The Tourism Sector of the Baikal Region from the Perspective of Russian-Chinese Cooperation: Opportunities and Threats to the Sustainable Development of the Region

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Abstract. The tourism sector development has a multidirectional effect on the sustainable development of the region. Analysis of the tourism sector developments in the Baikal region demonstrates the positive dynamics of indicators characterizing the functioning of this field in the region. However, emerging opportunities trigger a number of threats, too. The present paper was aimed at selecting and evaluating the most significant threats caused by the tourism sector development in the Baikal region from the perspective of Russian-Chinese cooperation and at selecting appropriate strategies for managing them in the aspect of the sustainable development of the region.

Based on the methods of expert estimations as well as on using international standards of risk management, the authors verify the threats resulting from the development of Russian-Chinese cooperation in the tourism sector. According to the analysis, there is a high risk level on a number of environmental, economic and infrastructural threats. Therefore, both the state and the business community are to develop preventive measures to mitigate the negative consequences. The authors establish the priorities for threat management in the aspect of sustainable regional development and determine the directions for their reduction. The results obtained can be advantageous in building up a tourism development strategy in the Baikal region and in working out measures for the sustainable development of the region.

1. Introduction
Over the past six years, the tourist flow in the Baikal region (Irkutsk Oblast) has shown stable and high growth. The region is among the leaders of Siberia and the Far East in the number of foreign tourists received. The majority of them are Chinese (64%). In 2017, 1598 thousand tourists (including 211 thousand foreign tourists) visited the Irkutsk Oblast. The growing tourist flow from China increases incomes of many economic sectors, improves the employment situation, helps develop small and medium-sized businesses, and evens out territorial imbalances. However, together with the emerging economic opportunities, Russian-Chinese cooperation in the tourism sector may lead to some threats impeding the sustainable development of the region in the future. Thus, the increase in tourist flows from China to Russia and the development of Russian-Chinese cooperation in the tourism sector actualize the necessity to study both the emerging opportunities for the region and the difficulties for its sustainable development.
2. Literature review
The impact of tourism development on the socio-economic condition of the region has long been the subject matter of many domestic and foreign researchers. This issue is reflected in the works of B. Archer [3], D. Frechtling [7], J. Fletcher [6], J. Mak [10] and other foreign authors [9, 18]. In Russia, such researchers as S. Anisimova [1, 2], S. Chuprov [4], N. Danilenko [5], M. Morozov [11], T. Golovchenko [8], N. Rubtsova [12, 13, 14], V. Samaruha [15, 16, 17], A. Suhodolov [19], Svetnis T.V. [20], S.E. Varavin [21] studied the consequences of the tourism sector development through the example of different regions. In general, the above-mentioned authors note the favorable impact of the tourism sector on the socio-economic development of the region. It should be noted however that the studies mentioned reflect only the positive side of this phenomenon, as a rule.

At the same time, together with the positive impact of the tourism sector expansion on the socio-economic situation of the regions, the researchers note its negative effect. In particular, some authors point to the emergence of significant risks in the socio-cultural, economic and environmental aspects. However, in the empirical perspective, a comprehensive study of threats associated with the increase in tourist flow and the rapid tourism development in the Baikal region has not yet been carried out. That actualizes the importance and necessity of its in-depth study.

3. Problem statement
The purpose of the study was to select and evaluate the most significant threats caused by the tourism sector development in the Baikal region from the perspective of Russian-Chinese cooperation and to select appropriate strategies for their managing in the aspect of the sustainable development of the region.

4. Theory
Threat assessment was carried out using the method of expert estimations resulting from the increase in the number of Chinese tourists in the Baikal region. The experts (11 people) were representatives of the authorities and the business community of the tourism sector of the Baikal region, including 6 heads of travel agencies, 2 heads of large accommodation facilities, the head and members of the specialized departments of the Irkutsk city administration. The expert questionnaire included 15 types of threats grouped in three occurrence sectors: eco-economic, infrastructural, and socio-psychological. The list of threats under discussion was formed through a brainstorming session.

5. Results
Based on 15 threats considered, the high risk level and the necessity to develop preventive measures to mitigate the negative consequences by both the state and the business community were identified in all the three groups of threats: eco-economic, infrastructural, and socio-psychological (Table 1, Fig. 1).

The analysis made it possible to determine the following threats as the “most dangerous” (Fig. 1): environmental degradation and pollution of Lake Baikal; local budgets’ revenue losses due to shadow businesses of Chinese partners; underdeveloped tourism infrastructure, including the transport one; lack of training and low qualification of personnel for the tourism sector; substitution of Russian tour guide-interpreters and hotel personnel by Chinese specialists.
Table 1. Classification and ranking of threats (expert estimation)*.

| Criterion of classification | Name of threat (threat number)                                                                 | Rank |
|-----------------------------|-----------------------------------------------------------------------------------------------|------|
| Eco-economic                | Zero or insufficient investment (1)                                                            | 7    |
|                             | Ruble depreciation (2)                                                                          | 13   |
|                             | **Environmental degradation and pollution of Lake Baikal (3)**                                | 1-2  |
|                             | **Local budgets’ revenue losses due to shadow businesses of Chinese partners (4)**            | 1-2  |
|                             | Reduced income of individual entrepreneurs due to Chinese partners’ businesses with no middlemen involved (5) | 6    |
| Infrastructural             | Battered property assets of the tourism sector (6)                                             | 9    |
|                             | **Underdeveloped tourism infrastructure, including the transport one (7)**                    | 4    |
|                             | Poor quality of tourism services (8)                                                           | 10   |
|                             | **Lack of training and low qualification of personnel for the tourism sector (9)**            | 5    |
|                             | Lack of Chinese-speaking tour guide-interpreters and staff (10)                               | 8    |
| Socio-psychological         | Decrease in the sector attractiveness for local businessmen due to cornering the market by Chinese partners (11) | 12   |
|                             | **Substitution of Russian tour guide-interpreters and hotel personnel by Chinese specialists (12)** | 3    |
|                             | Security threat to Chinese tourists due to mutual distrust and cultural insensitivity (13)     | 14-15 |
|                             | Threat of interethnic conflicts with the locals, intercultural antipathy (14)                  | 14-15 |
|                             | Popular discontent with the environmental degradation due to increased tourist flow from China (15) | 11   |

* Based on the results of the authors’ study

| Risk probability Consequences | Low2 (less than 25%) | Acceptable (25-50%) | High (50-75%) | Very high (over 75%) |
|-------------------------------|----------------------|---------------------|---------------|----------------------|
| Low (less than 25%)           | 13, 14               |                     |               |                      |
| Acceptable (25-50%)           | 2, 6, 11, 15         | 1, 5, 10            |               |                      |
| Significant (50-75%)          | 8                    | 7, 9, 12            |               |                      |
| Highly significant (over 75%) |                      |                     | 3, 4          |                      |

Figure 1. Risk matrix of the threats and their consequences*
*1 Based on the results of the authors’ study
*2 Estimate of probability and damage consequences of the threats was considered low at a value of less than 25% (not taken into account), acceptable – from 25 to 50% (qualitative analysis is recommended), high – from 50 to 75% (quantitative analysis is recommended) and very high – over 75% (urgent measures are required).

The listed threats have high or very high risk probabilities and require urgent measures aimed at reducing them.

To determine the consistency degree of the expert estimations, coefficients of variation were calculated (Table 2).

**Table 2. Coefficients of variation of the expert estimations (n=11)**

| Threat                                                                 | Variation, % | Consequences |
|-----------------------------------------------------------------------|--------------|--------------|
| Zero or insufficient investment (1)                                   | 27,64        | 27,48        |
| Ruble depreciation (2)                                                | 47,27        | 47,12        |
| Environmental degradation and pollution of Lake Baikal (3)            | 32,13        | 23,07        |
| Local budgets' revenue losses due to shadow businesses of Chinese partners (4) | 20,32        | 29,61        |
| Reduced income of individual entrepreneurs due to Chinese partners’ businesses with no middlemen involved (5) | 33,79        | 44,49        |
| Battered property assets of the tourism sector (6)                   | 27,04        | 47,14        |
| Underdeveloped tourism infrastructure, including the transport one (7) | 20,04        | 27,64        |
| Poor quality of tourism services (8)                                 | 36,39        | 29,81        |
| Lack of training and low qualification of personnel for the tourism sector (9) | 33,17        | 31,64        |
| Lack of Chinese-speaking tour guide-interpreters and staff (10)      | 27,46        | 36,76        |
| Decrease in the sector attractiveness for local businessmen due to cornering the market by Chinese partners (11) | 23,13        | 18,54        |
| Substitution of Russian tour guide-interpreters and hotel personnel by Chinese specialists (12) | 33,90        | 24,02        |
| Security threat to Chinese tourists due to mutual distrust and cultural insensitivity (13) | 48,56        | 59,23        |
| Threat of interethnic conflicts with the locals, intercultural antipathy (14) | 55,75        | 64,23        |
| Popular discontent with the environmental degradation due to increased tourist flow from China (15) | 36,70        | 29,81        |

*1 Based on the results of the authors’ study
*2 Permissible value of the coefficient of variation of not more than 33% indicates the uniformity of the obtained estimations.

According to data in Table 2, the expert estimations of the probability and consequences of some threats were ambiguous. However, the whole complex of the estimations obtained is quite similar in terms of assessing the impact of the five most significant threats.
6. Conclusions
The necessity to regulate the threats involves the development of strategic and tactical measures both at the level of the federal, regional, municipal authorities and at the level of individual business communities (associations) and individual business structures (hotels, tour operators).

As a result of the study, the threats to the development of Russian-Chinese cooperation in the tourism sector have been identified. According to the data obtained, the greatest impact of threats occurs in the eco-economic and infrastructural aspects.

The authors have determined the important directions of reducing threats and enhancing benefits in the partnership development between the Irkutsk Oblast and China in the tourism sector:

- improvement of the civil and environmental legislation at all levels of governance (federal, regional, municipal);
- infrastructure development of the main routes for different types of tourism;
- working-out and implementation of projects for the development of new territories, preservation of the cultural legacy, and redistribution of tourist flows;
- assistance to the training and retraining of highly qualified personnel, raising the prestige of the occupation in the tourism sector (WorldSkills movement).

References
[1] Anisimova S & Prisyazhnyj M 2013 Socio-economic problems, deviations and foresight of northern peoples (on the materials of the Republic of Sakha (Yakutia)) Bulletin NEFU Science Magazine 9(4) 63
[2] Anisimova S Maksimov A & Osipov D 2014 Tourism as an agent of sociocultural changes: risks and trends Modern problems of science and education 5 724
[3] Archer B & Fletcher J 1990 Multiplier Analysis in Tourism Cahiers du Tourisme C(103) 102–116
[4] CHuprov S 2014 Unsustainable development - the reality of globalization and the imperative of the industrialization of the Russian economy Bulletin of the Irkutsk State University of Economics (Baikal State University of Economics and Law 5 10
[5] Danilenko N & Rubtsova N 2012 Impact of social functions of tourism on the sustainable development of the region (on the example of the Baikal) Bulletin of the Baikal State University 6(86) 47-53
[6] Fletcher J E 1994 Economic impact Tourism Marketing and Management Handbook by eds S F Witt, L Moutinho (New York, Prentice Hall) 475–479
[7] Frechtling D 1994 Assessing the Impacts of Travel and Tourism – Measuring Economic Benefits Travel, Tourism, and Hospitality Research A Handbook for Managers and Researcher (New York.) John Wiley & Sons 367–391
[8] Golovchenko T & Rubtsova N 2019 Evaluation of tourism product and hospitality in the Baikal region: results of an online survey of Chinese tourists Azimuth of Scientific Research: Economics and Management 1(26) 129-132
[9] Macleod D 1999 Tourism and Globalization of a Canary island The Journal of the Royal Anthropological Institute 5(3) 134-135
[10] Mak J 1989 The Economic Contribution of Travel to State Economies Journal of Travel Research 28 2-5
[11] Morozov M & Rubtsova N 2016 The role of tourism in the sustainable socio-economic development of the regions of the Siberian Federal District Regional Economics: Theory and Practice 8(431) 187-198
[12] Rubtsova N 2018 Methodological foundations of managing the effectiveness of the tourism and recreation services in the region Azimuth of scientific research: economics and management 7 4(25) 266-269
[13] Rubtsova N 2019 Foreign tourists on Baikal: changing the portrait of consumers of tourist services under the influence of the geopolitical crisis Marketing in Russia and abroad 1 48-53
[14] Rubtsova N 2014 The impact of sustainable development of the sphere of recreation and tourism on the sustainable development of the region (empirical research on the example of the Baikal regions) *Bulletin of the Irkutsk State Economic Academy* **5** 47-60

[15] Samarukha V & SHodorova N 2012 Development of management decisions in order to ensure sustainable socio-economic development of municipalities of the *Baikal region* *BSU Publ.* (Irkutsk)

[16] Samarukha V 2009 Problems of sustainable development of the Baikal region *Scientific works of the Free Economic Society of Russia* **115** 74-78

[17] Samarukha V 2009 Strategic directions for the sustainable development of the Baikal region: key points *BSU Publ.* (Irkutsk)

[18] Spanou E 2007 The impact of tourism on the sociocultural structure of Cyprus *Tourismos: an international multidisciplinary journal of tourism* **2(1)** 142-162

[19] Sukhodolov A 2010 Baikal region as a model area for sustainable development *Bulletin of the Irkutsk State University of Economics (Baikal State University of Economics and Law)* **4** 103-108

[20] Svetnic T & Bubaeva T 2011 Strategic management of creating a special economic zone for tourism and recreation in Buryatia *Baikal research journal* **5**

[21] Varavin E & Kozlova M 2018 Evaluation of the development of a green economy in the region (on the example of the Republic of Kazakhstan) *Economy of Region* **14(4)** 1282-1297