ASSESSING THE TOURISTIC POTENTIAL VALUE IN SATU MARE (ROMANIA) AND SZABOLCS-SZATMÁR-BEREG (HUNGARY) COUNTIES

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Abstract
The present paper aims to provide an assessment of the touristic potential value from the two adjoined counties of Satu Mare (Romania) and Szabolcs-Szatmár-Bereg (Hungary). The endeavour has pursued to create an image of the regional tourism assets, granting scores for the three major categories of resources involved (namely the natural and anthropic touristic potential, as well as the related infrastructure). Cumulatively, the scores achieved by all micro-regions give an accurate image of the existent situation in the territory. Thus, the proposed assessment framework has lead to establishing different levels of touristic attractiveness, accessibility and infrastructural development in the analysed area. Hence, the application of this quantification model has revealed that the two county seats, Satu Mare and Nyíregyháza, due to their well-preserved cultural heritage values and adapted balneary establishments, represent defining elements in creating the region’s touristic offer.

Key words: Assessment, Cross-border tourism, Natural and anthropic resources, Tourism product, Touristic potential value.

JEL Classification: L83

1. INTRODUCTION

“Tourism potential” represents a widely reviewed term, generally referring to the presence of natural and/or anthropic resources in a certain area, which, through adequate exploitation and arrangements, may support tourism related activities and lead to its insertion into the tourist circuit (Cocean and Dezsi, 2009). Usually used as synonymous with a region’s touristic offer, tourism potential represents a fundamental indicator taken into account in every attempt to analyse or develop a tourism product. However, it is argued that the touristic offer constitutes a more practical notion, making reference to an already exploited resource, turned into a product (Muntele and Iațu, 2003).

Tourism resources constitute the input for new tourism products, consequently any debates on their assessment “should be rooted in the paradigm of innovation and new product creation” (Cocean, 2010, p.40). In this respect, the European Commission Report entitled Sustainable tourism based on natural and cultural heritage (2009) designates tourism potential assessment as the first stage to be considered when developing a tourism product based on natural and cultural heritage. The assessment is later followed by defining and implementing a tourism strategy before monitoring its results and sustainability. Therefore, the situation analysis for establishing the touristic potential value of an area will carefully consider two aspects, both quantification (of natural and cultural features, stakeholders, infrastructure, legal context and tourism demand) and evaluation.

Due to its significant role in planning and developing tourist activities in a certain area, tourism potential has been estimated through different methods and formulas. A proposed methodology to determine tourism potential is based on Weighted Sum Model (WSM), a widely used multi-criteria decision making method comprising ranking and scaling techniques to quantify different attributes (Triantaphyllou, Shu et al., 1998; Abdulla and Soumen, 2012). Other approaches take into account the Multicriteria Analysis, carried out by measuring the identified indicators through scoring, ranking and weighting, a method used by Ashour and Fariyadi (2010) to assess the eco-tourism potential of a region.

The literature review has disclosed various attempts to evaluate both natural and cultural heritage resources. Nature-based tourism assets are also appraised through a set of indicators taking a matrix form, in which each resource receives a score revealing the importance of that indicator (Prinskin, 2001) or by making use of 5 value classes expressing different potential stages, from very low (<5 units) to very high (>25 units) (Oprea-Gancevici and Cheia, 2011). However, built heritage makes use of economic impact assessment models, for instance the input-output modelling (Vaillancourt, 2002). Another approach to determine the touristic potential value of a region takes into account the Multiple Linear Regression method using four variables: natural resources, cultural assets, tourism infrastructure and also general infrastructure (Iațu and Bulai, 2011). The results will further enable not only the development of a certain tourism product but also the differentiation of several taxonomic categories: touristic spots, settlements, centres, axes, areas, regions and provinces (Ielenicz, Comănescu et al., 2010).
II. METHODOLOGY

The present research has been carried out in two stages. The initial phase was focused on the study of bibliographic resources combined with field observations. This stage enabled an accurate inventory of all touristic assets, completed by a classification according to their importance. During the latter stage, the quantification model proposed by Ciangă, Dezsi et al. (2002) for evaluating the touristic potential in the north-western region of Romania was adopted. The grading scheme was adjusted to the existing tourism resources and territorial reality as it follows:

- The natural touristic potential was granted a value of 50, which was also detailed for all the component elements (relief 0-24 points, water resources 0-14 points, climatic factor 0-4 points and biogeographical components 0-8 points);
- The anthropic touristic potential was estimated in a rather similar manner. In this case two different indices were given, both qualitative (between 0-25 points, according to importance and touristic appeal of each analysed element) and quantitative (between 0-25 points, taking into account the density of man made assets);
- The touristic infrastructure potential was also granted a maximal value of 50 (accommodation 0-20 points, balneary treatment equipment 0-12 points, leisure facilities 0-10 points, accessibility/ connectivity 0-8 points).

After assessing the above components, the cumulation of the partial scores lead to emphasizing a hierarchical system for the investigated tourism factors, thus four class values were achieved:

- Very high tourism potential: above 30 points;
- High tourism potential: 15.1-30 points;
- Medium tourism potential: 7.1-15 points;
- Mow tourism potential: below 7 points.

Furthermore, the endeavour was completed by the realisation of the cartogram, meant to emphasize the micro-regions disposing a complex touristic potential.

III. RESULTS AND DISCUSSIONS

Prior to revealing the evaluation of the three components involved in the touristic phenomenon (natural and anthropic potential, touristic infrastructure) it is essential to underline the fact that the scores were given at micro-regional level. The study aims to reveal the touristic potential of the 20 micro-regions identified in the study area, namely 12 statistical sub-regions from Szabolcs-Szatmár-Bereg county and 8 tourism sub-zones in Satu Mare county. While in the case of the Hungarian county the individualisation of the touristic micro-regions was facilitated by the existence of the statistical sub-regions (kistérség), for the adjoining county, the sub-zones were identified according to the following criteria: touristic endowment and prevalence of certain attractive resources, which enable the development of corresponding types of tourism, landscape and functional criteria, as well as communication network (Zaman, Vasile et al., 2012). The attempt to establish and delimit these sub-zones within the county of Satu Mare was also facilitated by the existence of the local action groups approved by the Ministry of Agriculture and Rural Development (www.rndr.ro), considered an impulse for implementing local development strategies. It should nevertheless be ascertained that the essential factor in identifying these sub-zones is represented by the touristic endowment, element which enables the designation of appropriate tourism products for each micro-region.

The touristic potential of natural resources

As previously mentioned, the touristic potential of this component was estimated according to the role played by every resource type (and its subcomponents) in stimulating the development of tourism. After applying the described method it has been revealed that the study area does not distinguish itself as bearing outstanding natural assets, due to the predominance of plains, bordered by low hills. For this reason, none of the identified micro-regions achieved an adequate score so as to be included in the category of very high and high touristic potential.

However, the endeavour has underlined that most micro-regions have a medium touristic potential of natural resources. Oaș Land for instance gained 13 points, due to the existence of mineral springs with therapeutic value (especially carbonated waters found at: Tarna Mare, Bixad, Negrești-Oaș, Certeze, Valea Măriei, Orașu Nou), favourable climate conditions for developing touristic activities, geomorphological elements with attractive features (volcanic structures), completed by the presence of Pricop-Huta-Certeze, a Site of Community Interest. In this category several micro-regions were also included: Satu Mare (10), Carei and Ier Plains (9.5), Tâșnad (9.5), Eco-Nătur (8) and Crasna-Codru (8), as well as Vásárosnamény (13), Nyíregyháza (12.5), Nyírbátor (11), Fehérgyarmat (10.5), Kisvarda (10), Tiszavasvári (10), Mátészalka (9) and Baktalórántháza (8), where certain hydrological and biogeographical assets were identified (mineral or thermal springs, fauna, forest and protected natural areas, such as Natura 2000 Sites or Upper Tisza Ramsar Site).

The micro-regions bearing a low touristic potential generally overlap the plain landforms: Someș-Codru (7), Ibrány-Nagyhalász (7), Nagykáló (7), Csenger (6.5) and Ardud (5). The achieved scores reflect the presence of certain hydrological components...
The touristic potential of anthropic resources

The estimation of anthropic touristic potential was undertaken by making use of similar methods. It is essential to underline the fact that this approach was based on the following legislative framework: Law no. 5/2000, section III, comprising values of national cultural heritage (monuments and architectural ensembles, monuments and archaeological sites), Act LXIV/2001 (on the protection of cultural heritage in Hungary), National Register of Historic Monuments (designated by the Minister of Culture and National Patrimony of Romania in 2004, approved by Order no. 2361/2010), National Archaeological Record of Romania and the List provided by National Office of Cultural Heritage in Hungary.

Against this background, the endeavor pursued to accord qualitative and quantitative indices (between 0-25 points for each type). The sum of the obtained values reaches a maximum of 50 points, which according to the quantification model, is gained by the micro-region preserving an outstanding anthropic tourism patrimony. The category including monuments and architectural ensembles was awarded 0-20 points while monuments and archaeological sites was given 0-5 points, as presented in table 1.

Table 1. Qualitative indices

<table>
<thead>
<tr>
<th>Monument types</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monuments and architectural ensembles</td>
<td>2 points</td>
</tr>
<tr>
<td>Fortresses</td>
<td></td>
</tr>
<tr>
<td>Castles, manor houses, palaces</td>
<td>3 points</td>
</tr>
<tr>
<td>Urban civil buildings</td>
<td>2 points</td>
</tr>
<tr>
<td>Urban ensembles</td>
<td>1 point</td>
</tr>
<tr>
<td>Wooden churches</td>
<td>3 points</td>
</tr>
<tr>
<td>Ethnographic museums</td>
<td>3 points</td>
</tr>
<tr>
<td>Churches and monasteries</td>
<td>3 points</td>
</tr>
<tr>
<td>Traditional architectural monuments</td>
<td>2 points</td>
</tr>
<tr>
<td>Rural traditional ensembles</td>
<td>1 point</td>
</tr>
<tr>
<td>Monuments and archaeological sites</td>
<td></td>
</tr>
<tr>
<td>Paleolithic complex</td>
<td>0.5 points</td>
</tr>
<tr>
<td>Neolithic and Eneolithic settlements</td>
<td>0.5 points</td>
</tr>
<tr>
<td>Bronze Age settlements and necropolis</td>
<td>0.5 points</td>
</tr>
<tr>
<td>Early Iron Age fortifications and settlements</td>
<td>1 point</td>
</tr>
<tr>
<td>Dacian settlements</td>
<td>0.5 points</td>
</tr>
<tr>
<td>Iron Age necropolis and sacred sites</td>
<td>1 point</td>
</tr>
<tr>
<td>Monuments and edifices</td>
<td>0.5 points</td>
</tr>
<tr>
<td>Medieval monuments identified on account of archaeo</td>
<td></td>
</tr>
<tr>
<td>logical excavations</td>
<td>0.5 points</td>
</tr>
</tbody>
</table>

The score obtained by each micro-region according to the first type of indices (qualitative) was completed by the one accorded for the density of cultural heritage monuments in the study area. The application of this quantification method highlighted a hierarchy with four levels, corresponding to the categories of anthropic touristic potential.

The category of very high anthropic touristic potential (scoring above 30 points) includes only two micro-regions: Nyíregyháza (31.5) and Satu Mare (31). The cultural heritage monuments concentrated in the area (buildings and architectural ensembles, churches, cathedrals, statuary and museums with various profiles) have become a impulse for cultural tourism practice. Their position within the hierarchy is justified by the significant heritage legacy consisting in monuments of national importance, depicting the ethnic and confessional interference specific to the Romanian-Hungarian border area.

Achieving a score ranging between 15.1 and 30, the following micro-regions fall into the category with high anthropic tourism potential: Oaș Land (20), Carei and Ier Plains (19), Crasna-Codru (15.5), Fehérgyarmat (19.5) and Vásárosnamény (17). In the current case, the attributed values reflect a rich cultural inheritance: medieval and wooden churches under historic building protection, ethnographic museums, manors, monuments and rural traditional ensembles, archaeological sites.

The category with medium anthropic touristic potential groups a considerable number of micro-regions which gained a score between 7.1 and 15. Their touristic appeal is supported by the presence of built heritage elements, such as castles, manors, museum houses, urban civil buildings and religious monuments: Someș-Codru (11), Tâșnad (9.5), Eco-NaTur (8.5), Nyírbátó r (13), Tiszavasvári (11.5), Mátészalka (9.5), Kvisvárda (9.5) and Csengers (8.5).

The micro-regions of Ardud (5.5), Ibrány-Nagyhalász (6) and Nagykálló (5) possess few types of assets relevant for the undertaken quantification and therefore were included in the last category, bearing a low anthropic touristic potential.

Estimating the potential of touristic infrastructure

The primary touristic supply, including natural attractions and historic sites, is completed by the secondary touristic supply: accommodation and catering units, general infrastructure and transport services, recreational facilities, treatment equipments. Among these, the accommodation facilities represent fundamental grounds for developing touristic activities and at the same time, key-elements of modern tourism (Gheorghilău, 2008; Cocean and Dezsi, 2009).

In order to assess the potential of the touristic infrastructure from Satu Mare and Szabolcs-Szatmár-Bereg counties a total score of 50 points was given, detailed below:

- In the case of the accommodation units 20 points were differently assigned, according to their type. Thus, a value between 0 and 10 points was achieved by hotel units, the
scores being distributed by taking into account their comfort level, accommodation capacity and membership to an international network. The presence and number of other types of structures, such as: guesthouses and agritourism pensions; motels; hostels; campings; bungalows and villas was marked with a score between 0-2 points each;

- Cure and treatment facilities were granted 12 points, namely 7 for balneary resorts on account of importance (international 3 points, national 2 points, regional and local one point) as well as 3 points conferred in the case of medical care and rehabilitation centres respectively 2 points for the treatment facilities existing within thermal baths;

- Leisure and recreational endowments: 10 points, according to their complexity and density. The highest score was attributed in the case of thermal complex with modern waterparks (0-4 points), resorts dedicated to winter sports (0-4 points), followed by thermal baths (0-2 points);

- Communication potential: 8 points, assigned differently, in compliance with the accessibility degree of the accommodation units, their location in relation to highway segments (3 points), European and/or national roads (2 points), railroads (1.5 points) and other road categories (0.5 points).

The results confirm that when it comes to the touristic infrastructure only Nyíregyháza is characterised by very high potential of touristic infrastructure, obtaining a value situated above the threshold of 30 points (more precisely a score of 32). This rating is upheld by the attractiveness of Sóstó resort of national importance, the diverse accommodation units in the area (hotels, hostels, guest houses, campings), accompanied by various treatment facilities, wellness services and the Aquarius water park. In the present case, the study has disclosed a superior communication potential, conferred by the favourable location in relation to the M3 highway and 573 European road.

The category with high potential of touristic infrastructure firstly includes Satu Mare, achieving 27 points due to its modern arrangements built around thermal springs, comprising recently rehabilitated baths, the only water park in the area, Aquastar (opened in 2013) as well as the well-equipped health care centre, Aqua Medica. These elements are completed by various accommodation units and superior accessibility, which is ensured by the border proximity (Satu Mare being situated at 12 km from the border crossing point towards Hungary, from Petea). This category also includes Tășnad, obtaining 19.5 points due to the resort of local interest exploiting chloro-sodic, bromoiodide hyperthermal springs of 72 °C (Mărușca, 2008). The resort provides cure opportunities in outdoor baths and also accommodation units with health centres (Alystra Hotel 3*, Marissa Motel 3*). Other micro-regions belonging to this category are: Fehérgyarmat (20), Nyírbátor (20), Vásárosnamény (18.5) and Kisvárda (16) which possess touristic-purpose arrangements of regional and local interest and balneary endowments (Atlantika water park, Szilva Wellness and Thermal Baths at Vásárosnamény, Sárkány SPA and water park at Nyírbát; thermal baths with SPA and treatment facilities in the remaining cases).

The category with medium potential groups the following micro-regions: Oaș Land (13.5 points, the touristic infrastructure mainly comprising two hotels, motels, guest houses, the future winter sport resort from Luna-Șes, leisure and treatment baths at Negrești-Oaș and Valea Mâriei), Căreai and 1er Plains (12.5), Tiszavasvári (12.5), Mátrészalka (11), Záhony (11), Nagykálló (9.5) and Baktalórándháza (8.5) possessing touristic arrangements which highlight the curative and recreational features of thermal springs.

The category with low potential of touristic infrastructure includes micro-regions with modest accommodation endowments and also a lower degree of accessibility. Ardud, Crasna-Codru, Someș-Codru, Eco-NaTur, Csenger, Ibrány-Nagylhalász have gained scores below the threshold of 7 points.

The total touristic potential

The total touristic potential was calculated by summing the three partial scores attributed to the above components: the primary touristic offer (natural and anthropic touristic potential) and the secondary touristic supply (tourism infrastructure), which lead to a situation pursuant to the existent territorial reality. In compliance with the applied methodology, four classes have been obtained, illustrating the total touristic potential (table 3):

- Very high tourism potential: above 50 points;
- High tourism potential: 30-49.9 points;
- Medium tourism potential: 15-29.9 points;
- Low tourism potential: below 15 points.

Within the first class value of micro-regions bearing a very high touristic potential, only Nyíregyháza (76) and Satu Mare (68) are included, as a result of their valuable anthropic potential and complex arrangements related to the hydromineral resources. A significant plus for Nyíregyháza consists in the presence of several assets: Sóstó salty lake exploited for balneary and recreational purposes, the open-air ethnographic museum, the Zoo (which is the second...
largest in the country), completed with the accessibility factor conferred by the M3 highway.

The category of high touristic potential comprises micro-regions possessing manifold resources: remarkable built heritage, thermal and mineral springs, water bodies, protected and forest areas, encountered in Oaș Land (46.5), Carei and Ier Plains (42), Tășnad (38.5), Vásárosnamény (48.5), Fehérgyarmat (44.5) and Nyírbátor (44). Within the last three cases the study has emphasised the high density of churches with wooden bell towers, richly decorated ceilings, well-preserved frescoes and carved pulpits, dating from the 14th and 15th centuries. Thus, the churches from Tákos, Lónya, Csaroda, Márokpapi or Nyírbátor, due to their unique heritage value, have been submitted on the Tentative List and are considered for inscription on the World Heritage List (http://whc.unesco.org/en/tentativelists/1501).

The next category groups several micro-regions with medium touristic potential: Someș-Codru (possessing anthropic assets such as monasteries, manor-houses, ethnographic museum), Eco-NaTur (the main touristic resources are represented by the two castles from Livada and Turulung, the Tur River natural protected area – site of national and also community importance). Similar cultural-religious values reason the position occupied by the micro-regions from the Hungarian side of the investigated area: Baktalórántházsa, Mátészalka, Záhony and Csenger. In the last mentioned case, the town of Csenger could become a cross-border destination for cultural tourism, encompassing several buildings designed by Makovecz Imre, an exponent of the organic architecture: the Greek-Catholic and the Adventist churches, the elementary school, the Sports Hall, to which another invaluable heritage tourism resource an be added, namely the Calvinist church, bearing the imprint of the Gothic style.

Achieving below 15 points, Ardud represents the only micro-region possessing a low tourism potential. Two notable touristic attractions were identified in the area, the Roman-Catholic church and Károlyi Fortress from Ardud town, the latter recently renovated and reintroduced into the touristic circuit. The scores representing the total touristic potential value are presented in Figure 1.

![Figure 1. The touristic potential value of Satu Mare and Szabolcs-Szatmár-Bereg micro-regions](image)

**IV. CONCLUSIONS**

The estimation of the touristic potential value for all 20 micro-regions identified in Satu Mare and Szabolcs-Szatmár-Bereg counties has provided a clear image on the assets which lie at the base of tourism product development. In brief, the obtained results have revealed several guidelines for project prioritisation and funding allocation especially important within a cross-border context, as it follows:

- The micro-regions of Satu Mare and Nyíregyháza emerge as touristic areas able to support the development and promotion of polyvalent tourism (curative and recreational tourism based on the existent hyperthermal springs and the related arrangements, cultural tourism which is encouraged by the valuable heritage legacy: ecclesiastical buildings, synagogues, museums and galleries, urban ensembles);
- The most suitable micro-regions for developing cultural-religious routes are, as mentioned before, Vásárosnamény, Fehérgyarmat and Oaș Land (already connected by a cross-border trail entitled *The Route of Medieval Churches in*...
Sâmbăta-Săcădate and Satu Mare Counties), Nyírbátor (Hungary’s National Sanctuary from Máriapecs, preserving the miracle weeping icon of the Virgin Mary) and also Crasna-Codru (based on values such as: the Romanesque church from Acâș, the wooden churches from Corund, Bolda and Stâna);

- Curative tourism development is based on thermal and mineral springs from Oaș Land, Tâșnad, Carei and Ier Plains, Crasna-Codru, Vâsárosnamény, Fehérgyarmat, Nyírbátor and Mátészalka. This type marks a shift towards healthcare tourism, characterised by a growing demand for maintaining a good physical and mental state through natural therapeutic means;
- Recreational tourism, although of short or medium duration, is highly efficient in terms of benefits arising from discovering new places and experiences. Primarily exploiting nature-based resources, this type of tourism has found favourable conditions to ensure its development particularly in Oaș Land (comprising assets such as Oaș and Gutâi mountains, Câlinești lake, Tur river), Fehérgyarmat, Vâsárosnamény and Csenger (where Tisa river and its affluents become a target for fishing or water sports enthusiasts).

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REFERENCES