

# **Methods for Assessing the Tourist and Recreational Potential** of the Territory

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Abstract. Regional socioeconomic planning requires assessing the local resource potential from the economic standpoint. The assessment must cover the tourism opportunities the region has, as domestic and inbound tourism is a national priority. This makes relevant any effort to improve the methodology for assessing the opportunities for tourism; the new methodology must provide not only quantitative, but also qualitative assessment for effective managerial decision-making in tourism. Despite numerous papers having been published on the topic over the last decade, objective assessment of tourism opportunities for strategic decision-making in socioeconomic development is a problem yet to be solved. The goal hereof is to create a method for comprehensive assessment of local tourism opportunities so as to choose the priorities of regional socioeconomic development. The paper overviews the existing approaches to the problem and presents the author's method as well as how it applies to Novosibirsk Oblast. The research builds upon Russian and international studies on evaluating single tourism opportunities as well as on comprehensive assessments. It will of use for regional and municipal governments in Russian regions, for tourism development agencies, as well as for anyone interested in regional tourism.

#### 1. Introduction

Resources available to each region must be assessed to find what should be prioritized when developing regional tourism in Russia. However, the contrasting climate, the existing industrial infrastructure, and the socioeconomic state of the art means this is not a fair race for the regions.

On the other hand, each of the country's regions can be analyzed as a touristic destination in its own right to choose high-priority local recreational areas and administrative entities to boost tourism. That requires assessing the value of tourism opportunities each location has and to make actual use of them by investing in tourist infrastructure. Many areas have attractive yet underutilized locations, which, if invested properly, can turn into municipal or regional 'points of growth'. The existing approaches to the assessment of tourism opportunities fail to cover the entire spectrum of factors and conditions that enable tourism; on the other hand, as the tourism industry develops, new kinds of tourism arise, and specialized products emerge. Emphases may shift spatially or temporally.

Tourism opportunities are defined herein as the set of natural, climatic, historical, cultural, social, and economic resources in a location. It should be noted that the set is subject to change, as tourism might make use of different resources [1]. Tourism resources are a special type of regional resources.



The methodology hereof is based on Russian and international research in recreational geography, tourism resources, tourism economics and management. Tourism opportunities and their comprehensive assessment are the issues covered by A.Yu. Aleksandrova, A.V. Drozdov., N.N. Zubakova, Ye.N. Karchevskaya, Ye.Yu. Kolbovsky, A.S. Kuskov, N.S. Mironenko, L.I. Mukhina, I.I. Pirozhnik, V.S. Preobrazhensky, M.A. Sarancha, A.A. Safaryan, I.T. Tverdokhlebov, Yu.A. Khudenkikh, etc. [2, 3, 4, 5, 6, 7, 8, 9, 10], as well as by a number of international scientists that study the assessment of tourism opportunities and how they affect the national economy: Abrham J., Al Mamun A., Mitra S.A., Ashouri P., Fariyadi Sh., Gadakh Bharat L., Shamsoddini A., Popichit N. et al. [11, 12, 13, 14, 15, 16].

Overview of these papers leads to a conclusion that objective assessment of tourism opportunities is a problem yet to be solved. Besides, the existing approaches fail to cover the whole spectrum of criteria and scores that affect the industry's development as well as the regional socioeconomic development. All of this necessitates a universal method that could provide assessments for a variety of purposes, including substantiation of strategic decisions regarding regional socioeconomic development. The authors hereof believe that a comprehensive assessment method must take into account various resources that municipalities might have.

Practical use of the existing methods for assessing the tourism opportunities is complicated by the fact that tourism is not a fair race, as different regions have different climates, infrastructural development, or living standards. The author-developed method is purpose-driven; the purpose might not necessarily be to make an efficient decision on how to use the local resources (which landscape or cultural heritage assessment seeks). Some of the international scientists' methods for evaluating the tourism opportunities are intended to collect data on how satisfied the customers are with a tour [12, 15, 17].

Economically sound decision-making with respect to tourism development will have to rely on a comprehensive approach to evaluate the local climate, historical, cultural and socioeconomic resources. Regional tourism opportunities are basically the total of district and municipality opportunities adjusted for accessibility and attractiveness.

Literature overview has enabled the authors to systematize the approaches by the range of areas or aspects each approach focuses on:

- geographical approach: assessing the natural landscapes and district zoning;
- geoecological approach: assessing the environmental status and identifying the limits on tourism and recreational industries;
- marketing approach: research into tourist services, competitiveness, and attractiveness for younger travelers;
- cadastral approach: accounting of tourism resources, systemization of data on local dynamics and to which extent the location is known. This is fundamental to economic assessment;
- geoinformation approach: databanks and databases, digital maps and atlases, territorial and industrial GIS to enable stronger tourism and even recreation groups;
- cluster approach: identifying the boundaries of promising tourism clusters to intensify the cooperation of local governments, businesses, public organizations, and tourists;
- ecosystemic approach: defining the economic benefits of ecosystem services. The approach must be replicated to optimize the use of natural resources as part of the sustainable local development concept.

The authors hereof enhance upon a comprehensive assessment algorithm that is based on assessing the tourism resources one by one or integrally. The assessment follows the algorithm below:

- define who assesses what;
- make a system of criteria, assessment scales, and scores;
- choose software for data processing;
- collect data to assess the tourism opportunities;
- process and structure the collected data;
- assess the specific components of tourism opportunities;



- calculate the integral scores, check, adjust, and interpret the results;
- identify the best locations where to develop tourism.

The proposed methodology involves qualitative and quantitative assessment of natural, climatic, historical, cultural, and socioeconomic resources that municipalities have to calculate integral scores. Figure 1 shows how integral scores are calculated on the basis of tourism opportunities that municipalities, urban districts, etc. have.

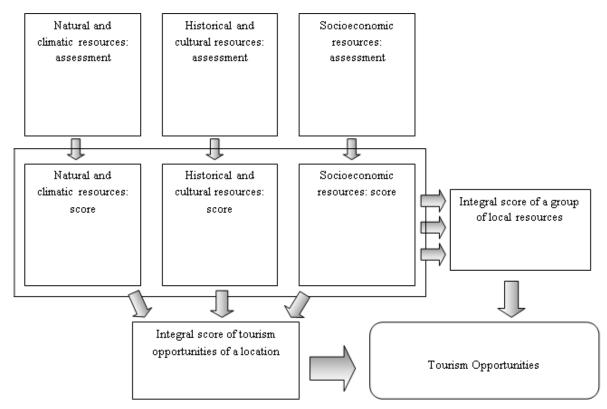


Figure 1. Integral scores of tourism opportunities.

The integral scoring system comprises resource-specific scores (Equation 1) and the total score (Equation 2).

$$P_{ml} = \sum_{i=1}^{n} \frac{p_i v_i}{n_m},\tag{1}$$

where  $P_{ml}$  is the partial resource group-specific score;

*m* is a group of resources;

l is a location;

 $p_i$  is the tourism opportunities score by the criterion (i), points;

 $v_i$  is the criterion weight;

n is the number of assessment criteria pertaining to the group of resources;

$$R_l = \sum_{m=1}^t P_{ml} \tag{2}$$

where  $R_l$  is the total tourism opportunity score of a location; t is a resource group.



This method has been used to assess the tourism opportunities in Novosibirsk Oblast. The region is the geographical center of the Russian Federation; it covers an area of 178 thousand sq.km and spans over 600 km from west to east, 400 km from south to north. The region borders Tomsk Oblast in the north, the Republic of Kazakhstan in the south-west, Omsk Oblast in the west, Altai Krai in the south, and Kemerovo Oblast in the east. The administrative center is the City of Novosibirsk that straddles the Ob River and is located next to the Novosibirsk Reservoir, 3,191 km east of Moscow. Novosibirsk Oblast had 2,793.4 thousand people as at January 1, 2019. This is an urban region, as 79% of its people live in cities. Tourism opportunities were assessed for the region's 30 municipalities and 5 urban districts. The region's tourism opportunities remain underutilized, as most touristic sites are in Novosibirsk, whereas many rural areas, despite having great natural sites while being of historical and cultural value, are ignored [18, 19].

To analyze the current situation and trends in the region's tourism industry, the authors hereof applied expert assessments and economic statistical analysis, including T. Saati's hierarchy analysis, etc. [20]. It is the combination of such methods that helped clarify the criteria and assessments for certain components of tourism opportunities. For instance, the socioeconomic score builds upon such data as number and capacity of infrastructures, remoteness from the regional center, transportation, etc.

The key finding of assessment is that Novosibirsk Oblast is generally not an attractive destination for international tourists; however, it has a good potential in terms of regional tourism. Places that rank best are the cities of Novosibirsk and Berdsk as well as the Novosibirsk District, as the infrastructure here is well-developed: the locations have touristic sights, good transports, accommodation, catering, etc. Krasnozyorsky, Iskitimsky, Toguchinsky, Chanovsky, Kupinsky Districts offer good recreational opportunities and well-established infrastructure. Kuybyshevsky District has multiple cultural heritage sites; Kuybyshev itself is a historical settlement. Berdsk is a resort city on the shores of the Sea of Ob; it is here that most spa resorts of the regions are. Novosibirsk is the regional center, a concentration of historical and cultural sites, and a hub of tourist infrastructure.

The assessment has effectively identified the most investment-attractive municipalities that will be the new points of growth for the region. The results presented herein can be applied to boost tourism in Novosibirsk Oblast, to create tourism clusters, to implement investment projects and programs.

### 2. Conclusion

Notably, the methodology proposed herein adjusts to the interregional and inter-location inequality in terms of nature, climate, history, culture, and socioeconomic resources; locations can be ranked, and priority areas for tourism development can be identified to help reform territories and boost tourism on the regional level. The method can be applied to other regions of the country to choose strategic priorities so as to optimize the use of existing resources while boosting the socioeconomic development.

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