

DEVELOPMENT OF WATER TOURISM – THE PROSPECTS OF THE HUNGARIAN TISZA RIVER BASIN

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Abstract. *One of the most prominent perspectives for the economic development of Eastern Hungary, more specifically the Tisza River basin, lies in water tourism on the river Tisza. In 2005, the author of the present paper was entrusted with the leadership of a work team with the assignment of assessing the state of water tourism on the Hungarian section of the Tisza and determining the direction of further development. Within the frameworks of this program, the Hungarian sections of several flowing waters such as the Tisza, Bodrog, Körös and Maros rivers were studied, under the collective name of the Tisza River basin, together with all potential target areas for water tourism along these rivers. The aim of the Tisza River Water Tourism Development Program, coordinated by the Hungarian National Tourist Office., was to become part of the National Tourism Development Strategy, which is part of the National Development Plan (2007–2013), and become eligible for national and EU funding for development projects.*

Key words: *research, development, water tourism, Tisza, Tisza River Water Tourism Development Program*

Introduction

The Tisza is the second largest river in Hungary, while the area closely connected to the river, the Tisza Valley, is one of the richest natural environments of the country (Fig.1). In spite of the intensifying human interference with nature, the Tisza Valley still retains many of the traditional characteristics of the lowlands, such as the tessellated scenery and the arrangement of forests, meadows, water habitats, cultivated land masses and settlements specific to this area only (Michalkó, 2003).

The drafters of the *Tisza River Water Tourism Development Program* were aiming at laying the basis of transforming the Tisza into a National Touristic Product, although not without having taken into consideration the most important circumstantial conditions going beyond the lobbyist power of tourism: upgrading the Tisza to an international waterway, creating a technical infrastructure that ensures a stable water level, exploiting the Vásárhelyi Plan for touristic goals (Dávid, 2004) or drafting a comprehensive Tisza Act.

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Fig.1. Tisza River basin district and the area of research
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1. Research methodology

Within the frameworks of the *Tisza River Water Tourism Development Program*, the Hungarian sections of flowing waters such as the Tisza, Bodrog, Körös and Maros rivers were studied under the collective name of the Tisza River basin, together with all potential target areas for water tourism along these rivers (at an average distance of 5-10 km).

The researchers made use of several methodological tools during their work. Also, secondary research was done to process the literature on the region and the specialty, to study the legal background applicable to water tourism, water management and water traffic, as well as to collect data of touristic supply on a national and regional level.

In the course of the field-work in the summer months of 2005, the whole Hungarian section of the river Tisza was surveyed, both from motorboat and from automobile, for a double perspective. The centerpiece of the survey

were the anchoring and docking possibilities, the conditions for orientation on the water, together with the assessment of the current state and accessibility of bridges, dams, havens and waterside service infrastructure, with respect to the distances covered at a comfortable pace with different vehicles in a day.

A complex market analysis was performed in the assessment phase by means of a direct mail action. The exact method was passing around questionnaires among the target groups and conducting deep interviews with personal involvement from the surveyors. The subjects of the inquiry were carefully chosen to cover all concerned parties: local governments, companies offering water tours, guests preferring traditional water tours and using small motorboats, shipmasters, providers, proprietors, as well as tourists who had spent at least 5 days in the area. As much as 1360 questionnaires were given out to guests who had spent at least 5 nights on the site. During the collection of data, the questioners sought out all the settlements that had a stake in water tourism and filled out the questionnaires themselves. During the drafting of the questionnaire, it was essential that the questions applied to potential target groups in respect of the concerned water tourism branches (employment conditions, qualification etc), the areas (settlements and regions), the justification of the decision and the circumstances of the stay (duration, cost and so on), the services employed and the individual expectations. The inquiry was conducted paralelly in the Tisza bank settlements over two weeks, excluding the effects of seasonal tourism on the research results. The research results have been processed in digital map files.

2. Situation analysis of water tourism in the Tisza River basin

2.1. Forms of water tourism

Water tourism is a collective name for pastime activities that are pursued on water, in the water, or next to a body of water (including any form of natural or artificial, living or stagnant water), and at some point the traveller resorts to at least one service on the spot that qualifies as income for the facilities or organisations that maintain and deliver water traffic and recreational services. Examples for such income are the mooring fees, the purchase of a fishing ticket, the rent of a water sports equipment, beach entry fees, boat renting fees, booking of a ferry ticket and so on. From an ecological and economical point of view, it is essential to state that the participants in water tourism represent a potential hazard to the waterside ecosystems even without using any services. Human presence means inevitable pollution and interference, with serious implications on the vegetation and the animals, but also on the local authority and population that has to bear the brunt of the expenses thus generated.

The typology of water tourism can be based on several circumstantial factors, such as the *type of the area* in question (medium and surface), *motivation* or the equipment needed to pursue an activity. The subcategories cannot always be precisely marked off, because in many cases activities are complex in nature. For example, a speedboat tour might include occasional angling, or a day spent rowing might culminate in camping.

Based on the type of area, we can distinguish two obvious subdivisions: *river* and *lake tourism*. A good number of activity subtypes can be conceived within these subdivisions: rowing, angling, making boat trips, bathing, waterside recreation and any combination of these. In the same time, based on the medium but viewed differently, we can categorise water tourism according to the established water categories. These categories put the waters in the order of the difficulty they pose to traditional water touring. The international scale of water difficulty distinguishes *still waters* and *rough waters*.

Still waters are classified into three categories:

- ZW-A category: Stagnant bodies of water or slow living waters (speed of current less than 4 km/h)
- ZW-B category: Living waters with 4–7 km/h current speed
- ZW-C category: Living waters with current speed more than 6–7 km/h

Rough waters are classified into 6 categories marked from WW-I to WW-VI. The upper end of the scale is indicated as potentially lethal conform to international standard. There are barely any rough waters in Hungary; only shorter sections of some rivers are classified into the WW-I category (Bokody J. 1989). All the waters covered and surveyed within the frameworks of the program belong to the category of still waters.

Motivation is another factor water tourism activities can be sorted by. This classification is connected to the demand for pastime activities in the water and on the banks. Based on the demand, we distinguish *waterfront camping* (the use of free beaches included) and *traditional camping*. In case of the former, camping areas are more modestly equipped while traditional camping provides a wider choice of services and displays a richer supply of paraphernalia. A second type of motivation is associated with *fishing*, which is a pastime activity practised on smaller natural and artificial bodies of waters, backwaters and oxbow lakes as well. A third type under this entry is the *water tour*, marking active pastimes pursued on the surface of waters. Subtypes of water tours are set apart by the required equipment.

A third form of categorisation is grouping based on the required equipment:

- Man-powered watercrafts (rowing boats, canoe, kayak)
- Smaller engine-powered vehicles (speedboats, yachts, motorboats)
- Larger watercrafts capable of receiving groups of people (excursion boats, recreational boats and cabin cruisers)

The research program was delivered in the above presented equipment based structure conform to the expectations of the procurer, the Hungarian National Tourist Office, and the present study will follow suit hereafter.

2.1.1. Man-powered watercrafts

The most important category in this group is the *traditional water tour*, the characteristic vehicles being the canoes and kayaks.

The direction of traditional water tours not counted as sports achievement is characteristically down-stream (slow descent). Based on an assessment of the supply and demand on the market, this category is mostly connected to rivers, but there is some occurrence of these activities in the case of lakes, shores and islands too, mainly in the form of guided eco-tours. In most of the cases, traditional water tours span across several days and include stops in several ports and checkpoints. The average daily distance covered during these slow descents is of 15–20 km. Given the natural features of the river along the way (strength of current, vegetation and soil quality on the banks, accessibility of settlements and attractions and basic services like drinking water, food and medical supply), the optimal distance between checkpoints is of 10–35 km. The difference between the two main types of traditional water tours is in the way sports equipment reaches the destination point. In the first case, it is carried along in the boat and shipped downstream on the river, while in the second case it is transported on the ground. When carried along, the tour is independent of docks because a boat can spend the night on any convenient shoal of sand, while ground transportation requires the existence of a working dock and waterside infrastructure. Any dock or checkpoint must be equipped with a camping site, toilets, washbasins, as well as shopping facilities and restaurants. Tourists frequently wish to stop between two major checkpoints, and it is best if these stops also have at least a buffet or a bar.

An interesting element of this category are the competitive water sports. The competitions have significant appeal towards the general public. However, only the training takes place on the river itself; the competitions are traditionally held on the backwater racing lanes (e.g. rowing lanes on the Maty creek, backwaters at the Alcsi island).

The greatest enemy of traditional water tours are the unfavorable weather conditions. When the weather is unstable, the number of touring groups and the headcount of these groups drastically drops. The most favored areas of water tourism are the upper section of the Tisza, the rivers Bodrog and Körös. Among the types of water tourism, the seasonal character of traditional water tours is conspicuous: even in the summer, the season lasts a mere two months starting from the middle of June and ending in the middle of August.

Among the man-powered small watercrafts, the rowboat is employed for *angling tourism* purposes. Due to the local features of the river, like the speed of the current, the rowboat is less than ideal for angling. Mostly locals use it for fishing in certain areas, whereas tourists prefer to use small motorboats instead.

Man-powered vehicles are ideal for the purposes for ecotourism. Moreover, there is a number of areas in the Tisza River basin trendy among the ecotourists, that are solely approachable by flat rowboats by reason of water depth or local legislation. If the legislation allows it, ecotourism will rely stronger on motorboats, because such vehicles can service a larger number of ecotourists.

2.1.2. Smaller engine-powered vehicles capable of servicing a small number of tourists

This group can be further divided into two subgroups based on engine output. The boundary between categories is a performance of 4 kW. On the other hand, this group can be divided into the most diverse subcategories based on motivation. These subcategories include yacht tourism, angling tourism and ecotourism as well. It is important to stipulate a headcount limit as well, otherwise this group will fuse with the next one as engine output or ship size do not unambiguously separate the two groups. A yacht may easily be larger and more powerful than a recreation boat capable of servicing 12 to 15 passengers.

According to the Hungarian shipping laws (see the Ministry of Economy and Transport shipping regulations), a boat mounted with an engine capable of an output larger than 4 kW (around 5 HP) is regarded as a small motorboat that requires a permit to drive and an exam to run. *Small motorboat (yacht) tourism* however is connected to crafts with more powerful engines, of at least 20 to 30 HP, but they can easily exceed even 100 HP.

Small motorboat tourism has two types: *ship sports* and *ship touring*. Ship sports include water skiing and jet-skiing. These sports activities are usually

pursued in the vicinity of a dock capable of supporting and storing the crafts. As opposed to this, ship touring is characterised by great distances covered in several days. Both types of motorboat tourism requires however the existence of ports and service areas, the difference being that ship sports may not require more than a single service facility while ship touring requires, as a rule, a whole network of docks and stations. One of the most important requirements that the docks must live up to is the re-fuelling capacity. The distance between docks in a network is influenced by the size of the petrol tanks and fuel consumption of the ships that enter the network. On average, this distance is of 70 to 80, perhaps of 100 kilometers. Small motorboat traffic is influenced by the current and the weather. The use of such crafts is connected to the summer season, although ship touring may continue for some time.

Angling tourism on the Tisza is connected to small engine-powered vehicles, usually under an engine output of 4 kW. The most dynamically expanding side of ecotourism offers sightseeings on Lake Tisza, mostly on small motorboats with a tour guide. This service has experienced a steady grow in demand in the last few years, and second only to the main fishing seasons, it constitutes a reliable source of income for providers.

2.1.3. Larger watercrafts capable of receiving groups of people

This category comprises the ships and the related supply, e.g. passenger transportation. The greatest promise of shipping on the river Tisza are the *excursion boats*, *recreational boats* and *cabin cruisers*. Regular scheduled transportation shipping is not characteristic for the Tisza River basin. Party and event shipping is still new to the area, and at the moment there is a single recreational boat on the river, the Victor Hugo.

The minimum requirement for shipping is an adequate network of ports capable of receiving relatively larger ships with significant displacement tonnage. These ports should occupy strategic geographical points, with special attention given to all potential touristic attractions of the area. A further practical consideration is that the ship needs resupply of both petrol and drinking water. Shipping is less influenced by currents and weather conditions, but the main season is still around summer, between May and September.

2.2. A study of demand and supply

The concentration of settlements is the greatest on the upper section of the Tisza (120 localities) and the sparsest in the mid-section recreation area (11 localities). Regardless of the population numbers, there is notable variation in the touristic significance of individual settlements in terms of the number, size

and geographic position of attractions, observation of traditions and marketing activities characteristic of the areas. The last decade has seen a geographic diffusion of the tourism in the Tisza River basin settlements. The number of localities connecting into the touristic network is growing, but overall the settlements receive a smaller ratio of tourist traffic than in the 90's. Based on comprehensive statistics concerning the number of nights spent in the area by guests, the income from tourism and the number of supply elements, the Tisza River basin has an unfavorable position among Hungary's main touristic sites.

Analysing the answers given by the domestic target groups and service providers, there are some general diagnostics applicable to the state of water tourism in the Tisza River basin (based on the research results), presented hereinafter.

The demand factors:

- The number of guests visiting the area had been continuously diminishing in the five years preceding the inquiry (between 2000 and 2005);
- The water tourism facilities of the region attract guests in greater numbers from the larger cities of Eastern Hungary and their economic areas;
- The greatest appeal of a tour on the Tisza is the relatively pristine beauty of the landscape and the longing for water;
- The main season lasts for two months: July and August;
- Rowing has started to lose its appeal, drawing less and less tourists;
- Small motorboats and yachts are used in ever greater numbers, but incongruously with other branches of water tourism.

The supply factors:

- Lake Tisza is the most sought after destination within the basin (Fig. 2)

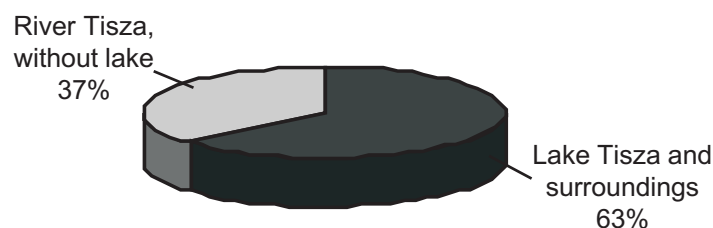


Fig 2. Distribution of guests in the Tisza River basin by region, 2005
Source: Tisza River Water Tourism Development Program, 2006

- Accommodation in the settlements along the river are inexpensive as there are less completed developments or established services that would require much spending (guests spend around 3000 HUF a day on average);
- The few ports offer meager choice;
- At the base of the supply is the river itself and its present untouched natural environment, so increased precaution is advisable while executing developments in order to forego a loss of value;
- Local governments in settlements along the Tisza generally regard feasibility and effect studies as highly important, and increasing marketing efficiency is given top priority.

2.3. Regional characteristics

In the course of the field-work, the following data were collected: the kilometer, the character of the river bank and the locality. These data play an important role in the development of water tourism on the respective section. To sum it up, the areas can be characterised as follows: Although water tourism has been traditionally present on the upper section of the *Tisza*, services are unevenly developed there. Certain areas like Vásárosnamény or Tivadar are positively developed, but the infrastructure is inadequate in the neighbouring territories and does not live up to the expectations. Rural tourism dominates the services.

Settlements and service providers on Lake *Tisza* stand out by far from the local average. The presence of financially competitive social strata triggered development uniquely fast paced on the river. This area has more ports capable of servicing the traditional crafts of water tourism and fishing tourism as well than perhaps any other on the *Tisza*. As opposed to this, the mid-section of the river, dominated by privately owned resorts and homes, is short of the desired level of services. Despite the fact that the nearby Lake *Tisza* absorbs much of the local water tourism, development of the area is of vital importance.

Water tourism on the lower *Tisza* is concentrated around larger cities, mostly in the form of a series of day trips. Among the cities, Szeged excels in an obvious fashion: all the other settlements lag behind in water tourism facilities. Still, providers are understaffed and services are of poor quality compared to the Lake *Tisza* area or the upper *Tisza*. Among all surveyed areas, development is most crucial in this area. However, the sustainability of a more vibrant tourist traffic on the long run is a considerable risk factor as the current size of commerce might well show the upper limitations of the region.

Presently, water tourism on the river *Bodrog* is heavily leaning on traditional water tours. Yacht tourism is practically inexistent and, due to the local conditions and natural environment on and around the river, unfeasable to develop. Canoes or small four-stroke flat-boats are perfect for discovering the natural treasures of the Bodrogzug region. Due to the natural characteristics of the area, no development is possible on the left bank. The only solution is to base all tours and visits on the right-bank facilities, and preserve the Bodrogzug in its current state.

Water tourism on the *Körös* group of rivers goes back a long way, but the services don't measure up to the expectations. There is need for a system of facilities on the floodplain that would allow of visiting without significantly disturbing or changing the environment. The natural beauty of the river *Maros* undoubtedly justifies development, but given the local environment, water tourism must be based there on traditional man-powered canoes and rowboats only.

Concerning the area of study and the individual subprograms, some important factors have emerged during state analyses. These factors have been presented in detail in the case of some subgroups, e.g. small man-powered motorboats and recreation boats. Due to content limitations, the present study comes down to a mere outlining of the general analysis. The state of water tourism can be characterised by the totality of these factors, and this state constitutes the platform for future development.

2.3.1. General SWOT-analysis of water tourism in the Tisza River basin

Strengths

- Favorable conditions, natural values unique in Europe, nature reserves open to limited visitation;
- Existence of waterworks (floodplains, dykes etc) eligible for development of complementary touristic products (bicycle trails, ecotourism etc.);
- Existence of a rich popular tradition, the basis of rural tourism;
- Favorable conditions for health tourism, medicinal waters;
- Programs, outings, festivals around the clock;
- Social need for tourism, hospitality;
- Versatile attractions that can be organised into longer programs

Weakness

- Underdeveloped and unevenly balanced general and touristic infrastructure in the region;

- Low quality of services;
- Co-operation is still problematic between civilian and professional organisation;
- Lack of monetary resources;
- Low level of environment culture, evident signs of pollution (litter, floatsam etc.);
- Inadequate language services, lack of professionals;
- Shortness of touristic season;
- Lack of travel agencies and event organising companies;
- Lack of a working network of services;
- Lack of the Cluster approach;
- Decreasing fish stock, deficient mosquito extermination

Opportunities

- Improving the infrastructure and accessibility of touristic sites;
- Coordinating the work of organisations concerned with tourism;
- The beneficial role of the Tisza River Basin Program Region, strong regional lobby;
- Attracting public interest for the region, attracting capital;
- Decentralisation of touristic capacities;
- Elaboration of complex regional development plans;
- Common image planning, more efficient marketing;
- Better advertising of modern touristic products (business, eco- and cultural tourism);
- Successful application for NDP II. EU funds;
- Re-utilisation for touristic purposes the planned reservoir areas of the Vásárhelyi Plan.

Threats

- Cumbersome access discourages visitors;
- Due to the uneven distribution of development, unfavourable opinions of less developed areas might discourage guests from visiting the whole region;
- Concentrated development might cause tourism to become unilateral;
- Danger of neglecting existing facilities;
- Pollution of the Tisza and her tributaries might discourage visitors;
- The natural environment has changed significantly and that might decrease the appeal of the region;
- Deterioration of water quality, decrease of water surface;
- Lack of capital at the local governments;
- Unsuccessful EU tenders;

- The lack of cohesion of the legislative background will further increase the tension between participants in water tourism.

3. Results

The Tisza River basin strategic development plan for the seven-year period between 2007 and 2013 is aimed at laying the foundations of a long-term expansion: *Expanding the facilities of water tourism in such a way as to attract tourists and inject capital in the region; to provide means of recreation and entertainment to the populace; to secure a regular income to providers; and to protect the ecosystem of the river.*

In view of the long-term expansion, the drafters had presented three strategic goals that later on, broken down to the level of priorities and actions, defined the locations of development, the choice of optimally co-operating partners and the financial demand.

The three strategic goals:

- Creating an ecologically sustainable tourism
- Improving the living conditions of the local population
- Attracting target groups from outside the region

The priorities and actions connected to the strategic aims in view of these three subgroups are as follows:

3.1. Developing water tourism with regard to man-powered vehicles

For efficient *creation and development of boat landing stages*, there is need for the expansion of floodplain infrastructure, servicing and blacktopping the roads leading to the landing stages, reparation of the existing delapidated docks, embankment construction and landscaping.

An important supplement to traditional water tourism is the *development of beaches* through construction of supervised open beaches, control of vegetation and ensuring a clean and healthy environment on the bank. Given the relatively low propensity for spending characteristic for the target groups of the subprogram, complementary development of infrastructure is most important in the case of camping areas, waterside catering facilities and fishing docks. To further stimulate spending, development of water parks and, coordinated with the demand of competitive sports, development of canoeing and rowing lanes is also desirable.

3.2. Developing water tourism with regard to small motorboats and yachts

The two priorities in this category are the *development of service and refueling bases* for the safe operation of small crafts, and the *planning and building of docks* capable of servicing small motorboats and yachts. At all these places, there is need for the building of safe ramps available in all weather conditions to launch boats, speedboats and yachts. As for complementary development of infrastructure, there is need for the expansion of catering facilities considering the demands of the target group (floating bars and restaurants, as well as corresponding waterside facilities fitted with full restaurant service, a working sewage system, and appropriate waste collecting capacity), as well as the improvement of existing accommodation (campings of high standard, tourist motels and eventually hotels).

3.3. Developing water tourism with regard to excursion boats, recreational boats and cabin cruisers

The first priority is the same here as in the previous subgroup: the *planning and building of docks* capable of servicing excursion boats, recreational boats and cabin cruisers, as well as the modernization of existing port infrastructure taking into account the up-to-date environmental and technical norms. Raising the standard of service on *beaches*, developing new water parks and fitting the existing ones with new attractions is also crucial.

As for *complementary development of infrastructure*, there is need for high standard accommodation fitted with the appropriate all-inclusive restaurant services. In this category, the organization of *cultural and recreational programs* is indispensable, together with creating the conditions for a thriving *health tourism*.

3.4. Developing other aspects of water tourism

Besides expanding the *training of tourism experts*, the popularisation of water tour guide training is essential. Also, there is need for *enhanced cooperation between organisations* with an interest in water tourism, a more powerful lobby, creation of a new advisory body comprising the tourism experts of the region, creation of a council of mayors undertaking the improvement of the touristic value of their localities as well as conducting occasional meetings on the issue. The development of *adequate marketing and communications tools and their efficient propagation among target groups* is still to come, together with the elaboration of a communication strategy for the area, the realisation of regional *társégi* public relation activities and the execution of the lobby program. With respect to the development of an *information and help network*,

the planting of information signs overland and in the water as well as the creation of a help desk and a call center is essential.

As a next step, the work group has suggested the establishment of a supervisory program office with a national scope of authority. In addition, the group advocated the integration of the already compiled conception into the development plans of the concerned regions and the further division of development plans into local action plans, with special attention accorded to full realisation of the prospective synergic effects of related forms of tourism.

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