

"THE OTHER WORLD" – ASSESSMENT OF THE TOURIST POTENTIAL OF THE LAKE BAIKAL REGION

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Abstract: The Lake Baikal region situated on the territory of the Irkutsk Oblast and the Republic of Buryatia in Siberia has a great tourist potential which is not fully used. Its unique environmental and cultural attractions make it very attractive from the perspective of tourists. However, the communication availability and still underdeveloped tourist facilities cause that many places are difficult to reach and the stay there is a real challenge. The most common forms of tourism are: camping, hiking, climbing, biking, swimming, fishing, hunting, sailing, adventurous tours, ecological tours, birth watching, scientific tourism. The best developed tourist area is in the southern part of the region with a good accessibility to the Trans-Siberian Railway, motorways and airports. The northern part, being still wild, is not as hospitable as the southern area. The article presents characteristic environmental and cultural attractions of the Lake Baikal region and is the assessment of its tourist potential. The transport infrastructure, which influences communication availability, and tourist facilities are also analysed.

Key words: tourist potential, tourist facilities, environmental and cultural attractions

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INTRODUCTION

The Lake Baikal region is located in Siberia on the territory of the Irkutsk Oblast and the Republic of Buryatia which are the part of the Siberian Federal District. According to federal statistics, there were only 28 cities and towns in the region in 2002. Table 1 shows the domination of villages. Over two times bigger area of the Irkutsk Oblast concentrates a bigger number of people and settlement units, especially in the southern region. Planes and the Trans-Siberian Railway with its branches maintain the main connections with the world. The road accessibility is limited due to environmental conditions, especially during winter.

The region has a great tourist potential. Its environmental and cultural attractions present good perspectives for the development of tourism. There are numerous reasons to visit it. The main tourist attraction is the unique ecosystem of Baikal and picturesque landscapes created by complicated geological processes. Lake Baikal, which features are presented in table 2, is notable for its purity and transparency water with the highest quality standards for drinking water and rich, unique biological life. The World Heritage status since 1996 stresses the important role of the lake and its surroundings as the treasure of the natural world.

Table 1. Settlement units in the the Lake Baikal region in 2002
(Source: based on: Федеральная служба государственной статистики,
www.perepis2002.ru/ct/doc/1_TOM_01_03.xls)

	Capital	Area in thousands km ²	Number of cities and towns	Number of urbanised villages	Number of villages
the Irkutsk Oblast	Irkutsk	767.9	22	55	1,503
the Republic of Buryatia	Ulan-Ude	351.3	6	29	611

Table 2. Features of Lake Baikal
(Source: based on: <http://egov-buryatia.ru>; <http://baikalwave.eu.org>)

Features	Description
Age	25-30 mln years old
Volume of water	contains 23,000 m ³ of fresh water, which is 20 % of world's fresh, unfrozen water supply
Length between northern and southern banks	636 km
Length of the coastline	over 2000 km
Width range	from 25 to 80 km
Maximum depth	1637 m
Average depth	731m
Water basin area	around 570 000 km ²
Number of rivers going to the lake	over 340
Number of rivers flowing out of the lake	1 (the Angara River)
Number of islands	22, of which the largest one is Olkhon

Visits in the region give the occasion to experience the way of life over there. The meeting with the culture of **indigenous** Asian Buryats and Siberian Russians who started the intensive colonization process in the 17th century is a great tourist attraction.

Many enterprises and organizations implement the tourist activity. They are also involved in the international tourism. Even an unorganized tourism is considerably developed.

In the article, the author presents and describes these environmental and cultural attractions that are important from the perspective of a tourism development. As the key point of this development, the transport infrastructure that influences the communication availability and tourist facilities are analysed. It is also worth to present the forms of tourism, especially in protected areas. Finally, these analyses are a base for the tourist value assessment.

Information for this article is based on the researches done in July and August 2010 during the scientific expedition of students from the High School No. 3 in Poland and the Lyceum No. 1553 "Lyceum on Donskaya" in Moscow with specialists from the **Lomonosov** Moscow State **University**, the University of Gdansk and teachers of both schools. The author was responsible for the researches done by the geographical group cooperating with the geological group, in the southern and central parts of the region. Also the interviews with local society were the source of data, especially connected with the culture of Buryats.

COMMUNICATION AVAILABILITY

Communication availability, which is analysed on the base of Fig. 1, is the major factor which influences the development of tourist regions and the major tourist flow. The Trans-Siberian Railway plays a very important role in the communication with the region. It connects Moscow and Vladivostok through **Usole Sibirskoe**, Angarsk, Irkutsk, Sljudjanca, Baikalsk, Vydrino, Ulan-Ude in the southern Baikal region. The BAM Baikal-Amur Mainline gives the access to the Far East through Severobaikalsk and Nizhneangarsk in the northern part. The Trans-Manchurian Line goes to and from China as well as Trans-

Mongolian Line that additionally has the connection with Mongolia. These connections decide about the concentration of tourist facilities in the southern region. Tourists can use the Circum-Baikal Railway on the southwestern tip of Lake Baikal covering the route: Kultuk, Maritui, Ulanovo, Baikal. It has been working since 1905. The small concentration of the tourist flow is around Severobaikals and Nizhneangarsk.

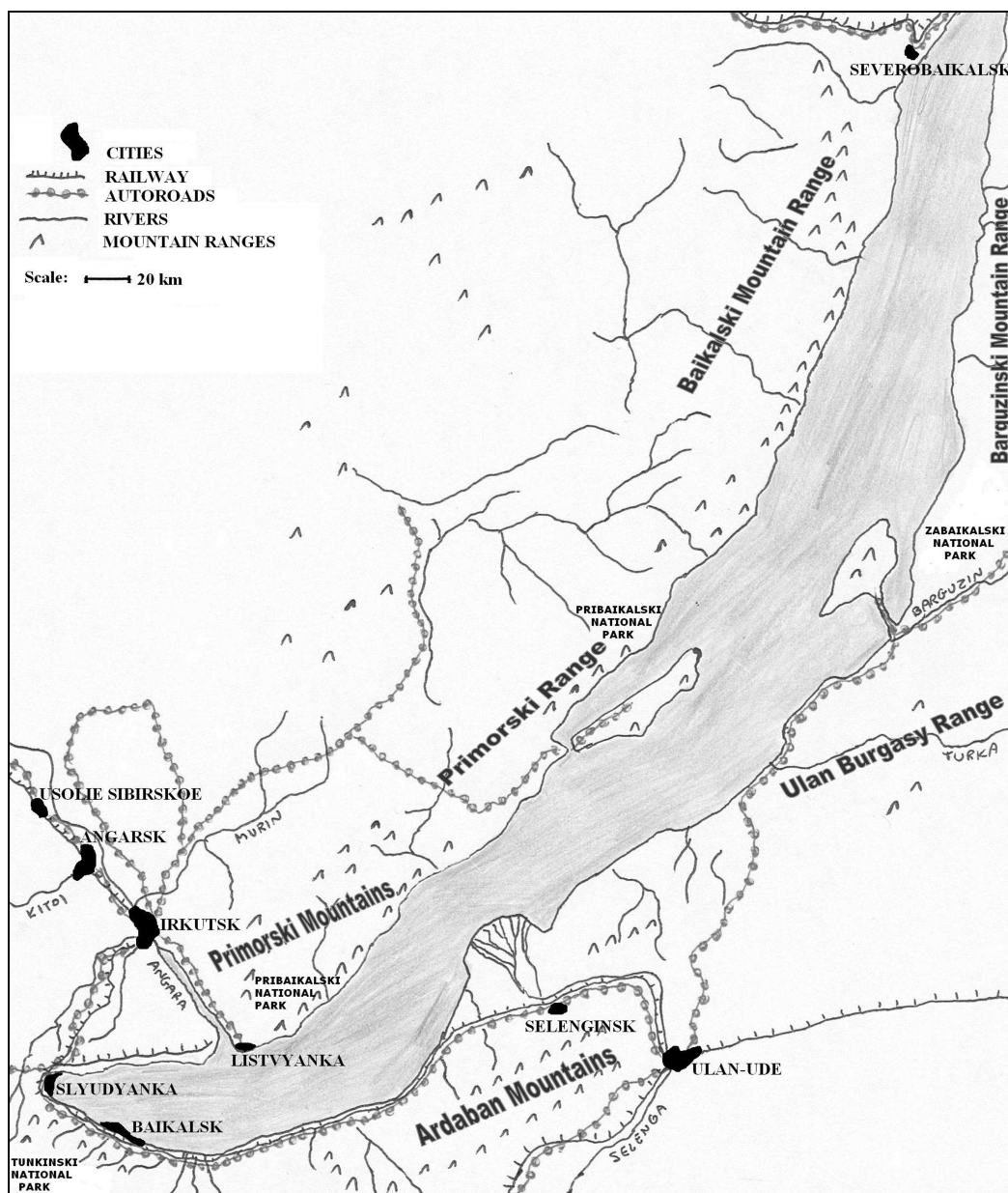


Figure 1. Transport infrastructure and some environmental features of the Lake Baikal region
(Source: self-made on the base: The map of the Zabaikalskii National Park, 2010;
Baikal Lake Map, 2002 (www.flickr.com/photos/isanders/21643800/))

The Lake Baikal region has the connections with many countries in the world via airports, mainly in Irkutsk and in Ulan-Ude. Five of them are in the Republic of Buryatia: Kyren Airport, Nizhneangarsk Airport, Taksimo Airport, Ulan-Ude Airport, Vostochny Airport. Twelve airports are located in the Irkutsk Oblast, of which: Bodaybo Airport, Bratsk Airport, Irkutsk Airports (3), Kazachinskaya Airport, Kirensk Airport, Mama Airport, Ust-Ilimsk Airport, Ust-Kut Airport, Zheleznogorsk Airport. Most of them have the local flights. The airports are situated mainly in the southern region. Main roads with improved surfacing are along the Trans-Siberian Railway (road numbers are: M-53, M-55, A-165). Additionally, main paved roads connect bigger towns. They go e.g. from Irkutsk to Kachug with the branch from Baiandai to Elantsy close to Lake Baikal and from Irkutsk to Listvyanka or from Ulan-Ude towards Barguzin. The northern region has only the main paved road along the BAM Baikal-Amur Mainline with a branch going south from Severobaikals to **Baikalskoie**. The major problem from the tourist point of view is a low density of roads in the region, especially in the northern part, as well as their quality. Asphalt roads with improved surfacing are only around big cities. Farer from cities the quality of roads is low, asphalt is changed into unpaved roads. The access within the region is possible thanks to many ground roads without surfacing and the use of minibuses or special cars prepared to these difficult conditions. Because of the permafrost, there is no sense to have asphalt in less accessible areas what causes a mud every time during the summer rains. The next problem of tourists is a poor quality of many bridges.

The transport along banks or across Lake Baikal is offered by many ship companies or by individual, local citizens.

During a winter season, which is approximately ten months long, most places in the region are not accessible. There are only narrow winter roads or people can use frozen rivers and lakes. Driving is a subject to reduced visibility, ice, and heavy snow.

TOURIST FACILITIES

Accommodation in the form of hotels and hostels is offered in cities and towns. Irkutsk perceived as the gate to Lake Baikal has the highest number of beds in about 14 hotels and hostels for all budget and tastes with diverse quality from a 5-star hotel to the very simple, but cheap rooms. Ulan-Ude, the next big city in the region, has about five such places. In all towns and cities it is possible to find apartments for short-term rent, usually cheap and a low quality. There is also the chance to find a homestay in private houses. The number of apartments and homestays is not possible to state as in the most cases they are not officially registered. The most popular forms of accommodation during summer are camping sites close to Lake Baikal or on banks of many rivers. In national parks the permission is needed to use such sites. They are not signed and tourists are usually responsible for the organisation of showers, outside toilets, and the waste disposal. Many tourists organise their own camping sites in wild places.

The food related places, such as restaurants and **cafés**, are in all towns and bigger villages. Most of them are quite ordinary and offer local food. An every form of settlement has grocery shops where food can be bought and prepared with the use of fire. Cities like Irkutsk or Ulan-Ude are not famous for their nightlife. There are a few clubs there. It is surprising that even well known places on the banks of Lake Baikal do not offer any summer **cafés** or market stalls. There is the insufficient number of tourist information points or tourist shops.

There are a lot of **trails** in mountains surrounding Lake Baikal. Most trails are not well signed what means that only well prepared tourists with maps, compases and other equipment prepared to stay for the night should start hiking in this mountainous area. Local guides offer their services, especially in bigger towns and cities. Along trails camping sites and some basic shelters called "zimovya", usually built by hunters for 4-5 people, are prepared.

3491 metres above sea level. The Primorski and Baikalski Ranges, with their maximum height of 2678 metres are located on the western side of lake. The Barguzinsky and Ulan-Burgasy Ranges are on the eastern side. Mountains have a wide choice of slopes with different levels of difficulty for hiking and climbing. A wide range of slopes with various expositions, at prevalence of the northern slopes, provides a high quality of snow cover good for skiing and snowboard during winter and spring (figure 1, The map of Zabaikalski National Parks, 2010).

The most common igneous and methamorphic rocks that built mountains were formed in Precambrian eras. Within these rocks tourists can meet many unique minerals. The region that consists of the highest number of minerals is Sljudjanca. Within about 200 minerals the most common are: mica, lazurite, apatite, calcite, gold, different types of quartz. The Mineralogical Museum in Sljudjanca presents most of these minerals giving one of the most interesting exhibitions of minerals in Russia. Also other places of the region have various deposits of natural resources and the industrial exploitations are made in many of them. Mining of e.g. gravel, brown and hard coal, granite, marble, gneiss changes landscapes. On the other hand, passionates of geology with the permission might visit some mines.

The Buryat Republic and the Irkutsk Oblast are known for their unique Central Asian landscapes. There is the domination of mountains with forests, alpine meadows and tundra, plains with steppes, vast woodland, cliffs, spits, bays, gravel and sand beaches. Some plains have mud volcanoes or dry lakes with salt formations, e.g. in the region of Niestiericha. Many areas along the coastline contain mineral and thermal springs that are famous all over Russia and might be used for the medical treatment. However, there are not too many resorts based on these springs. Sometimes good geological maps are needed to reach them, like in the Zabaikalskii National Park where there are e.g.: the Nechaevsky spring, the Zmeinyi spring, spring of Kulinyhh bogs. The deep river valleys and ravines cut up mountains. Some U-shaped valley, mountain lakes, sediments are the evidence of distinct traces of the local mountain glaciation during Pleistocene.

Most rivers are included into the Lake Baikal water basin. The largest rivers are: the Selenga with the biggest dalta in the region, the Turka, the Khilok, the Dzhida, the Uda, the Barguzin, and the Upper Angara. Some of them are used for rafting. Rivers are abundant in fish what is good for fishing as well. Many of them are source of clean water, especially rivers of the eastern and northern part of the Lake Baikal water basin with lower population density. Many campings are organised on banks of rivers during summer. However, in many places rivers are the barriers for tourists going along official trails signed on maps. The insufficient number of good quality bridges makes many rivers dangerous to cross them. Many bridges are made of a single log.

The region's one of the most important natural resources are forest resources. Within the prevailing tree species larch, pine, Siberian cedar, and fir trees dominate. Almost all forests are situated in mountainous areas. They offer opportunities for the development of amateur hunting and picking nuts, mushrooms or berries. A great variety of animal species is the resource potential of hunting, of which: sable, squirrel, manchurian deer and roe deer are of great hunting importance.

The other natural factor which influences the development of tourism in the Lake Baikal region is sharp continental climate of the temperate zone with a big range difference of annual and daily temperatures. It makes tourist life conditions difficult, especially during winter. On the other hand, it protects the area from the massive flow of tourists and makes the region wild and desirable. Not all types of tourists are able to accept cold winters (average temperature -22°C) with dry frosts and little snowfall on the level about 200 mm or short summers with hot days and cool nights, with heavy rains in July and August and the average summer temperature 18°C . Springs are almost without rainfalls, but strong winds and late frosts do not encourage many visitors to come. The period from March to April is known from motor and bicycle trips on the ice, ice boating,

ski-walks and ice fishing. Late autumn from the mid-October till the end of November is the most unfavourable recreation and tourism time, because of rainy weather and strong winds. But it should be stressed that an every season in the region is interesting and available for travelling. Most visitors come during the warm summer time and trips have the expedition character (www.irkutsk.org/fed/climat.html).

FORMS OF TOURISM IN NATIONAL PARKS

A law thanks to establishing national parks and nature reserves protects 28 % of the Lake Baikal region. There are also other types of protected areas, such as: state nature refuges, natural landmarks, resorts, and recreational areas. The great environmental importance of the region decided that in 1996 Lake Baikal and its surroundings became a UNESCO World Natural Heritage Site (WNHS).

There are two national parks in Buryatia (the Tunkinski National Park and the Zabaikalski National Park) and one in the Irkutsk Oblast (the Pribaikalski National Park). Table 3 presents their basic characteristics. The youngest and the biggest park is the Tunkinski National Park. All these parks protect natural, unique ecosystems and landscapes situated on a large but compact territory. Two parks preserve directly a unique natural complex of the Baikal Lake basin. The Tunkinski National Park is not located directly on the shore. The glacial-moraine landscapes with many lakes, wetlands, and springs dominate in its area. The development of tourist facilities is limited in national parks and nature reserves, especially in the Zabaikalski National Park. Being far from big cities and highways the park refers to the category of the Parks of Wild Nature. It means that there is no industry, a human activity is limited, and only three small settlements exist within its boundary. The entry to the park is limited by means of transport as there is the only one road. However, diversified forms of tourism can be successfully developed, e.g.: hiking, climbing, ecotourism, adventure touring, scientific touring, ornithological touring, or photographing touring. For many families camping, swimming, sailing or other water sports are the way of spending their holidays. Other parks have better developed facilities and bigger number of tourists comes there. They also have a better accessibility and the location close to bigger urban centres what are the pull factors encouraging tourists to come. Some resorts and higher number of settlement are located within their boundaries.

In all parks long trails are prepared through the most scenic sites. Using the example of the Zabaikalski National Park it is possible to show some interesting trails on the base of brochures from 2010 received from the park rangers. Trails give an opportunity to get acquainted with the unique nature of the Baikal region during minimum some days, like e.g.:

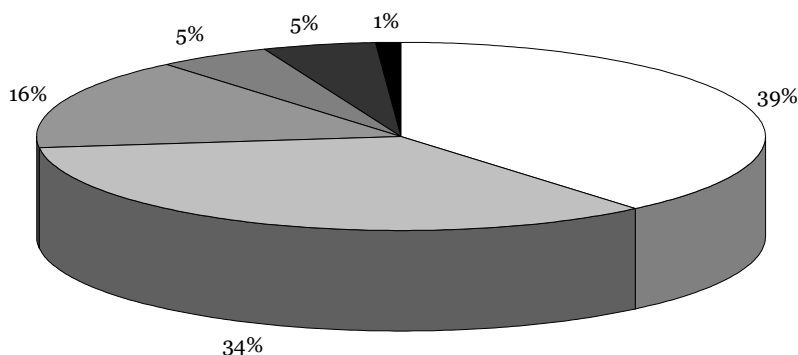
- the ecological trail "The way to the pure Lake Baikal" through the Barguzinsky Range, the Chivyrkuisky Bay, hot spring of the Zmeynaya Bay, the Svyatoy Nos Peninsula;
- the ecological trail "Chivyrkuisky Legend" with scenic sites of the Chivyrkuisky Isthmus, like: the salted Barmashovoye lakes, Arangatuy Swamps, hot springs, sand beaches, and dunes of the Svyatoy Nos Peninsula;
- the tour "The Trail of challenge", which runs through the Svyatoy Nos Peninsula to Glinka;
- the ornithological tour going through swamps called "The kingdom of birds", providing a chance for a bird watching;
- the ski route on ice around the Svyatoy Nos Peninsula, offered during winter.

Except for these trails, there are two water routes on the park territory.

The territories of all national parks are divided into functional zones with different preservation regimes. Figure 4 shows such zones on the example of the Zabaikalski National Park but in all parks there is a strict nature reserve zone, a controlled recreation zone, an intensive recreation usage zone, a visitor's zone with visitor service centres. Tourism is allowed to develop only in recreation and visitor's zones.

Table 3. Basic characteristics of three national parks in the Baikal region
(Source: <http://ngo.burnet.ru/znp>; www.forestsmonitor.org/en/reports)

	Zabaikalski National Park	Tunkinski National Park	Pribaikalski National Park
Date of establishing	12th September 1986	27th May 1991	13th February 1986
Area in ha	269,100	1,183,662	418,000
Geographical location and	on the eastern shores of Lake Baikal adjacent to the southern borders of the Barguzinsky Nature Reserve, includes: the Svyatoy Nos Peninsula, the southern part of the Barguzin region up to the territory of the Barguzin Natural State Preserve, the Chivyrkuisky and the Barguzinsky Bays, the Ushkanyi Islands and many others	south from the shore of Lake Baikal but not directly on the shore; covers the whole area of Tunkinsky District, of which: the Tunka (Tunkonskaya) Valley	on the western shores of Lake Baikal, Irkutsk, Olkhon, and Sliudyanski districts of the Irkutsk Oblast, the south and south-eastern slopes of the Primorski Range
Settlement within the park	There are 3 settlements within the park's border, where there live 180 men.	There are about 30 small Buryat villages in Tunkinsky.	No data



- Strict protected zone
- Controlled recreation zone in the costal area
- Intensive recreation usage zone in the water area of Baikal and Lake Arangatui
- Zone with regime of the ornithological preserve
- Visitor's zone
- Preserve zone in the Lake Baikal water basin

Figure 3. Functional zoning with different preservation regimes in the Zabaikalski National Park according to the "Project of establishment of the Park"
(Source: self-made on data from: <http://ngo.burnet.ru/znp>)

CULTURAL ATTRACTIONS

Customs and traditions of the Buryats

The most interesting cultural attraction in the region are customs and traditions of the Buryats, indigenous population of the Republic of Buryatia, and their influences on settlement, architecture, holy places, style of wearing, or the attitude towards tourists. The Buryats are believers of the Tibetan Buddhism called Lamaism. The other important religion is Shamanism. The Buryat Shamanism has a specific form because of highly developed polytheism and more complex ritual system. In many places of Buryatia tourists can find holly places of Buryats located on natural sites, like: hot springs, banks of lakes, rivers, violent waterfalls, steppes, on slopes of mountains, on tops of hills.



Figure 4. The Buryat Datsan in Siberia
(Source: Jaworska Ewa)



Figure 5. Typical Siberian house in Kultuk
(Source: Jaworska Ewa)

They can be easily recognised as there are some pieces of materials on trees (prayer flags), coins, cigarettes, sweets around wooden sculptures of gods, or piles of stones called “obos” which are arranged to ask local deities for help (figure 4). In many places big single rocks can be met and local legends are the evidence that people believe that the stones are hosts of the valley or the other area. One of the most important religious places are datsans, monaster complexes with temples, many statues and portraits of the Buddha, prayer wheels, places where monks live. Sometimes the schools and small shops are built. According to local Buryats, datsans are placed where source of the space energy has been discovered. In all holy places tourists should respect strict rules. The Buryats can offer the accommodation at their houses but not long stay is acceptable. Special rituals can bless their guests (Witczuk, 2001).

People are mostly involved in herding cattle, sheep, horses in the vast steppe and the traditions of a cattle breeding can be recognised in traditional food based on meat and dairy products.

The development of tourism causes the commercialisation of traditions close to bigger settlements. Folk programmes, wearing traditional clothes, Buryat lunches are offered. For example, the Russian travel company "Baikalcomplex" invites visitors to Ust-Orda for "One day tour to shaman", where "the major Shaman accomplishes the procedure of cleaning the guests from possible evil spirits and gives them further protection. Inside the yurt, everybody sitting around the fire tastes the Buryat tea, followed by oriental dishes typical of this region." (www.baikalcomplex.com).

Churches

The other religious objects that are tourists' attractions are the Orthodox Christian churches. The orthodox religion is the most popular within the Russians. There are also communities of the Old Believers, who does not accept the Nikon's reforms. Also other religions have their sacrificed places, like Catholic churches, mosques, or Jewish temples.

Villages

Many Siberian villages consist of characteristic summer and winter wooden houses with sculptured window frames, usually blue, surrounded by high, wooden fences (figure 5). The poorly developed technological and social infrastructure represented by sandy, ground roads, wells, outside toilets, sandy football fields is perceived as a very interesting attraction from the perspective of richer European tourists. The hospitality of local population encourages visitors to see these houses, to get some information about the region directly from its citizens, to try traditional food or to enjoy a popular sauna called "banya".

In some places old, destroyed kholkhozes can be seen.

Sometimes villages concentrate different nationalities, where traditional holidays and festivals are regularly celebrated, or where the folklore dancing and singing groups give concerts. The examples are the Ukrainian village Zarietche and the Polish village Viershina.

MUSEUMS AND ARCHEOLOGICAL SITES

Well-known museums are located in bigger cities, mainly in Irkutsk and its neighbourhood:

- the Irkutsk Museum of Regional Studies,
- the Decembrists' Museum in Irkutsk,
- the Irkutsk State Mineralogical Museum,
- the Art Gallery in Irkutsk,
- the Taltsi Museum of Architecture and Ethnography, the open air museum with a large collection of original wooden houses, located 70 km from Irkutsk,
- the Lake Baikal Museum (Limnological Museum) in Listvyanka,
- the Lore Museum in Ust-Orda village, showing the history and traditions of Siberia.

In Ulan-Ude there are such main museums:

- the Ethnographic Museum,
- the History and Nature Museums.

What is more, in almost all villages local museums at schools are organised by teachers and students. They are not always advertised and only local dwellers can inform about them.

Around Lake Baikal it is possible to see the archeological objects, e.g. the Early and Late Neolithic camps, settlements of the Bronze and Early Iron Ages, the cementaries of Shamanka, Khuzhir-Nuge XIV, and Kurma XI, Lokomotiv, and others, single tombs, traces of the ancient irrigation systems. Most of these objects are discovered in the southern and central part of the region (Weber, 1995).

SUMMARY

Development of tourism and recreation in the Baikal region has a great potential thanks to many environmental and cultural attractions. Tourism is one of the priority directions of social and economic development programmes. However, limited communication access, a poor quality of roads, underdeveloped tourist facilities that do not meet high world standards decide about the division of the area into better and less developed tourist spots. The best developed area is in the southern region around Irkutsk and Ulan-Ude. The tourism in the northern part is not well developed and concentrates around Severobaikalsk and Nizhneangarsk. Northeastern, sparsely populated area does not enjoy a popularity among tourists. Also strict rules in national parks limit the initiatives of potential investors. Diversed environmental conditions cause that different forms of organised and unorganised tourism are available in different seasons to satisfy the requirements of tourists.

However, some steps should be taken to make tourism profitable:

- the organisation of a network health resorts;
- better advertisement of more remote areas;
- the organisation of the transport-logistic complex;
- the building local airports or investing in the existing ones;
- the foundation of new water ports;
- the construction and/or the improvement of roads along Baikal;
- the development of more electric power lines (220 V);
- the solving the problem of wastes disposal.

At the same time all these steps should respect a general concept of tourism development in the region. Tourism can not be a main threat to preservation of world heritage – Lake Baikal and its surrounding.

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