# Sustainable Tourism Development in Russia: The Case of Baikal Harbour Project

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#### Abstract.

Currently, the Russian government has announced the creation of 9 tourism and recreational zones, which have preferential taxation and are designed to develop domestic and foreign tourism. The paper considers the prospects for the development of the Baikal region concerning Special economic zone of tourism and recreation "Baikal Harbour". The complex approach was used which included the variety of methods such as landscape and geochemical research, the study of contemporary environmental situation in order to assess the prospects for the development of recreation and nature protection. To assess the prospects for the region development as the local population see them the sociological survey was carried out. The SWOT-analysis revealed the positive and negative factors of territory development. To meet the priorities of socio-economic development of the Republic of Buryatia it is optimal to encourage the growth of Special economic zone "Baikal Harbour". The impact of this zone is believed to be nonthreatening in comparison with unorganised tourism. The diversity of tourism and entertainment creates the necessary conditions for the efficient spending of tourists having a rest in the resort, and provides cash flow, allowing compensate all the investments in basic facilities and tourist infrastructure.

Keywords: sustainable tourism, environmental management, special economic zones, Baikal Harbour, Lake Baikal.

#### 1. Introduction

The creation of 9 tourist recreational zones announced in Russia, which have the status of special economic zones, have preferential taxation and are designed to develop domestic and foreign tourism. Tourist recreational zones are located in European Russia, Siberia and the Far East.

Foreign experience covers the study of the creation of special tourist zones and the development of ecotourism in Bulgaria (Arabska, Terziev, 2015), Thailand (Sakolnakorn et al., 2013), South Africa (Rogerson, 2015), Russia (Ovcharov et al., 2015) and other countries (Saufi et al., 2014). Russian and foreign scientists note the importance of the development of ecological (Evstrop'eva, Korytnyi, 2016), rural (Maksanova, 2017) and educational (Chizhova et al., 2016) tourism in the Baikal region (Rubtsova, 2014), the introduction of the green economy (Pakina, 2014), the application of geoinformation technologies (Kuklina, Bayaskalanova, 2015) and the integration of climate change (Kirillov, Slipenchuk, 2017).

A lot of attention is given to the Baikal region which is a unique place in Russia in South-East Siberia. Lake Baikal and its environs is a giant natural laboratory, extremely attractive to the international community, attracting more and more interest of not only scientists, but also tourists. It is surrounded by a system of protected areas with high scientific and other natural values. Among the cultural heritage are the forms of living traditional culture as they reflect the cultural habits and traditions of people living in a certain area. The shores of Lake have been inhabited by people since ancient times. These are the Evenki, the Soyots, the Buryats, the Russian and other nations, which have largely retained their unique culture of the exploration of the Baikal region.

At the same time the Baikal region faces challenges in the sphere of economy, ecology and social sustainability. So it is of vital importance to conserve the Baikal natural territory as well as arrange and develop the region's economy. Special environmental policy in the Central Ecological Zone (CEZ) of the Baikal natural territory imposed special restrictions on the development of natural resources. As a result the nature management structure has changed and the development of the Republic of Burytia goes in a special regime of nature management, and for the local population is not always for the better. Between different types of economic activity there are conflicts, which have different reasons and the region has long been considered "depressed". The direct losses related to environmental restrictions and limitations, range from 12 to 17 % relative to the GRP, which is comparable with the annual volume of investments. Obviously, the area included in the CEZ, despite strict restrictions needs future development. So it is vital to conserve virgin nature which serves an ecological frame of the region and to encourage its economic development, to find the balance between these two contradictions.

For future development of specially protected natural areas and creation of tourist recreational zones (TRZ) it is possible to develop infrastructure. The development of tourism and the accompanying service sector is considered as an activity that best meets the environmental and ecological requirements. Thus, under the institutional policy of the Baikal region the main far going opportunities of economic growth are linked with tourism, and the development of tourism and recreation activities within the area fully meets the priorities of socio-economic development of the Republic of Buryatia.

Special Economic Zone of tourism and recreation "Baikal Harbour" was created in the Republic of Buryatia in 2007. It was aimed at organizing the center of international tourism in the eastern part of Russia in order to raise competitiveness of the region's tourism with the help of Lake Baikal. It is supposed to be an all-seasonable resort meeting with the world standards. The TRZ will specialize in mountain ski, spa, treatment methods of Oriental Medicine, cruises on Lake Baikal, family vacation" (Spilenchuk et al., 2016). Another reason why the TRZ was created here is that recreational use, taking into account the high environmental requirements, leads to the urgent need for the development of organized recreation.

In the period from 2012 to 2019 the scientists and students of our department of Geography of Lomonosov Moscow State University organized expeditions in order to study the problems and future opportunities of development in the area of TRZ "Baikal Harbour".

#### 2. Methods

The use of integrated approach allows to assess the potential of the territory developing as the TRZ. We applied a variety of methods for investigating different aspects of nature use in the area of study which included landscape research, geochemical research, hydrochemical research, toponomic research, studies of nature management, sociological survey, expert evaluation, and SWOT analysis.

Landscape research included the study of the landscape structure and ecological capacity of the territory, the study of hazardous exogenous natural processes in the area and the assessment of recreational potential of landscapes.

One of the most important aspects of geochemical research was the study of contemporary environmental situation in order to assess the prospects for the development of such types of nature management as recreation and nature protection. Investigations were carried out on the example of a number of model sites, one of which was a recreational area of Lake Kotokel (Kirillov et al., 2014). The hydrochemical network was established to control the water quality at the locations of recreational facilities and prospective tourist routes.

The toponymic research was carried out to study the history of human activity and contemporary nature management. As a result contemporary and historical maps of nature management and traditional nature use were made.

To assess the prospects for the region development as the local population see them the sociological survey was carried out. The questionnaire developed for different target groups included questions about their attitude towards the creation of the TRZ "Baikal Harbour" and the prospects for the development of the area. Special emphasis was given to the tourism development.

### 3. Study area

The TRZ "Baikal Harbour" was created on the territory of the Pribaikalsky District of the Republic of Buryatia on the eastern coast of Baikal Lake 150-180 km from Ulan-Ude (figure 1). The total area makes 700 sq km. The TRZ adjoins the river valley Khaim from the south. The length of the Baikal coast is 60 km from the village Goryachinsk to Cape Katkov. On the territory of "the Baikal Harbour" there is Lake Kotokel, Bychya Mountain is located 20 km to the south, with a peak height of 1771 meters.

First plans for the creation of TRZ appeared in late 2005 after the visit of the Minister of Economic Development of Russia German Gref to the Republic. A year later, the application from Buryatia passed a competitive selection, and the republic was among the 9 regions of Russia, where the creation of the TRZ began.

In June 2010, five areas of economic preference were established in Buryatia: "Turka", "Peski", "Bychya Mountain", "Bezymyannaya Bay", "Goryachinsk". While choosing the areas they took into consideration a variety of landscapes of the territory, natural and climatic conditions, availability, close location to the infrastructure, opportunity for all-weather functioning of the resort, recommendation of "ECOSIGN" company (Canada) which is the world leader on designing of mountain resorts. The transport infrastructure

includes: Ulan-Ude – Turuntaevo – Kurumkan (a road of republican importance where 180 kms are reconstructed), airport in Ulan-Ude and in Goryachinsk, port in Turka.

"Turka", one of areas of the TRZ, is planned as a yacht club with marina for small boats and service infrastructure, commercial and entertainment center "Fishing Village". Turka is a valley which is located on the coast of Lake Baikal. The distance from the capital of Buryatia Ulan-Ude to Turka is 169 km. Bearing the same name river divides the site into two parts. The right-bank part is located at the mouth of the bay of the river, which is convenient for navigation. Along the coast of the lake, in the direction of the area "Peski", sandy beaches are located. The area "Turka" is positioned as one of the centers of business tourism. Near the complex "Fishing village" the administrative and business center with a hall for conferences and other events will be placed. There are plans for hotels and cottage village, a sports complex, a swimming pool, outdoor sports grounds, a SPA-center.

"Peski", one of areas of the TRZ, would be a leisure tourist and recreational complex consisting of several zones of recreation and entertainment. The company "Golden Sands of Baikal", which is one of the residents of "Baikal Harbour", will provide the development of the area "Peski" in the framework of the business plan.



Figure 1. Location of the "Baikal Harbour" (Spilenchuk et al., 2016)

"Bychya Mountain" is planned as an all-season ski resort within the TRZ "Baikal Harbour". The project involves 29 routes with a total length of 40 km. The resort is designed to receive 300 thousand tourists every year. The developer of this site was the Italian company "Plan Team" that won the competition. In August 2010, the company introduced the project of the resort development concept to the Government of

Buryatia. "Bychya Mountain" in the proposed project is an ideal route for giant slalom and can serve as a training ground for professional athletes. The company "Plan Team" previously designed the Olympic facilities in Turin, the International ski center in St. Petersburg, road and communication Bukovel ski resort, Ukraine. The construction of the resort will cost 32 billion rubles, according to the representative of the company "Rusresorts". "Rusresorts" expects the influx of tourists from Asia, who want to relax at Lake Baikal. The resort "Sobolinaya Mountain" in the neighboring Irkutsk Region is believed to attract tourists from Russia and does not compete with the new resort.

The resort "Goryachinsk", one of the five areas of TRZ "Baikal Harbour", is planned to be a modern world-class resort specializing in medical and wellness treatments. Spa resort is located in the village of Goryachinsk in the Baikal Region of Buryatia on the shore of Lake Baikal. Goryachinsk, being one of the oldest resorts in Russia, has a 200year history. Founded in 1781, it is now widely known for its healing capabilities. Goryachinsk is famous for its proximity to Lake Baikal, coniferous forest, fresh air, weakly mineralized thermal waters. Now the resort Goryachinsk successfully treat diseases of the musculoskeletal system, nervous system, skin, respiratory, and others. In addition, near the site the airport is under reconstruction which will allow the area to become the air gateway to the "Baikal Harbour".

The last area of the TRZ is "Bezymyannaya Bay". It is planned that "Bezymyannaya Bay" will become a major tourist destination for family vacations, amateurs of adventure and water sports on the shore of Lake Baikal. The land area is 422 hectares. The resort concept project "Bezymyannaya Bay" has developed an Italian company, according to which it will provide accommodation for 1,500 people with a possible extension up to 2,500 people. The total funding of the road construction will be 5.6 billion rubles.

The Russian Ministry of Economic Development has concluded an agreement for the development of the TRZ with nine residents of the "Baikal Harbour." The total investment was expected to reach 36 billion rubles. More than over 1 million of tourists per year are expected to 2027, 20 % of them will make foreign tourists (Spilenchuk et al., 2016).

In July 2010, "Baikal Harbour" was included in the list of priority investment projects in the Siberian Federal Region approved by the Russian government. At the end of 2010 the first phase of infrastructure of special economic zone was put into operation: power facilities, inner water supply, domestic sewerage, an embankment with lightning. In February 2011, treatment facilities and power substation started to work. In 2010, the state invested in the infrastructure of "Baikal Harbour" about 2 billion rubles, in 2011 the 3.8 billion rubles. In 2012, Buryatia planned to send 585 million rubles from its budget to the infrastructure of the TRZ, in 2013 - 676 million rubles, in 2014 - 318 million rubles. The building company, which was initially dealt with the erection of the pier at the mouth of the River Turka, was removed from the project due to the poor implementation of works. Also at the moment Russia is suffering from economic crises. As a result the full project is postponed until 2026.

### 4. Results

As a result of our studies we have analyzed current environmental and economic situation on the territory of the TRZ. The area of research has a variety of resources and attractive features which can be used for territory development as a part of the TRZ. Also it is important for the economy of the Republic of Buryatia to encourage the growth of the TRZ.

The landscape research showed the diversity and attractiveness of the studied territory. The area "Turka" can specialize mainly in summer forms of leisure and cruise tours of Lake Baikal. The area "Turka" is a sea gate in the "Baikal Harbour". The construction in this area is integrated into a single port of water and transport infrastructure of the Baikal Basin. The location of an administrative-business complex with congress center provides for international and Russian conferences, forums, etc. The area "Peski" is characterized by a beautiful sandy beach and is also mostly focused on summer tourism. A recreational and tourist complex will specialize in products such as tours, cruises on Lake Baikal, health and beauty, camping. The area "Mountain Bychya" is most suitable for creating a year-round mountain resort. The spa-resort "Goryachinsk" will specialize on medical and wellness treatments. As for the area "Bezymyannaya Bay", it is the most remote site of the TRZ, located in a very picturesque place in shallow water with sandy beaches, and is characterized by highlevel accommodation and top-class recreational interests. In fact, it is the most secluded area of land intended for the organization of VIP-rest on Baikal. Thus, the tourist offer of the TRZ can satisfy all categories of consumers: from the economy and business class to class "luxury". It can include all possible kinds of entertainment, leisure, sports and other services that will be a source of income throughout the year. Sport, adventure and ecological tourism are the base of the high season tourism. Among interseasonal there is business tourism, cultural and religious tourism. Yearround offer may have SPA-resorts, wellness programmers, entertainment area.

The analysis of the data allows to say that all the allocated recreational areas included in the TRZ "Baikal Harbour", according to a wide range of possible recreational activities can be used for recreation all year round. First of all, this is due to the unique natural opportunities of the territory, which include a variety of landscapes mountains and foothills, Lake Baikal, rivers, inland lakes of the coastal part of Lake Baikal, as well as climatic conditions with relatively hot summers and snowy winters. All this makes it possible to develop a variety of types of recreation and sports in the given territory. In terms of the number of possible recreational activities, two areas are the most promising "Turka" and "Bychya Mountain". According to the totality of the components of the recreational potential are "Turka" and "Goryachinsk" (Table 1).

	Areas of TRZ «Baikal Harbour»				
Types and subtypes of recreational resources	"Turka"	"Peski"	"Bychya Mountain"	"Bezymya- nnaya Bay"	"Gorya- chinsk"
Natural (total score), including:	21	22	22	22	20
climatic resources	3	4	4	5	4
geomorphological resources	5	5	5	4	3
hydrological resources	5	4	3	4	5
biotic resources	4	4	5	4	4
landscape resources	4	5	5	5	4
Historical and cultural (total score), including:	9	5	8	5	7
monuments (history, archeology, art, urban planning and architecture, religious)	4	4	3	4	5
other places of interest	5	1	5	1	2
Socio-economic (total score), including:	22	20	8	15	23
objects for accommodation of tourists	4	3	3	3	5
labor resources	3	3	0	3	4
roads	5	5	0	4	5
distance from the airport (Ulan- Ude)	5	5	5	3	4
availability of shops, cafes, health centers	5	4	0	2	5
TOTAL	52	47	38	42	50

Table 1. Recreational resources in the areas of TRZ «Baikal Harbour", expert evaluation (in points).

Thus, the TRZ resorts will be able to meet the diverse needs of different categories of tourists, which makes the whole project highly profitable and promising. The zone can be a city-forming place from which to begin the development of tourism and tourism-related industries. The diversity of tourism and entertainment creates the necessary conditions for the efficient spending of tourists having a rest in the resort, and provides cash flow, allowing compensate all the investments in basic facilities and tourist infrastructure.

The research of the contemporary ecological situation proved the contamination of Lake Kotokel. Due to serious deterioration of the lake's state, it lost its recreational value. The sources of drinking water around it are also of serious concern. Only complex measures together with permanent control of the environmental situation of the lake can help restore its recreational attractiveness in the structure of the territory of TRZ "Baikal Harbour".

In the course of toponymic research the toponymic dictionary was created after the analysis of about 700 toponyms. The contemporary and historical maps made on the toponimic data reflect the natural features of the area, fishing grounds, fishing and hunting objects and crafts, objects of natural and cultural heritage, etc. which can also be considered as valuable recreational resources.

The SWOT-analysis revealed the positive and negative factors of territory development (figure 2).

	Helpful to achieving the objective	Harmful to achieving the objective
originInternal origin (attributes of the system)	<ul> <li>Strengths</li> <li>The interest of foreign and Russian tourists in ecological tourism</li> <li>Presence of the World Natural Heritage site - Lake Baikal</li> <li>Project support at the state and regional levels</li> </ul>	and location • Insufficient number of investments
External origin! (attributes of the environment) (a	<ul> <li>Opportunities</li> <li>Year-round tourist reception</li> <li>The possibility of temporary accommodation (camping) in high season (July-August)</li> <li>Offering a variety of accommodation on cost categories</li> </ul>	

Figure 2. SWOT-analysis of the TRZ "Baikal Harbour"

Sociological study showed that only half of the population surveyed expressed positive attitude towards current development of the region, however, more than 20 % of respondents are skeptical or negative towards the creation of the "Baikal Harbour" (Slipenchuk et al., 2016). This can lead to conflicts between the TRZ and

the local population. There are some objective reasons for that. In spite of the fact that a great sum of money has already been invested in the area, the locals do not have many advantages of it. The standard of living is still very low: the inhabitants need proper housing, communication, sewage facilities, health care, jobs. At the same time many respondents are positive about tourism development and are ready to work in tourism.

## Conclusion

As a result of our research we can assume that the main prospects for future development of the territory can be connected with the creation of "Baikal Harbour" which is the way of sustainable tourism development. Tourism can be a significant source of economic growth in the Republic of Buryatia with little impact on the environment. Tourist and recreational activities can be presented by all kinds of recreation and sports, both winter and summer, which can be developed on the territory of the TRZ in order to obtain the maximum socio-economic effect.

The creation of the TRZ in the Baikal region has a multiplier effect. The infrastructure of the area is improving; the roads and other communications are being conducted and reconstructed, public service communities are improving too. Also we cannot ignore the positive effects of tourism development resulting from giving more job opportunities for local population and sale of goods and services to tourists.

From the other point, local people do not see much prospects for themselves, their social infrastructure needs serious improvement right now not in the long-run. The standard of living is still very low which leads to a gradual outflow of local residents. In this case we should remember that it is a long-term project.

There are ground prospects for the TRZ in this area. Tourism being one of the fastest developing businesses will account for one third of the GRP of Buryatia. Moreover, it will provide collaboration between authorities, businesses, institutions and communities. The appearance of such zones in the Baikal region will lay the ground for changing the area from the depressed into the prosperous one.

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# References

Arabska, E. & Terziev, V. K. (2015). Opportunities of establishment of destination management and marketing organizations in Bulgaria. *Journal of Economic Development, Environment and People, 4 (2),* 49-60.

Chizhova, V., Kirillov, S. & Slipenchuk, M. (2016). Educational tourism in protected natural areas in southeast of the Baikal region. *Quaestiones Geographicae*, 35 (1), 63-68.

- Evstrop'eva, O. V. & Korytnyi, L. M. (2016). How to Develop Cross-Border Ecotourism in the Lake Baikal Basin. Problems of Economic Transition, 58 (7-9), 794-804.
- Kirillov, S., Sedova, N., Vorobyevskaya, E. & Zengina, T., (2014). Problems and prospects for tourism development in the Baikal Region, Russia. 14th GeoConference on ecology, economics, education and legislation, 2, 531-538.
- Kirillov, S., Slipenchuk, M. & Zengina, T. (2016). Management of the sustainable development of the Baikal natural territory in Russia. International Journal of Innovation and Sustainable Development, 10 (1), 57-68.
- Kirillov, S. & Slipenchuk, M. (2017) Trends and threats of climate change on the Baikal natural territory in Russia. 17th International Multidisciplinary Scientific Geoconference, SGEM 2017, 17, 693-700.
- Kuklina, M. V. & Bayaskalanova, T. A. (2015) The Project of Information System of Baikal Natural Territory as a Factor of Tourism Development. *Mediterranean Journal of Social Sciences, 6 (S7)*, 171-174.
- Maksanova, L. Z. (2017) Rural Tourism in Siberia. Problems of Economic Transition, 59 (6), 443-447.
- Ovcharov, A. O., Vasiljeva, M. V. & Shirin, S. S. (2015). The Russian tourist industry: Structure, trends, competitiveness at the world market. *Review of European Studies, 7 (9),* 151-161.
- Pakina, A. A. (2014). Green Economy's Prospects in Russia: Case of Baikal Area. Journal of Sustainable Development of Energy, Water and Environment Systems, 2 (2), 139-151.
- Rogerson, C. M. (2015). Tourism and regional development: The case of South Africa's distressed areas. Development Southern Africa, 32 (3), 277-291.
- Rubtsova, N. V. (2014). Identification of tourist clusters in the Pribaikal Region. International Journal of Econometrics and Financial Management, 2 (4), 163-167.
- Sakolnakorn, T. P. N., Naipinit, A. & Kroeksakul, P. (2013). Sustainable tourism development and management in the Phuket province, Thailand. Asian Social Science, 9 (7), 75-84.
- Saufi, A., O'Brien, D. & Wilkins, H. (2014). Inhibitors to host community participation in sustainable tourism development in developing countries. *Journal of Sustainable Tourism, 22 (5)*, 801-820.
- Slipenchuk, M., Sedova, N. & Vorobyevskaya E. (2016). Sociological research in the tourism and recreation zone "Baikal Harbour". Journal of the Geographical Institute Joran Cvijic SASA, 66 (2), 325-332.
- Vorobyevskaya, E., Zengina, T., Sedova, N. & Ustyantsev, A. (2014). Complex geographic researching in the Baikal Region. In Engineering for green development. Proceedings of the first Russian-Japanese Collaboration Seminar for Sustainable Environment, Moscow, 231-238.