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Therapeutic resources in the Great Tea Road: perspectives from the Republic of Buryatia

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Abstract. The article deals with the problem of using the therapeutic resources located in the regions of the Great Tea Road. An example of the Pitatelevsky source located on the territory of the Russian part of the transboundary basin of the Selenga River in the Republic of Buryatia is given, its current state and prospects for use are assessed. Conclusions are made about the need to study the therapeutic resources of the region, improvement of legislation, and the development of public-private partnership mechanisms.

Keywords: Great Tea Road, therapeutic resources, public-private partnership, mineral waters

1. Introduction

The underdevelopment of border regions' in the neighboring countries located on the Great Tea Road, the presence of large areas with intact natural complexes, picturesque landscapes, natural and historical, and cultural attractions naturally raise the question of rational use of tourist and recreational potentials. If a number of works are devoted to the study of recreational resources of border areas, as subjects of the Russian Federation, then practically no attention has been paid to the studies of the recreational potential of transboundary territories, including in the transboundary river basins [1]. Therapeutic resources, the study of which is insufficient, is an important component of the natural resource potential.

2. Materials and Methods

As is known, the most densely populated and developed areas of the Earth's surface are transboundary river basins, to which numerous articles in the literature of representatives of various scientific fields are devoted. One of such objects of study is the transboundary basin of the Selenga River, which is located on the territory of two states – Russia and Mongolia. Unlike others, its space is characterized by relatively low indicators of the number and density of the population. The peculiarities of the development of the territory determined the focal and areal pattern of the territorial organization of the economy and the settlement of the population. This contributed to the preservation of intact state of natural ecosystems, favoring the formation of a rich tourist and recreational potential.

The project of the new Great Tea Road and other projects for the creation of international transport corridors make differently assess existing the health and fitness potential transboundary Selenga River Basin in terms of the development of international medical tourism.



Most of the Selenga River Basin is located in Mongolia. Here, in general, there are more than 400 mineral springs, of which 127 are located directly on its territory. The wealth and diversity of healing waters serve as a reliable basis for the development of a sanatorium-resort complex. The peculiarity of their placement is that most of them are confined to the periphery of the basin, which is explained by the specifics of the geological structure of the territory [1].

The Russian part of the transboundary basin is located within the borders of the Republic of Buryatia (RB), which also has ample opportunities for the formation of a sanatorium-resort base based on the use of its own medical and recreational resources. The register of mineral waters of the Republic has 303 mineral sources of various types (cold and thermal) and 55 mineral lakes. Despite their significance, sufficient attention was not paid to the study of therapeutic properties and prospects for use. There are only a few publications on this issue.

3. Results

As the analysis shows, most of the medical and health resources of the Republic of Buryatia located in the Selenga river basin are used inefficiently, without any plans for development and assessment of potential reserves. Many of them are on the lands of different categories, do not have a certain legal status, which complicates their development.

The procedure and procedure for obtaining and securing the status of a health-improving area or resort is enshrined in federal and regional legislation. As practice shows, only a few mineral sources have this legally established status. The state ecological expertise of materials on the creation of a specially protected natural area of regional significance of the category of therapeutic and recreational terrain of the Goryachinsk resort was carried out only in 2011, but no appropriate decision was made.

For the rational use of therapeutic and recreational resources, the republican target program "Development of therapeutic and recreational areas and resorts in the Republic of Buryatia for 2012-2014" was developed and implemented. The program was supposed to give the appropriate status to 24 sources, which are located in 12 administrative districts. Unfortunately, due to lack of funding, the work was not completed until the end, and the new program was not developed. At the same time, it was possible to prepare documents on individual mineral sources, which formed the basis for making decisions on their legal status.

Tourist flows are formed due to the presence of transport hubs and highways, so the lack of roads hampers the development of tourism. Under these conditions, special attention should be paid to the health-improving resources of the Pribaikalsky and Ivolginsky districts located directly in the Selenga river basin, in the nearest transport accessibility from the capital of the subject of the federation, which is a generator of tourist flows. In the Pribaikalsky district is located one of the famous resorts "Goryachinsk," there are also less well-known mineral springs. The Ivolginsky District is notable for its richness and variety of mineral waters, including the presence of the Uta-Bulag, Khalyuta, Emgay Bulag, etc. mineral springs.

Due to the limited abilities of the resident population to travel abroad and other regions, local health resorts that have arisen on mineral springs in the Soviet times are especially popular. But there are those who, for various reasons, were abandoned in the post-reform period of the late 1990s. Among them is the Pitatelevsky source located near the village of Ilyinka in the Pribaikalsky District, which is located on the left bank of the Selenga River 54 km from Ulan-Ude. It has "mineral water reserves for balneological purposes in category "A" are 518 m³ / day. High temperature (65-70 ° C), a significant content of silicic acid and the presence of a large number of microelements make the waters of the Pitatelevsky source a very valuable balneological factor, and their good reserves open up broad prospects for the further development of the resort [2].

For the first time, the waters of the Pitatelevsky source were taken for analysis by the doctor A.L. Pitatelev at the beginning of the 20th century. After the revolution of 1917, the source was found suitable for the organization of a resort of all-union importance. Mineral water at that time surfaced on the left bank of the Selenga River. In 1928, a small sanatorium was opened, which was very popular among the local population. On the basis of the Resolution of the Council of Ministers of the Buryat



Autonomous Soviet Socialist Republic No. 378 of 02.12.1981, this natural object received the status of a natural monument.

The Pitatelevsky source of thermal waters with a high content of mineral substances, similar to the resort Goryachinsk, attracted many sick and vacationers. Water is used to treat diseases of the musculoskeletal system – polyarthritis, arthritis, various osteosclerosis, a number of skin diseases such as neurodermatitis, allergic dermatitis, as well as neurological, gynecological diseases, diseases of the respiratory system and circulatory system. Locals used the term for the treatment of gastrointestinal diseases, in particular, stomach ulcers [3].

In the Soviet period, people came to Ilyinka from other districts of the republic, the Irkutsk Region and the Chita Region (since 2008, the Trans-Baikal Territory). Unfortunately, in connection with the change in the socio-economic situation in the 90s of the last century, the Pitatelevsky source turned out to be actually abandoned. During the years of "perestroika," those enterprises which owned sanatoriums in Ilyinka began to close them. In 1997, the wellbore was plugged, with exception of the well No. 61, which was operated until 2001 at the site of the bathing building of the seasonal dispensary, as well as the well with an unmounted pump located on the Selenga river. The famous resort on the eve of assigning it the status of a resort of all-union importance ceased to exist. In the period from 1969 to 2001, on the basis of the well No. 61, the functioning building of the Ilyinka seasonal dispensary for 300 people functioned. The well was operated intermittently during the day, the water flow was 1.5-21/s. The monitoring control over the quantity and quality of mineral water in the dispensary was not carried out. In 2001, due to the cessation of the activities of the seasonal sanatorium, it found itself in an unattended state [4].

In 2004, in connection with the opening of the sanatorium (a branch of the Republican medical and sports clinic in Ilinka), the Ministry of Health of the Republic of Buryatia needed to restore the well No. 61 in order to organize and conduct treatment and balneological procedures for patients of the sanatorium. In 2005, a license was obtained for the right to use a subsoil site for the extraction of groundwater. In 2008, restoration works were carried out by the drilling organization Buryatvodservis LLC. The well, equipped with a production pump, is under constant protection, and it is located in a ground pavilion of reinforced concrete slabs. The tip of the water outlet and the floor of the pavilion are cemented [4]. In 2011, the Pitatelevsky mineral water deposit produced the amount of 1,987 thousand. M3 / day and approved TDF 0,048 thousand m³ / day [5]

The recreational value of the territory of the Pitatelevsky mineral water field is determined by the possibilities for organizing rehabilitation and treatment, including not only mineral waters, which have been used for more than a hundred years, but also the healing climate, natural and artificial plantations. Therefore, there is an urgent need to organize a medical and recreational area for the purpose of its protection and rational use.

The existence of legal grounds related to the need to implement federal and republican laws actualized the process of creating protected areas of the respective categories. Within the framework of the regional target program "Development of therapeutic and recreational areas and resorts in the Republic of Buryatia for 2012-2014" in 2013, the staff of the Baikal Institute for Environmental Management of the SB RAS prepared materials on giving the status of a therapeutic and recreational area of regional significance to the territory of the Pitatelevsky source. Unfortunately, for a number of reasons, it was never received, including in connection with the amendment of 23.02.2013 in Article 2 of Federal Law 33-FZ "On specially protected natural territories."

In the period from 21.12.2004 till 31.12.2016, the operated resort "Ilinka was a branch of the Republican medical-sports clinic of the Ministry of Health of the Republic of Buryatia. On the basis of the Order of the Government of the Republic of Buryatia, an area of 7.15 hectares in the village of Ilyinka, Pribaikalsky District, together with the Pitatelevsky mineral source, was transferred to the permanent Republican Children's Clinical Hospital for permanent indefinite use in November 2017, which made it possible after repair to open a children's rehabilitation facility on this base.

The growing mass demand for medical and recreational services and the organization of recreation near the city of Ulan-Ude served as the impetus for the creation of a corresponding tourist and



recreation complex based on the Pitatelevskiy thermal mineral waters. In November 2017, a hot thermal pool was opened by private business, which quickly gained popularity as a place of rest not only for residents of the republic, but also for tourists coming from other regions of the country.

4. Discussion

The richness and diversity of the mineral waters of transboundary river basins naturally raises questions of their study and rational use. The shortcomings of the current legislation, difficulties in obtaining the status of therapeutic and recreational areas, lack of funds for research, and other factors impede the development of therapeutic and recreational tourism in the Republic. At the present stage, the most promising is the use of those mineral waters which are directly on the territory of the Selenga River Basin in the Baikal and Ivolginsky areas. In this regard, the in November 2017 source has significant advantages over others.

At present, on the basis of the Pitatelevsky source, there is a department for medical rehabilitation of the Children's Republican Clinical Hospital and a private tourist and recreation complex. However, the question of creating a therapeutic and recreational area on its territory remains open. The analysis showed that, according to many experts, a health resort of all-Russian importance could be created on the basis of the Pitatelevo thermal mineral water field. Given the border position of the republic and proximity to the city of Ulan-Ude, this health resort could become internationally known.

In our opinion, obtaining the official status of a medical and recreational area would allow the Pitatelevsky source to be included in the strategies and programs of socio-economic development. On the basis of a public-private partnership, it would be possible to build a multifunctional medical and recreation complex near the city of Ulan-Ude, which was repeatedly reported in the media. This would create not only new jobs and increase the amount of deductions to the budgets of all levels and give new impetus to the development of not only Ilinka village, but also in the whole of the Pribaykalsky district. It is necessary that the project being created is in organic connection with other projects implemented in the region, this would allow to form a multifunctional tourist and recreational complex (based on its recreational resources) that meets all the needs of modern tourists.

5. Conclusion

In the short term, we can expect that a public-private partnership will be earned in the development of therapeutic and recreational resources in the regions of the Great Tea Road. Private businesses are ready to invest in the development of mineral waters. In our opinion, urgent measures include the study of the region's medical and recreational resources, the improvement of current legislation in determining the status of therapeutic and recreational areas, the development of mechanisms for cooperation between the state and private business in the rational use of the wealth and diversity of mineral waters, the construction of tourist and recreational facilities, health complexes, etc.

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