders of the selected municipalities (N=22). The research results are presented in the form of proposals related to infrastructural developments, such as the construction of a cycle path along the Old Danube embankment (from Danakiliti to Gönyű) or economic development such as the creation of a unique tourism brand.

Keywords: cross-border research, economic structure, economic development, regional development, Szigetköz, Csallóköz

INTRODUCTION

“The Danube, which is past, present, future,” wrote the great Hungarian poet Attila József, musing on the connection between the past and the present of his country, “entwines its waves in tender friendly clasps (József, 2013:52). The unspoiled area could be found downriver of Bratislava, first in the fabulous inland delta of the Csallóköz (Žitný Ostrov in Slovak) and Szigetköz, and then in the Danube Bend, where the river turns abruptly south, among forested

hills, towards Budapest. As Algernon Blackwood, a novelist from the beginning of the twentieth century described the river among the Csallóköz and Szigetköz “the Danube here wanders about at will among the intricate network of channels intersecting the islands everywhere with broad avenues” (Blackwood, 2019:7–8).

Among this stretch of varied treasures, the communist regimes of Czechoslovakia and Hungary joined forces in 1977 to launch a massive dam project. The nature and consequences of the scheme serve as a fitting representative of similar projects across the world, both past and present. The Hungarian campaign that emerged to challenge it also provides us with a unique and greatly needed example of a society rising against the destruction of its natural heritage (Reynolds, 2020). The legal status and history of the hydropower plant have been the subject of numerous studies (Fitzmaurice, 1998; Deets, 2009; Raisz & Szilágyi, 2017).

River and water regulation in the Szigetköz–Csallóköz area in the second half of the 1980s has drastically reduced river and groundwater levels, which, in addition to its ecological hazards, has transformed the socio-economic life of the region. Nagy (2014) provided the spatial interpretation of the process. With the construction of the dam near Bős, a series of artificial interventions disrupted natural processes on both banks of the Danube, modifying the flow conditions of the river, and thus the mass of water flowing into its branch systems, as discussed in the historical review of Vari & Linnerooth-Bayer (2010). The construction of the dam and the ensuing modification of water supply have also impacted the natural and economic environment of the region. The research is based on the premise that the prospective construction of new engineering structures will ensure stable and adequate water levels in the Old Danube branches, thus realizing a long-cherished dream of residents. The paper outlines proposals for economic, transport and tourism development and interventions for the period following the stabilisation and rise of water levels, with a special emphasis on sustainability and the preservation of green and blue infrastructure. Water system stabilisation would enable the planning of the complex utilisation of the whole area, ensuring the articulation between tourism and economic objectives. Water level regulation could trigger new economic opportunities for economic and municipal stakeholders in the Szigetköz–Csallóköz cross-border area.

The research seeks to identify economic opportunities, examine their feasibility and elaborate economic development proposals based on the analysis of information acquired in the needs assessment phase. Unless our research results are exploited, latent regional economic opportunities are likely to remain untapped and their under-exploitation would deteriorate the employment opportunities and living conditions of the local population, triggering increased

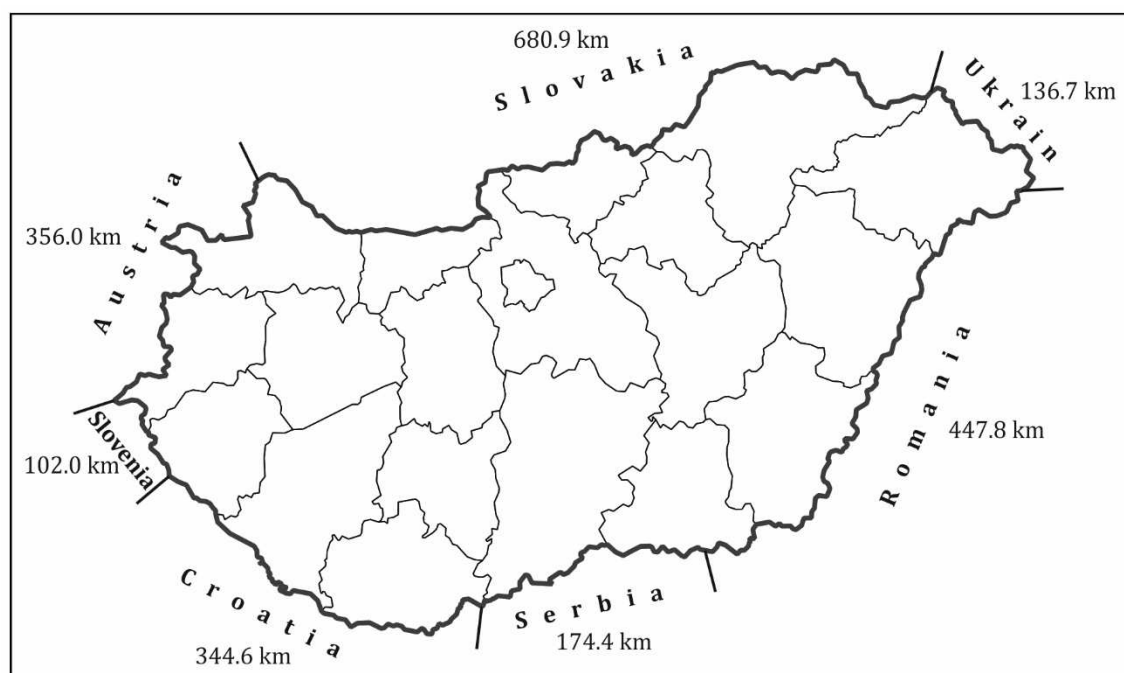
outmigration. The benefits of water level regulation could not be fully exploited in the absence of an economic needs assessment – which is crucial for mapping the demands of the municipalities and the needs of the local population. The diffusion of the positive effects of water level regulation from the natural environment to the local population requires a heightened focus on local economic development and the exploitation of potential economic opportunities. Thus, the objective of the present paper is to analyse the Hungarian-Slovakian Szigetköz–Csallóköz cross-border area and its economic development potentials.

THEORETICAL BACKGROUND

The radical geopolitical realignment of the post-WWI era triggered a proliferation of new states and state borders in Central Europe, encompassing the full territory of the Carpathian Basin (Baranyi, 2014). The divisive state borders imposed by the Trianon Peace Treaty (1920) radically redrew the map of the Carpathian Basin, causing an unprecedented loss of territory and population and dismantling organically evolving spatial structural units, nascent and functional regions that hitherto formed a coherent entity in socio-economic, infrastructural and ethnic terms. The subsequent decades were marked by Hungary's efforts to reposition its system of cross-border relations. The 'fragmentation' of the relatively uniform spatial structure, impacting the entire spectrum of socio-economic relations, and the concomitant emergence of external (cross-border) peripheries on both sides of the state border is a major barrier to cross-border cooperation to date (Baranyi, 2007).

European countries in the contemporary era are characterized by a higher-than-average number of border crossings, as demonstrated by a large number of so-called border intersections. Hungary is also referred to as a “cross-border country” (Hajdú, 2000). Currently, its seven neighbors include an old EU Member State (Austria), new Member States with internal EU borders (Slovenia, Slovakia), the new Member States with Schengen borders (Croatia, Romania), a pre-accession country (Serbia), and a third country (Ukraine) (Fig. 1). This diversity produces unique specificities and challenges on various (diplomatic, political, economic, cultural, everyday life, etc.) levels (Rácz, 2017). Research has therefore devoted increasing attention to the study of cross-border areas. Hardi, Hajdú & Mezei (2009) provided a detailed summary of the genesis of the spatial structure of the cross-border area of the Carpathian Basin, highlighting the role of historical, economic, political and social factors in shaping the nodal or peripheral position of various cities.

Figure 1 Border regions in Hungary, 2021



Source: Own compilation

Examination of cross-border projects

Cross-border funds have been gaining increasing momentum in the European Union since the 1990s. Cross-border cooperation is a highly prioritized issue for Hungary as a significant part of its population resides in the border region (Horváth, 2002). The analysis of cross-border projects has been undertaken by Kaszás, Péter, Keller & Kovács (2016a) and Kaszás, Birkner, Németh & Kovács (2016b). Kaszás et al. (2016a), in their comparative analysis, identified the main factors contributing to the success of cross-border projects of Austria and Hungary, Slovenia and Hungary, and Hungary and Croatia. Their findings point to the influence of organisational and individual factors such as time, project manager's authority and management competence on project implementation. The leadership competencies of the project manager are instrumental to the success of project management. Kaszás et al. (2016b) analysed the success rate of projects implemented between 2007 and 2013 under the aegis of the Austria-Hungary Cross-border Cooperation Programme. According to their findings, the main factors of success are time, successful project management and satisfaction level among the project target groups and over half of the cross-border projects could be qualified as successful.

Hakszer (2017) provided an assessment of Hungarian-Slovakian Cross-border Cooperation Programmes between 2007 and 2013. Ocskay & Hardi (2021) examined the causes of the failure of a spectacular number of winning project proposals targeting the valorisation of cultural heritage along the Hungarian-Slovak border to trigger stronger cohesion in the border region and the means to improve their inefficiency. According to a study by Péti & Szaloky-

Hoffmann (2016), the representation of networks of Hungarian communities from various countries in projects funded by EU territorial cooperation programmes is not particularly significant. They stress the need for a strategic approach to elaborating policies and development measures, with a focus on existing networks of national minorities in Central Europe (Péti & Szaloky-Hoffmann, 2016).

Economic changes in the Slovakian-Hungarian cross-border region in recent years

Slovakian-Hungarian border areas have been analysed by a wealth of studies, see, e.g. Szörényiné-Kukorelli (1997, 2001), Hardi (2008, 2012), Baranyai & Baranyai (2017), Hardi, Kupi, Ocskay & Szemerédi (2021). Economy-driven commuting has shown a rising tendency in recent years, whose entrepreneurship-related implications were analyzed by a study by Antalík (2017) exploring the external environmental factors that influence doing business in Slovakian-Hungarian cross-border areas. In his investigation of cross-border commuting, Egedy (2017) detects a high degree of spatial concentration in the case of commuters to Slovakia, namely in the Szigetköz settlements of Rajka, Mosonmagyaróvár, Győr, Bezenye, Dunakiliti and Hegyeshalom. Letenyei & Morauszki (2019) investigated the factors of cross-border influence through a survey by questionnaire focusing on two Slovakian and two Hungarian cities. According to their findings, ease of accessibility outweighs the significance of geographical proximity, and it largely determines the frequency of visits. The study, demonstrating a direct relationship between the frequency of visits and the knowledge of the native language of the region emphasises the bridge-building function of visits, noting that individuals with higher incomes and education levels are likely to benefit more from proximity to the border. Karácsony, Vinichenko, Antalík, Dávid & Vasa (2021) investigated the commuting workforce along the Hungarian-Slovakian border and the main drivers of commuting through a questionnaire survey. The results pointed to similarities between Hungarian and Slovakian commuters, i.e. commuter satisfaction was mostly determined by the variety of available jobs and the level of wages. In close relation to commuting, the suburbanisation effects of Bratislava and Győr were investigated through a questionnaire survey method by Pawera & Domonkos (2020). Jóna, Henézi, Döbrenstei & Gaál (2021) found that in the post-2000 period, agglomeration processes triggered a significant rise of the housing stock in Szigetköz in the catchment area of Győr. In the conurbation of Győr, the expansion of the housing stock was considerably (thirteen per cent) higher than the national average. In particular, Dunaszeg, Dunaszentpál, Győrladamér, Győrújfalú, Győrzámoly, Kisbajcs and Vámoszabadi had seen a significant, twenty percent increase of their housing stock. The intensification of agglomeration processes indicates the predominance of young, working-age

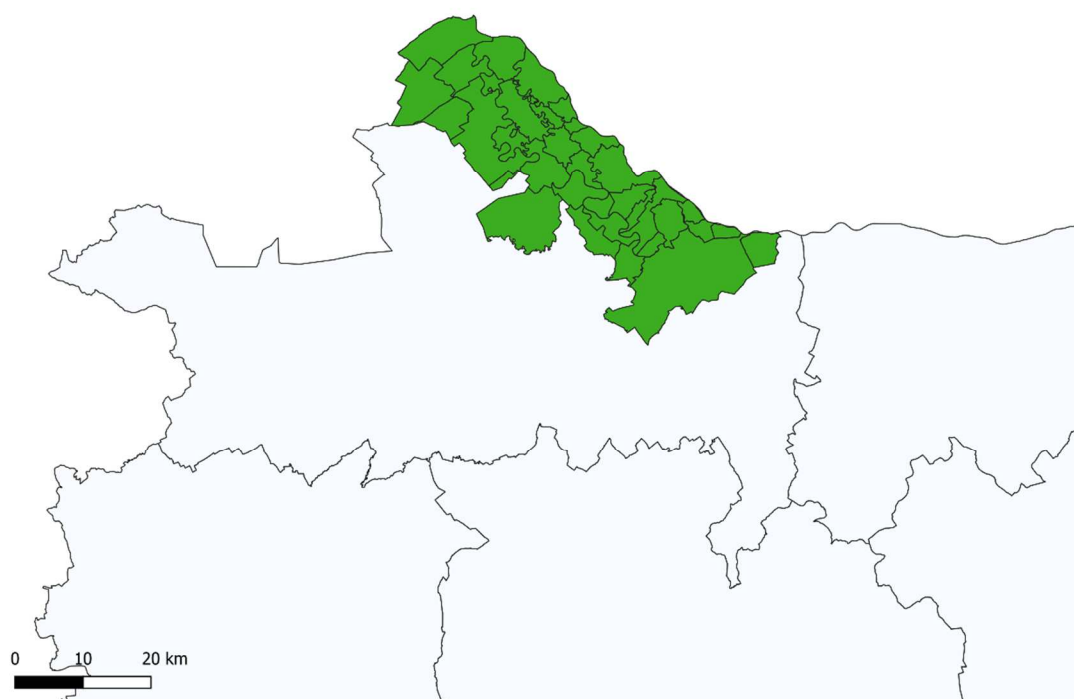
population migrants moving out of their hometown or closer to their workplace, contributing to population growth in the targeted municipalities (KSH, 2014). Hence, the higher proportion of the active population also underlines the importance of investigating the economic development opportunities in the region.

DATA AND METHODS

Territorial delimitation

Territorial delimitation constitutes the first step of the analysis. The study's main focus is on Szigetköz on the Hungarian side of the Old Danube and Csallóköz on the Slovakian side. 25 municipalities were selected in Szigetköz: Ásványráró, Darnózseli, Dunakiliti, Dunaremete, Dunaszeg, Dunaszentpál, Dunasziget, Feketeerdő, Győr, Győrladamér, Győrújfalú, Győrzámoly, Halászi, Hédervár, Kimle, Kisbajcs, Kisbodak, Lipót, Máriakálnok, Mecsér, Mosonmagyaróvár, Nagybajcs, Püski, Vámoszabadi and Vének, and four municipalities in Csallóköz in Slovakia: Čiližská Radvaň, Šamorín, Dunajská Streda and Gabčíkovo (Fig. 2).

Figure 2 The administrative boundaries of Szigetköz municipalities



Source: Edited by the Authors and Zsófia Magyar based on TeIr base maps

Strategic document review

The first phase of the situation assessment comprises an in-depth analysis of strategic documents with relevant information on the Szigetköz–Csallóköz area. This information, as a "point of departure", provides the basis for further needs assessment analyses. This section explores the economic situation of selected municipalities of Szigetköz and Csallóköz, the employment figures of the population, the infrastructural investments realized, and the opportunities for cross-border collaborations and partnerships. The review of national and county strategic documents summarized in Tab. 1 was performed in the preparatory phase.

Table 1 National and county strategic documents used in the analysis

National Strategic Documents	<ol style="list-style-type: none"> 1. National Development 2030. National Development and Spatial Development Concept [Nemzeti Fejlesztés 2030. Országos Fejlesztési és Területfejlesztési Koncepció] 2. Hungarian Rural Development Program 2014-2020. [Magyar Vidékfejlesztési Program 2014-2020.] 3. National Environmental Program 2015-2020. Policy strategy [Nemzeti Környezetvédelmi Program 2015–2020. Szakpolitikai stratégia] (Földművelésügyi Minisztérium, 2015)
County Strategic Documents	<ol style="list-style-type: none"> 4. Győr-Moson-Sopron County Integrated Territorial Program 2014-2020. [Győr-Moson-Sopron Megyei Integrált Területi Program 2014-2020.] 5. Győr-Moson-Sopron County Regional Development Programme 2021-2027. [Győr-Moson-Sopron Megye Területfejlesztési Program 2021-2027.] 6. Győr-Moson-Sopron: a dynamic, innovative and homely county. Győr-Moson-Sopron County Spatial Development Programme [Győr-Moson-Sopron a dinamikus, innovatív és otthonos megye. Győr-Moson-Sopron megyei területfejlesztési program] (Universitas-Győr Nonprofit Kft., 2014.)
Other strategic documents relevant to the region	<ol style="list-style-type: none"> 7. Domestic implementation of the Water Framework Directive, River Basin Management Plan [A Víz Keretirányelv hazai megvalósítása, Vízyűjtő-gazdálkodási terv] (Vízügyi és Környezetvédelmi Központi Igazgatóság, Észak-dunántúli Környezetvédelmi és Vízügyi Igazgatóság, 2010.) 8. Major water management issues 1-1 Szigetköz river basin management planning sub-unit [Vízgazdálkodási stratégia (2020). Jelentős vízgazdálkodási kérdések 1-1 Szigetköz vízyűjtő-gazdálkodási tervezési alegység] 9. Szigetköz-Moson-Sík LEADER Association Local Development Strategy 2014-2020. [Szigetköz-Mosoni-Sík LEADER Egyesület Helyi Fejlesztési Stratégiája 2014-2020.] 10. The local tourism organisation, "TDM" strategy 2013-2020 of the Szigetköz Tourism Association [A Szigetköz Turizmusért Egyesület helyi turisztikai szervezeti, „TDM” stratégiája 2013-2020.] 11. Maintenance plan for the HUFH30004 Szigetköz High Nature Conservation Area (Fertő-Hanság National Park Directorate, 2014). [A HUFH30004 Szigetköz kiemelt jelentőségű természetmegőrzési terület fenntartási terve] (Fertő-Hanság Nemzeti Park Igazgatóság, 2014)

Source: Own compilation

In-depth Interviews

The second phase of the situation analysis comprises the needs assessment, during which in-depth interviews were conducted to monitor the opinions of municipal leaders and other economic stakeholders on potential economic development opportunities. The qualitative data collection and analysis were conducted, using the methodology of Kvale (2007) and Corbin & Strauss (2007). The in-depth interviews took place between 30 April 2021 and 15 May 2021. Out of the 32 municipal leaders contacted, 22 were willing to participate in the in-depth interviews as well as two municipal public (school) leaders, which indicates a 70% response rate. All 22 interviews aimed to explore and understand the respondents' knowledge, views, and opinions, but at the same time, it provided an opportunity for new, unexpected points, which is important with regards to the topic.

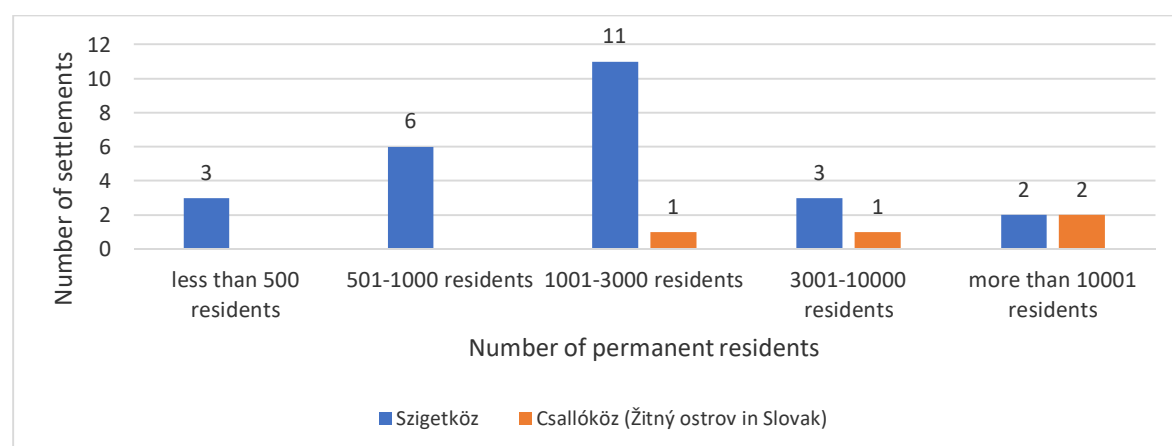
The municipalities and institutions involved are Darnózseli, Dunakiliti, Dunaszeg, Dunaszentpál, Dunasziget, Feketeerdő, Győr, Győrladamér, Győrladamér Primary School, Győrzámoly, Halászi, Kimle, Kisbodak, Lipót, Lipóti Primary School, Mecsér, Mosonmagyaróvár, Nagybajcs, Vámoszabadi in Hungary and Čiližská Radvaň, Šamorín, Dunajská Streda in Slovakia. Due to the situation triggered by the COVID-19 pandemic, only 7 individuals agreed to be interviewed in person, the rest of the interviews were realised online. The average length of an interview was 45 minutes and included 5 open questions. The added value of elaborate answers to in-depth interview questions was justified by the fact that “open-end questions allow interviewees to answer in their own words, and often reveal more about people's opinions. They are particularly useful in exploratory research.” (Kotler & Lane, 2012:104)

The following aspects were considered in the preparation of in-depth interviews: the evaluation of the socio-economic situation of each municipality, a review of development projects realised over the past ten years, as well as prospective developments impacting the socio-economic life of the municipality in the next 5 to 10 years. The willingness of municipalities to participate in cross-border economic cooperation and the identification of dormant opportunities contributing to the innovative and sustainable development of the Szigetköz–Csallóköz area were given special emphasis. Five open questions were posed during the interview, which is included in the annex. Our results were processed through text analysis.

RESULTS

The two study areas, Szigetköz and Csallóköz cover 25 and 4 settlements, respectively. Municipalities in Szigetköz are divided based on topographical boundaries into lower and upper Szigetköz municipalities, with Győr and Mosonmagyaróvár as their centers, the demarcation line stretching between Hédervár and Ásványráró. A developed industrial base characterises the two cities in the planning area, Győr (123,475 permanent residents) the county seat and Mosonmagyaróvár (32,316 permanent residents). Csallóköz also has two important economic hubs, Šamorín (12,801 permanent residents) and Dunajská Streda (23,044 permanent residents) alongside the small town of Gabčíkovo (5,232 permanent residents) and the small village of Čiližská Radvaň (1,175 permanent residents). Fig. 3 depicts the structural composition of the surveyed municipalities in terms of population. As demonstrated by Fig. 3, the region is characterised by the predominance of medium-sized settlements rather than small villages (Hungarian Statistical Office, 2021; Slovakian Statistical Office, 2021).

Figure 3 Structural composition of municipalities surveyed in the Szigetköz–Csallóköz area in terms of population



Source: Own compilation based on the Hungarian and Slovakian Statistical Office (2021)

Results of the analysis of strategic documents

The documentary analysis comprised a review of the national, county, and other strategic documents. According to our findings, while the national strategic documents contain no explicit reference to the Szigetköz–Csallóköz area (which is mentioned only in the context of Győr–Moson–Sopron county and Győr’s catchment area) and the environmental policy strategy highlights its central role only in the context of water management, the county strategic documents provide a detailed assessment of the conditions of Szigetköz and the adjacent Csallóköz. The strategic directions and development opportunities of the area appear to be well aligned to county-level strategic objectives and development directions (development of creative human resources, promotion of innovation, improved accessibility of the county and

its settlements, renewal of the environment, promotion of culture, amelioration of the quality of life, improved internal cohesion of the county and development of cross-border cooperation). The county documents put special emphasis on potential developments in the two urban centres (Győr and Mosonmagyaróvár) and the two adjoining districts. Tab. 2 provides a summary of recent development proposals for the study area for 2021, outlining economic, social and engineering development directions, with an emphasis on strengthening cooperations.

Table 2 Development opportunities of Győr-Moson-Sopron county based on the Győr-Moson-Sopron County Regional Development Programme 2021-2027.

Settlement network development opportunities	Catching-up of peripheral regions Strengthening cooperation Differentiated and targeted use of local and regional assets Strengthening linkages Inter-municipal cooperation Communication between urban centres and agglomerations
Social development opportunities	Promoting equal opportunities Human resources development Establishing and maintaining a universally accessible and well-functioning health and social care system
Economic development opportunities	Business infrastructure development Embracing digitalisation Development of SMEs Complex tourism development Food economy development Digitalisation Upgrading the innovation ecosystem
Technical development opportunities	Water management: closing the public utility gap - protection of groundwater resources, climate change adaptation, management of the Danube river bed subsidence Transport: development of motorway and trunk road networks, better access to municipalities, development of railway services, development of intermodality, development of water infrastructure

Source: own compilation based on the Győr-Moson-Sopron Megye Területfejlesztési Program 2021-2027. (2021, p. 258-269.)

The results of the analysis of other strategic documents relevant to the region underline the significance of water management in the Csallóköz–Szigetköz region, the involvement of various interest groups and the convergence between their conflicting viewpoints in the planning process of river basin management. The region is also a special area for nature conservation and the protection of birds, hence it is important to be mindful of these objectives as well. In this spirit, the local Szigetköz and Moson-Sík Association fixed the target of the development of local organisations, the promotion of networking and sustainability and local integrated economic development for the 2014-2020 period (Szigetköz-Mosoni-Sík LEADER Egyesület Helyi Fejlesztési Stratégiája 2014-2020.) and the local Szigetköz Tourism

Association aims to promote the Szigetköz as a tourist destination to reach the national average and catch up with its competitors and the national average.

Results of in-depth interviews

The first question targeted the socio-economic situation of the selected settlement and its specific role in the life of Szigetköz/Csallóköz. While the question allows for a great variety of responses due to the diversity of socio-economic situations and the regional position of the surveyed municipalities, some commonalities and basic trends can be detected. There was a general agreement among the responding municipalities about the uniqueness of their natural environment and their economic position that places them above the national average. The proximity of Győr and Bratislava, as well as the nearby international road and rail links, all have a positive labour market impact for people living in the area. Among the economic sectors, tourism is also a significant force in the region as an income-generating and job-creating economic sector. This positive tendency is mainly concentrated in the lower inter-island settlements around Győr, while tourism is more typical of smaller settlements, usually located on the banks, branches and canals of the Danube (e.g. Kisbodak, Dunasziget). None of the settlements showed any evidence of a downward trend in their population, and a massive influx of new residents was recorded in larger cities' (Győr, Mosonmagyaróvár, Bratislava) and their conurbations (lower Szigetköz settlements, Feketeerdő, Dunakiliti, Rajka, etc.). The number of holiday homes and holiday cottages is on the rise, as a powerful indicator of the area's touristic attractiveness. Traditional farming activities, such as agriculture, fishing and forestry are in decline in both Szigetköz and Csallóköz, mostly practised by local 'indigenous' people, or occasionally in rural and ecotourism destinations as a part of tourist attractions. Municipal leaders unanimously agreed on the need to develop tourism and related infrastructure, as the sector is lagging behind the national average in this area in both regions, and the Szigetköz municipalities in particular (Lack of catering and accommodation facilities).

While the dominant touristic activities are cycling and summer water tourism, settlements are experiencing severe infrastructure deficiencies in both. More attention should be paid to the connection and integration of the various tourism sectors, a process still in its infancy in Szigetköz and Csallóköz. The main tourist destinations of the region include the touristic attractions of riverbank settlements, Győr and Lipót on the Hungarian side, and Šamorín and Dunajská Streda on the Slovak side (thermal baths, wellness centres e.g. xBionic Hotel and

Wellness Center). Several municipalities mentioned the need for the comprehensive and innovative development of Szigetköz, as well as promoting territorial cooperation. They also mentioned the importance of creating a possible “Szigetköz brand” similar to the Slovakian Kukkonía brand, which is a great example of how local products and services can be effectively represented and marketed through local cooperation and the involvement of local economic actors, e.g. in Slovakia, MOL petrol stations offer Kukkonía brand products in the region. The Kukkonía brand was created by the Kukkonía civic association in Dunaszerdahely, which is also a member of the local TDM. Being attentive to synergies and trends and strengthening the TDM organisation are highly recommended.

Győr, despite being the major population and economic centre of the region, exerts a modest impact on the socio-economic life of Szigetköz. The settlements of Szigetköz and the county seat are weakly connected, which is a significant barrier to infrastructural developments. Mosonmagyaróvár and Lipót in the Szigetköz area, and Šamorín and Dunajská Streda in the Csallóköz area have identified themselves as central settlements besides Győr. The size of Csallóköz naturally explains the “need” for a greater number of settlements with central functions, and the spatial structural specifics of southern Slovakia justifies the “demand” for urban centres in Csallóköz, a predominantly rural area. Due to its smaller size, dense settlement network, and proximity to major urban centers, Szigetköz shows the features of a peri-urban area or a conurbation rather than a region with predominantly rural characteristics. According to a tourism expert from Dunajská Streda, the settlements of Csallóköz are “split” in two, the western part is a dynamically developing area with agglomeration characteristics, due to its proximity to Bratislava and denser urban network, while the eastern part is a backward, rural-type area with a scarcity of urban centres and a regional centre, Komárom, whose urban functions have a weak impact on the region’s socio-economic development.

The second interview question targeted the developments undertaken by the municipalities in the post-2010 period and the type of funding resources used. It also aimed to detect any non-realised developments in this period and their underlying causes. This latter helped us to identify latent gaps that could be incorporated into the proposals later on. The answers confirm the realisation of developments by the settlements of both Szigetköz and Csallóköz, implying large-scale investments in some cases. The majority of the settlements have mentioned the renovation of public institutions (kindergartens, primary schools, health centres) and the upgrading of the road network and public infrastructure. The objectives defined in district operational programmes for 2014-2020 and the priorities of the LEADER association have been

partially met. Institutional reconstructions were emphasised at the expense of tourism infrastructure, whose development would have been crucial in the case of both the Szigetköz and Csallóköz settlements. The realised infrastructural investments mainly target cycling and water tourism, i.e. the development of regional cycle routes and related services, the catering sector, riverboat harbours and campsites and accommodation facilities. Large-scale tourism destination development was realised in the spa area of the municipality of Lipót, and a major economic development project was realised within the Lipót Bakery. In the case of lower Szigetköz settlements, the main problem is the highway that traverses them, which, besides increasing the risk of accidents, also deteriorates the condition of local roads and air quality in the settlements. For many municipalities (e.g. Győrzámoly, Győrladamér, Dunaszeg), the poor condition of roads and pavements is a major problem, and these have not always been improved over the last ten years. The condition of roads also impacts the local economy by facilitating or hindering the access of local small and medium-sized enterprises to national and international road networks. Hence, road network development constitutes a major priority for economic development.

As regards individual development interventions, the four cities included in the survey (Győr, Mosonmagyaróvár, Šamorín, Dunajská Streda) were given separate treatment due to their size, population and settlement hierarchical status distinguishing them among other settlements of the region. Since 2010, these cities have witnessed large-scale economic and urban development interventions, connected mostly to national or international location decisions and transport infrastructure developments, and less to bottom-up regional processes. The specific situation of Győr in the region is highlighted as a beneficiary of the Modern Cities Programme launched recently by the Hungarian government. The programme contributed to the realisation of large-scale development projects in Győr (e.g. a new outdoor bath, large-scale development of the zoo as a strategic tourism attraction, and transport infrastructure investments), strengthening its nodal position within the region. The programme also targeted the construction of a new 2×1 lane, approximately 12 km long road to relieve the existing motorway, between Győr and Dunaszerdahely, which would connect the two cities but also the Szigetköz and Csallóköz regions (Fekete, 2018; 2021). Széchenyi István University is a major regional bridging institution, which, in addition to its central campus in Győr, operates a faculty in Mosonmagyaróvár, thus establishing its presence at two major "entry points" of the Szigetköz. The current Győr-based research also benefits from collaboration with researchers from Mosonmagyaróvár mostly engaged in agricultural research. The recently renovated castle

in Mosonmagyaróvár, which is home to the university's Faculty of Agriculture, has already demonstrated its capacity to host large-scale scientific and project events focusing on the region.

The implemented development projects drew on a variety of funding sources, including government and EU funds, and their contributions as well. A major tendency of the last few years is the increasing role of government funds in municipal development projects running mainly under the Hungarian Village Programme.

In addition to the aforementioned infrastructural deficiencies, the failure to realize various economic development investments and the delay of public catering subsidies are serious causes for concern.

The third question enquired about future development needs in a 1, 5, and 10-year timespan. This could be regarded as the key aspect of economic development interventions, providing a basis for desirable visions of the future. Most municipalities seek to obtain funding to develop their deficient tourism infrastructure and to improve the state and supply of roads in the next 5-10 years. Interestingly, some settlements of Szigetköz - mainly in the conurbation of Győr and Mosonmagyaróvár - see the extension of villages, the construction of new streets and new housing as a pressing task to counter the ongoing, increasingly unmanageable suburbanisation processes that may violate settlement image regulations and land-use plans. Almost all municipalities regard the poor condition of roads and the deficiencies of vital infrastructure as increasingly problematic, and accord a top priority to their development and modernization. In addition, further institutional reconstruction works and the building of new community centres and public squares are envisaged, but on a more modest scale than in the case of the former development priorities. The studied cities constitute an obvious exception, due to the availability of a wider range of opportunities and resources for future development activities than in the case of the rest of the settlements. Győr as the region's major economic hub accords a key priority to the development and modernization of its tourism destination in the coming years as well. In contrast to the eco- and sports tourism profile of Szigetköz and Csallóköz, Győr focuses on the development of cultural and sacred tourism and the exploitation of destination advantages connected to its industrial heritage. These types of developments will feature among the main priorities of urban development in the next 5 to 10 years.

The next question sought to explore the engagement of Szigetköz and Csallóköz municipalities in various (local, regional and cross-border) types of economic cooperation. This issue deserves special emphasis due to the growing importance of territorial cooperation and collaboration, and the fundamental role that territorial networks and synergies play in the

efficient use of resources. Cooperation raises the efficiency of bottom-up development, which is a major cornerstone of the EU policy framework. Mapping cross-border relations is a crucial element of collaborations in Szigetköz and Csallóköz, as the two regions are "twin islands" of the Danube, forming a coherent entity in terms of their natural geography and social development, yet attached to different countries as a result of historical events. The EU's Schengen Agreement allows for the interoperability of borders and its policy prioritises the development and strengthening of cross-border cooperation. Its significance for the research lies in the fact that it facilitates the complex development of a unique landscape by two different countries. On a national scale, Szigetköz is regarded as a Hungarian territory that shows an excessive reliance on cross-border cooperation due to the loss of its natural catchment area and its neighbouring region.

While almost all of the responding municipalities are involved in cross-border cooperation, the economic intensity of ties shows considerable variation. The great majority of Szigetköz municipalities participate in the activities of Arrabona EGTC, which is the main facilitator of cross-border cooperation in the region. The responding municipalities in Csallóköz are also involved in collaborative development projects of Arrabona EGTC, and several civil and religious organisations have created similar partnerships in recent years (e.g. the Somorja Benedictine Priory in Győr). Besides the intensity of cooperation, it is worth noting that the strength and intensity of twinning relations in the region have declined in recent years. The involved municipalities should place greater emphasis on strengthening and "reinvigorating" these ties, which could serve as the backbone of cross-border civil and non-profit partnerships.

Overall, while the municipalities of Szigetköz and Csallóköz are involved in cross-border economic cooperation, the intensity of cooperation varies from settlement to settlement. Larger municipalities are generally more capable of developing efficient economic cooperation, whose major engine is Győr on the Hungarian side and Dunajská Streda on the Slovak side. In the area of cooperation, the cities emphasised the renewal and development of local cultural spaces, such as the restoration of the refectory of the Benedictine Priory in Győr and the renovation of the Paulus House in Šamorín. Strengthening cross-border economic ties is a key priority for the next 5-10 years, as both sides of the border are constituted by areas dominated by small settlements, whose development is conditioned by the successful and efficient allocation of EU and government funds. In the case of small municipalities, this necessitates the strengthening of cooperation and synergies.

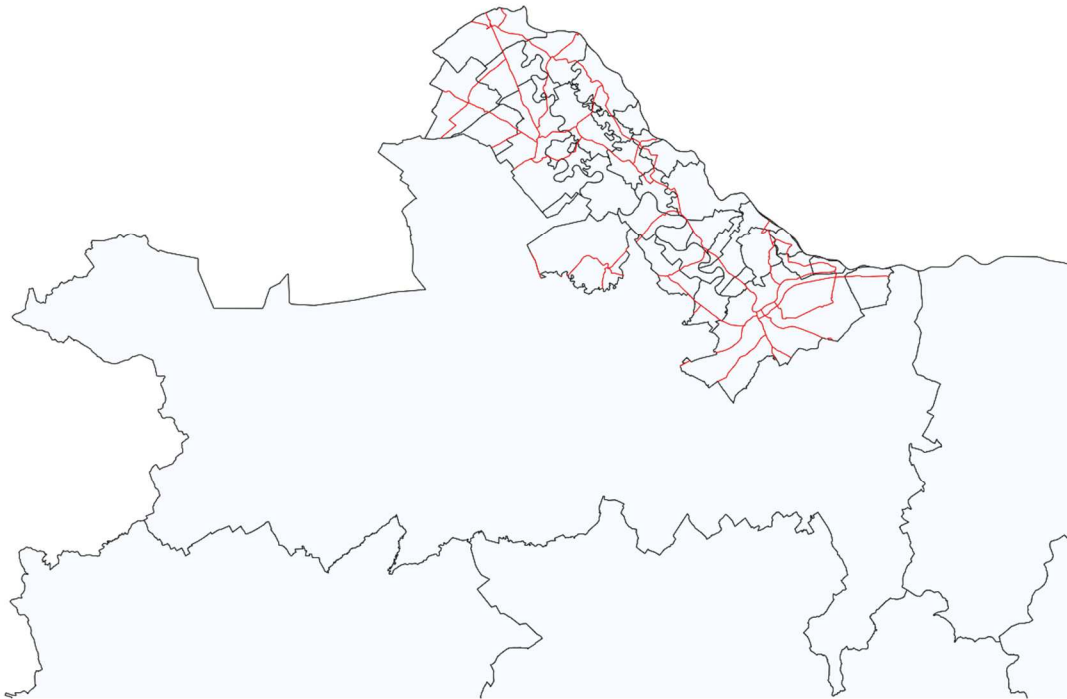
The fifth and final question targeted untapped and underutilised regional economic assets promoting the innovative and sustainable development of Szigetköz and Csallóköz. This relies on the identification of latent assets as a key component of regional planning and economic development interventions.

The great majority of municipal leaders, and those in Szigetköz in particular, emphasised latent opportunities or “inefficiently” functioning assets connected to their touristic potential. This points to the underdeveloped or low-standard tourism infrastructure of Szigetköz (Fig.4), which constitutes the main area of intervention in the coming years. Municipal leaders would put more focus on the revival of water tourism, facilitated by the planned water level regulation. Preference would be given to the use of small pleasure boats and kayaks and canoes, rather than larger and faster water equipment.

The development interventions should include – following the example of Slovakia – the construction of a cycle path along the Old Danube embankment, between Dunakiliti and Gönyű (Fig. 5). This would be a key infrastructure element for boosting cycling tourism in Szigetköz. Many of our interviewees agreed on the need to open up the Szigetköz branch system for tourists, especially for the organisation of rowing contests and boat cruises. They would also contribute to the re-utilisation of latent touristic assets, such as the Hédervár Castle, which requires clarifying ownership of these facilities and obtaining the necessary funding. These tourist attractions should form a network with cycling and water tourism, providing easier access for a wide range of catering businesses and services, and thus increasing the area's income-generating capacity and economic potential.

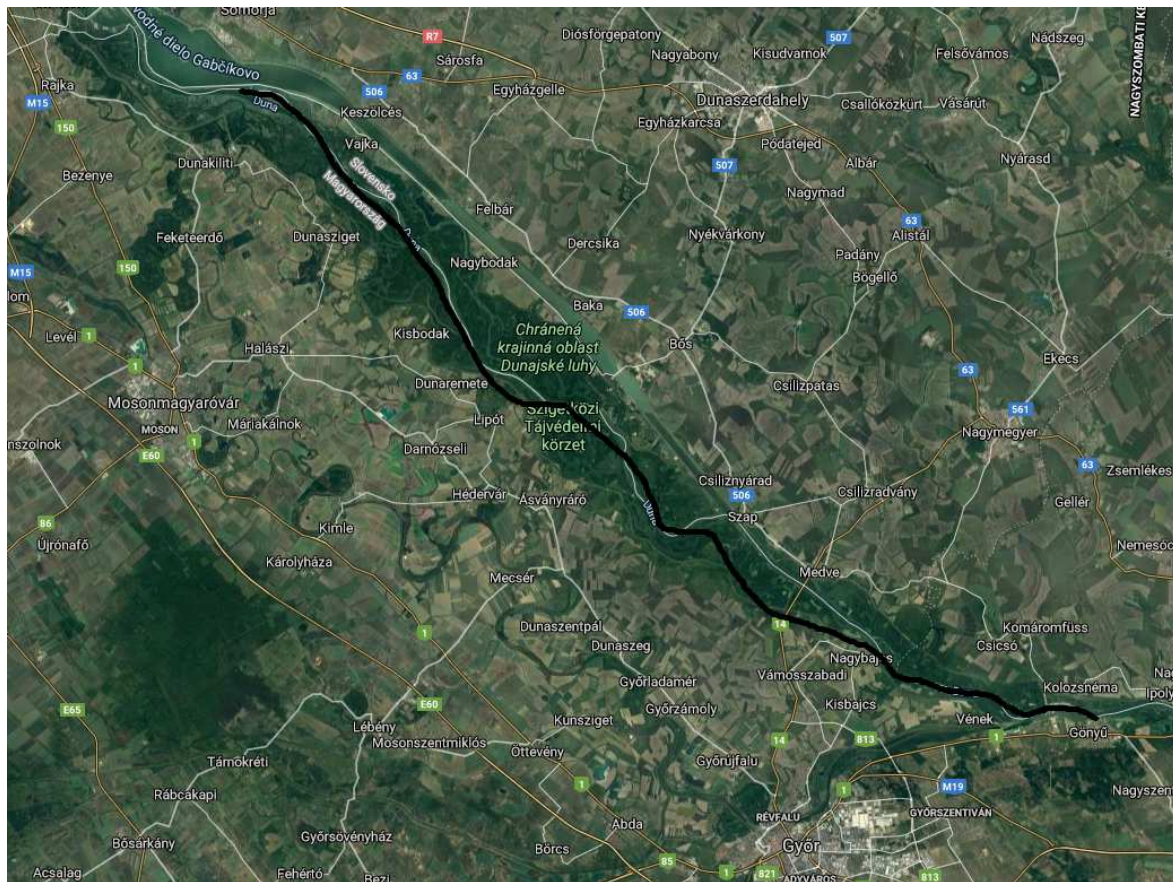
Improving the organisation of ecotourism, and making previously closed areas accessible to visitors, such as floodplain forests and backwaters would enable a more efficient promotion of natural assets. This is presently hampered by the complex ownership of different areas, and the interests and priorities of nature conservation should also be considered. Raising the water level of the Moson-Danube is a key prerequisite to the realisation of the aforementioned touristic developments since the uniqueness of Szigetköz relies on the density of its water network and branches.

Figure 4 The existing cycle route network of Szigetköz



Source: Edited by the authors and Zsófia Magyar based on TeIr base maps

Figure 5 Route of the planned Dunakiliti - Gönyű cycle route on the Danube embankment



Source: Own compilation based on google. maps.

Various elements of the basic infrastructure for cycling and water tourism are more developed in Csallóköz. The lack of adequate tourist accommodation capacity is more problematic for the region. Although there is a demand for infrastructural investments, the proximity of Bratislava as a major factor of development has already raised its standard over recent years.

As indicated by the results of our analyses, despite the heterogeneous situation and position of the settlements of Szigetköz and Csallóköz, they invariably benefit from a favourable socio-economic environment, manifest in positive labour market indicators, moderate population loss and an abundance of economic opportunities. A large number of municipalities are located in the conurbation of larger cities, showing signs of urbanisation and the characteristic traits of commuter towns (increased traffic, different use of services). As regards developments, the majority of targets fixed under the 2014-20 EU programming cycle have been achieved by the municipalities, mostly comprising the renovation of institutions and public spaces. These were financed from EU, governmental and own resources of municipalities.

DISCUSSION

The region has witnessed unprecedented positive processes in the post-1980 period, reigniting hope that stable and predictable water levels that enable touristic exploitation and the preservation of natural values would finally be achieved in areas hitherto menaced by drainage and extreme water levels. The technical investments, in addition to their anticipated positive impacts in terms of nature conservation and water management, will reinvigorate the economy and tourism sector of settlements in the vicinity of the Old Danube's branches.

Based on the results of our in-depth interviews, the greatest deficiencies according to municipal mayors and institutional leaders are found in the state of local tourism and the related facilities and infrastructure. This is an important finding since the Szigetköz and Csallóköz municipalities rely on tourism and related services as the main pillars of local economic development. Tourism is a key driving force in the life of Szigetköz and a key priority of economic development interventions. These may include water tourism-related investments, such as the construction of new ports, the development of water tourism infrastructure, the amelioration of gastronomic offer, the building of a new visitor centre or the development of a unique brand for the municipalities to improve the international visibility of the Szigetköz–Csallóköz area. The area has also witnessed the emergence of cooperation projects aimed, for instance, at preserving and cultivating local traditions, building partnerships between local

farmers, developing a joint damage warning system, or strengthening collaboration among local SMEs.

Another key priority is to improve the condition of roads, identified as a problem area by all of the municipalities. This is a crucial prerequisite to the emergence and operation of SMEs, the main drivers of local economic development. The construction of a new 2×1 lane, about a 12 km long road diverting traffic from the current road is highly significant for the lower Szigetköz area. The planned road, bypassing Dunaszeg, Györladamér, Győrzámoly and Győrújfalú would link Szigetköz settlements to the main road 14 connecting Slovakia and Hungary at the Sztádsomb housing estate in Vámoszabadi. As pointed out by Jóna et al. (2021), the construction of the bypass would improve the viability of settlements, allow for the vehicle load to be distributed and spread, and render the traffic impact between Szigetköz-Győr-Csallóköz more predictable. Not to mention the construction of a much larger-scale highway connecting Győr to Dunaszerdahely and eastern Szigetköz to Csallóköz, which would ensure fast and safe transport between the two regions.

CONCLUSION

The objective of the paper was to explore the latent resources of the Hungarian-Slovakian cross-border area of Szigetköz-Csallóköz, a region particularly rich in unique natural assets. It highlights economic development opportunities whose exploitation would enable municipalities in the region to safeguard and ameliorate their favourable socio-economic environment, positive labour market indicators and modest demographic decline. Since a large number of municipalities are located in the conurbation of larger cities, the effects of urbanisation and the residential economy (increased traffic, diversification of services) are increasingly felt, which poses significant challenges for municipal leaders. Despite the successful realisation of the majority of targets of the 2014-20 EU programming cycle – comprising mostly renovation of institutions and public spaces – by the municipalities, a key objective of the 2021-2027 cycle is to strengthen regional tourism and related services as the main pillars of local economic development.

As a result of the research based on the analysis of strategic documents and in-depth interviews with municipal leaders, the following recommendations were made in the area of tourism and infrastructural development. The uniqueness of Szigetköz stems from its dense water and branch network, however, making previously closed areas accessible to visitors, such as floodplain forests and backwaters would enable a better promotion of its natural assets whilst

boosting ecotourism, water and sports tourism (rowing, e.g. boat, kayak, canoe and stand up paddle tours). Besides natural assets, the refunctionalisation and repositioning of cultural and touristic resources (e.g. the Hédervár Castle), notably through more efficient linkages and networks, would connect a wide range of local catering businesses and services to active tourism (cycling and water tourism), contributing to the region's income-generating capacity and economic potential.

Similar to the Kukkonía brand the creation of a unique Szigetköz "brand" would largely contribute to these objectives. The "Kukkonía, our golden garden" brand established in recent years in the neighboring Csallóköz is an illustrative example of both qualitative and destination development. There is an urgent need to address the poor condition of roads, regarded as problematic by all of the municipalities. This is also a prerequisite for the emergence and operation of SMEs as the main drivers of local economic development. The construction of a cycle path – following the example of Slovakia – along the Old Danube embankment, between Dunakiliti and Gönyű would boost cycling tourism in Szigetköz. In conclusion, the study has demonstrated the existence of latent regional resources in the tourism sector, and in the Szigetköz area in particular, whose exploitation and development constitutes a key priority for the coming years, and will increasingly rely on the efforts of municipalities to advance regional cooperation and synergies.

Acknowledgment

This research was funded by the KEHOP-1.1.0-15-2021-00013 research program titled "Insula Magna – Complex Water Management and Sustainable Development Program."

REFERENCES

- A Szigetköz Turizmusért Egyesület helyi turisztikai szervezeti, „TDM” stratégiája 2013-2020. [The local tourism organisation, "TDM" strategy 2013-2020 of the Szigetköz Tourism Association] Retrieved from http://mosonmagyaróvár.hu/websites/www.mosonmagyaróvár.hu/files/Hivatalos_Ugyek/Dokumentumtar/A_Szigetkoz_Turizmusert_Egyesulet_TDM_strategiaja.pdf (accessed April 15, 2021.)
- Antalík, I. (2017). A vállalkozói versenyképességet alakító szlovák-magyar határ menti térségben mutató jelenségek. A SJE Nemzetközi Tudományos Konferenciája „Érték, minőség és versenyképesség – a 21. század kihívásai [Factors shaping entrepreneurial competitiveness in the Slovakian-Hungarian border region. SJE International Scientific Conference "Value, Quality and Competitiveness - Challenges for the 21st Century"] – Komárom, 2017, 12–13 September.
- Baranyai, O., Baranyai, G. (2017). From natural flood basin to cultural landscape- The Szigetköz protected area (Hungary) », *Dynamiques environnementales*, 35, 112-123. DOI: 10.4000/dynenviron.1170

- Baranyi, B. (2007). *A határmentiség dimenziói [The dimensions of border situation]*. 2. jav., bőv. kiad. Budapest–Pécs, Dialóg Campus Kiadó. 318 p.
- Baranyi, B. (2014). Additives for the reinterpretation of cross-border character in Hungary. *Deturope: Central European Journal of Tourism and Regional Development*, 6(2), 26–45.
- Blackwood, A. (2019). *The Willows. Weird Classics*. Lulu.com Publisher, Morrisville, United States
- Corbin, J., & Strauss, A. (2007). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.
- Deets, S. (2009). Constituting Interests and Identities in a Two-Level Game: Understanding the Gabčíkovo-Nagymaros Dam Conflict, *Foreign Policy Analysis*, 5(1), 37–56, DOI: 10.1111/j.1743-8594.2008.00082.x
- Egedy, T. (2017). A külföldre ingázás statisztikai, demográfiai és területi jellemzői Magyarországon. [Statistical, Demographic and Spatial Characteristics of Cross-Border Commuting in Hungary] *Területi Statisztika*, 57(4), 385–405. DOI: 10.15196/TS570403
- Fekete, D. (2018). Győri fejlesztések a Modern Városok Program keretében. [Development projects of the Modern Cities Program in Győr] *Területi Statisztika*, 58(6), 638–658. DOI: 10.15196/TS580605
- Fekete, D. (2021). A new planning instrument for urban development in Hungary: The modern cities program. *Regional Science Policy & Practice*. Paper: early view. DOI: 10.1111/rsp3.12422
- Fertő-Hanság Nemzeti Park Igazgatóság (2014). A HUFH30004 Szigetköz kiemelt jelentőségű természetmegőrzési terület fenntartási terve [Fertő-Hanság National Park Directorate (2014). Maintenance plan for the HUFH30004 Szigetköz High Nature Conservation Area]. Retrieved from https://www.ferto-hansag.hu/upload/document/283/hufh30004-fenntartasi-terv_2014_web_9q14.pdf (accessed April 16, 2021.)
- Fitzmaurice, J. (1998). *Damming the Danube: Gabčíkovo and Post-Communist Politics in Europe* (1st ed.). Routledge. DOI: 10.4324/9780429501128
- Földművelésügyi Minisztérium (2015). Nemzeti Környezetvédelmi Program 2015–2020. Szakpolitikai stratégia [National Environmental Program 2015–2020. Policy strategy]. *Magyar Közlöny*, 83. szám. 7690–7887.
- Győr-Moson-Sopron Megye Területfejlesztési Program 2021–2027. [Győr-Moson-Sopron County Regional Development Programme 2021–2027] Retrieved from https://www.gymsmo.hu/data/files/2021/teruletfejlesztes_anyagok/GYMSM_2021_HF_4.0_20210524.pdf (accessed July 13, 2021.)
- Győr-Moson-Sopron Megyei Integrált Területi Program 2014–2020. [Győr-Moson-Sopron County Integrated Territorial Program 2014–2020] Retrieved from https://www.gymsmo.hu/data/files/teruletfejlesztes/teruletfejlesztesi_program_2015/itp_3_1_gyms_2015_08.pdf (accessed April 15, 2021.)
- Hajdú, Z. (2000). A határon átnyúló együttműködés potenciális lehetőségei Magyarország EU-csatlakozása után [Potential cross-border cooperation opportunities in post-EU accession Hungary]. In: *A régiók szerepe a bővülő Európai Unióban*. Szerk.: Horváth Gy. Pécs, MTA Regionális Kutatások Központja. pp.163–173.
- Hakszer, R. (2017). „A 2007–2013-as Magyarország–Szlovákia Határon Átnyúló Együttműködési Program regionális aspektusai, megvalósításának tapasztalatai”. [Hungary-Slovakia Cross-border Co-operation Programme 2007–2013 – regional aspects and implementation experience] *Tér és Társadalom*, 31(1), 107–123. DOI: 10.17649/TET.31.1.2791
- Hardi, T. (2012). *Duna-stratégia és területi fejlődés: a folyó lehetséges szerepe a régió területi fejlődésében*. [Danube Strategy and territorial development: the river’s potential role in

- the territorial development of the region]. Akadémia Kiadó, Budapest. DOI: 10.1556/9789630598064
- Hardi, T. (ed.) (2008). *Transborder Movements and Relations in the Slovakian-Hungarian Border Regions*. Centre for Regional Studies of HAS, Pécs.
- Hardi, T., Hajdú, Z., & Mezei, I. (2009). *Határok és városok a Kárpát-medencében [Borders and towns in the Carpathian Basin]*. MTA Regionális Kutatások Központja, Győr-Pécs, ISBN: 978-963-9899-08-7
- Hardi, T., Kupi, M., Ocskay, G., & Szemerédi, E. (2021). Examining Cross-Border Cultural Tourism as an Indicator of Territorial Integration across the Slovak–Hungarian Border. *Sustainability*, 13, 7225. DOI: 10.3390/su13137225
- Horváth, G. (2002): Régiók Magyarországa [Hungary of regions]. In: Enyedi, Gy, - Horváth, G. (szerk.): *Táj, település, régió*. Budapest MTA Társadalomkutató Központ – Kossuth Kiadó, pp. 393-459.
- Hungarian Statistic Office (2021). Magyarország állandó lakossága 2021. január 1-jén. [Permanent population of Hungary on 1 January 2021.] Retrieved from <https://www.nyilvantarto.hu> (accessed Mai 12, 2021.)
- Jóna, L., Henézi D. S., Döbrentei, B., & Gaál, B. (2021). A Szigetköz közlekedési kihívásai [Transport challenges of Szigetköz]. Horváth B; Horváth G. (szerk.) XI. Nemzetközi Közlekedéstudományi Konferencia: „Közlekedés a Járvány után: folytatás vagy újrakezdés” [Transport after the epidemic: continuation or a new beginning]. Győr: Széchenyi István Egyetem, pp. 210-221. <http://hdl.handle.net/11155/2454>
- József, A. (2013). “By the Danube.” Trans. Peter Zollman. In *Inspired by Hungarian poetry: British Poets in Conversation with Attila József*. Ed. Gyöngy Végh. London: Balassi Institute.
- Karácsony, P., Vinichenko, M. V., Antalík, I., Dávid, L. D., & Vasa, L. (2021). Analysis of cross-border commuters’s spatial mobility between western regions of Hungary and Slovakia, *Geographia Technica*, 16(1), 128-140.
- Kaszás, N., Birkner, Z., Németh, K., & Kovács, T. (2016b). Hasonlóságok és különbségek a pályázati projektek sikerében – Az Ausztria-Magyarország határon átnyúló együttműködési program sikervizsgálata. [Similarities and differences in the success of the tender projects – the success analysis of the projects implemented in the Austria-Hungary cross-border program] *Deturope: The Central European Journal of Regional Development and Tourism*, 8(1), 61-77.
- Kaszás, N., Péter, E., Keller, K., & Kovács, T. (2016a). Boundless opportunities with definite limitations. *Deturope: Central European Journal of Tourism and Regional Development*, 8(1), 5-20.
- Kotler, P., Lane, K. (2012). *Marketing Management*, 14th Edition. Pearson Education Inc., New Jersey, USA Retrieved from http://eprints.stiperdharmawacana.ac.id/24/1/%5BPhillip_Kotler%5D_Marketing_Management_14th_Edition%28BookFi%29.pdf (accessed Mai 12. 2021)
- KSH (2014). Magyarország településhálózata 1. Agglomerációk, településegységek [Agglomerations, clusters of settlements]. ISBN 978-963-235-460-6, Retrieved from https://www.ksh.hu/docs/hun/xftp/idoszaki/mo_telepuleshalozata/agglomeracio.pdf (accessed Mai 12, 2021.)
- Kvale, S. (2007). *Doing interviews*. Los Angeles: Sage Publications Ltd. DOI: 10.4135/9781849208963
- Letenyei, L., & Morauszki, A. (2019). *What's on the other side of the river? Slovaks’ mental maps on Hungary and vice versa. Experiences of a cross-border study*. In: Changes in the Representation of a Borderscape. Central European Service for Cross-Border Initiatives, Budapest, pp. 235-262. ISBN 9786158126502

- Magyar Vidékfejlesztési Program 2014-2020 [Hungarian Rural Development Program 2014-2020]. 1.0. Retrieved from <https://www.palyazat.gov.hu/node/56582#> (accessed April 15, 2021.)
- TeIr (2021). TeIr base maps Retrieved from <https://www.teir.hu> (accessed March 12th, 2021.)
- Nagy, Z. (2014). Egy konfliktus konstrukciói. Térértelmezések Bős kapcsán. [Constructs of a conflict. Spatial interpretations of the Bős case] *Tér és társadalom*, 28(1), 62-83.
- Nemzeti Fejlesztés 2030. Országos Fejlesztési és Területfejlesztési Koncepció [National Development 2030. National Development and Spatial Development Concept]. (2014). *Magyar Közlöny*, Vol 1. 10-293.
- Ocskay, G., & Hardi, T. (2021). Határon átnyúló kultúrgazdaság integrált fejlesztése a magyar-szlovák határon. [Integrated development of cultural economy at the Hungarian-Slovak border] *Geographical Review*, 145(2), 154-169. DOI: 10.32643/fk.145.2.5
- Pawera, R., & Bott Domonkos, L. (2020). Cross-border Suburbanisation of Bratislava. CER Comparative European Research 2020. Retrieved from https://www.researchgate.net/profile/Zuzana-Hubinska/publication/350099766_PRACTICAL_USE_OF_INNOVATIVE_DIDACTIC_TOOLS_IN_DANCE_EDUCATION/links/6050d93e92851cd8ce482044/PRACTICAL-USE-OF-INNOVATIVE-DIDACTIC-TOOLS-IN-DANCE-EDUCATION.pdf#page=60 (accessed July 29, 2021.)
- Péti, M., & Szaloky-Hoffmann, C. (2016). Geostrategic context of networking of national communities in territorial cooperation programmes of the EU. *Deturope: The Central European Journal of Regional Development and Tourism*, 8(3), 156-169. DOI: 10.32725/det.2016.028
- Rác, S. (2017). Main characteristics of Hungarian-Croatian political relations and Cross-Border Co-operations. *Geographica Pannonica*, 21(1), 54–67. DOI: 10.18421/GP21.01-0
- Raisz, A., & Szilágyi, J. E. (2017). Cross border issues of the Hungarian water resources. *Rivista Quadrimestrale di Diritto Dell'Ambiente*, 7(1), 73-98.
- Reynolds, D. A. J. (2020). Let the River Flow: Fighting a Dam in Communist Hungary. *Hungarian Cultural Studies. e-Journal of the American Hungarian Educators Association*, Volume 13. 111-131. DOI: 10.5195/ahae.2020.391
- Slovak Statistic Office (2021). Trnavský kraj - Characteristic of the region. Retrieved from <https://slovak.statistics.sk/wps/wcm/connect/obsah-en/static-content/temy/regionalna-statistika/trnava/charakteristika-kraja/ff6448fd-9fc1-42fa-8df2-74a0f04c6632> (accessed May, 12, 2021.)
- Szigetköz-Mosoni-Sík LEADER Egyesület Helyi Fejlesztési Stratégiája 2014-2020 [Szigetköz-Moson-Sík LEADER Association Local Development Strategy 2014-2020]. Retrieved from https://www.gymsmo.hu/data/files/teruletfejlesztes/2014_2020_tajekoztato_anyagok/2016_04_15_hfs_szigetkoz_mosoni_sik_leader_egyesulet_2014_2020.pdf (accessed March 17, 2021.)
- Szörényiné Kukorelli, I. (1997). Egy kistérség sikerének titka – avagy tettek és tervek a Nyugati-Kapu Térségfejlesztési Társulás »házatáján« [Main Factors of Success of the „Nyugati-Kapu” Region: Plans and Actions for Development], *Tér és Társadalom*, 11(4), 25-43. DOI: 10.17649/TET.11.4.448.
- Szörényiné Kukorelli, I. (2001). Vidékkutatás előzményekkel és tényekkel. [Research of Rural Areas with Preliminaries and Facts] *Tér és Társadalom*, 15(2). 71-85. DOI: 10.17649/TET.15.2.803
- Universitas-Győr Nonprofit Kft. (2014). Győr-Moson-Sopron a dinamikus, innovatív és otthonos megye. Győr-Moson-Sopron megyei területfejlesztési program. [Győr-Moson-

- Sopron: a dynamic, innovative and homely county. Győr-Moson-Sopron County Spatial Development Programme] Retrieved from https://www.gymsmo.hu/data/files/teruletfejlesztes/teruletfejlesztesi_program_2014/gyms_megyei_tf_prg_2014_09.pdf (accessed April 15, 2021.)
- Vari, A. & Linnerooth-Bayer, J. (2010). A transborder environmental controversy on the Danube: The Gabčíkovo–Nagymaros dam system. In *Transboundary Risk Management* (pp. 169-196). Routledge
- Vízgazdálkodási stratégia, (2020). Jelentős vízgazdálkodási kérdések 1-1 Szigetköz vízgyűjtő-gazdálkodási tervezési alegység [Major water management issues 1-1 Szigetköz river basin management planning sub-unit]. Retrieved from http://vizeink.hu/wp-content/uploads/2020/04/1_1_Szigetkoz_JVK_2020_04_22.pdf (accessed March 17, 2021.)
- Vízügyi és Környezetvédelmi Központi Igazgatóság, Észak-dunántúli Környezetvédelmi és Vízügyi Igazgatóság (2010). A Víz Keretirányelv hazai megvalósítása, Vízgyűjtő-gazdálkodási terv [Domestic implementation of the Water Framework Directive, River Basin Management Plan]. Retrieved from http://www2.vizeink.hu/files3/1_6_Altal_er.pdf (accessed April 15, 2021.)

Appendix

Economic development opportunities related to in-depth interview questions

1. Please evaluate the current social/socio-economic situation of the settlement, what role it plays in the life of Szigetköz/Csallóköz.
2. Please describe the developments undertaken in the municipality since 2010.
 - ☐ What sources of funding have supported the realization of these developments?
 - ☐ Please describe in detail which planned development projects have not been implemented and on what grounds.
3. Please list the developments planned in the municipality in the next 1-5-10 years.
4. What type of local/Szigetköz/Csallóköz or cross-border economic cooperation is your municipality involved in? Please elaborate!
5. Please identify the potential, unexploited or untapped opportunities in your region that you consider worth exploring and instrumental to the innovative and sustainable development of the local/Szigetköz/Csallóköz area.