

GEORESOURCES OF THE GREATER ALTAI AS A BASIS FOR THE CREATION OF A TRANSNATIONAL GEOPARK

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Abstract. Russian and Mongolian Altai is a part of single mountainous country with a common geological history, geographical and ethnic features, artificially divided by the state border. The article considers the prospect of creating a transnational Geopark on the territory of two friendly States.

Key words: georesources, transnational, geopark, geotourism, Greater Altai, Geopark “Altai”, Russian Altai, Mongolian Altai

The philosophy behind the Geoparks concept was first introduced at the Digne Convention in 1991 as a means to protect and promote geological heritage and sustainable local development through a global network of territories containing geology of outstanding value. In 1997, in direct response to the ‘Declaration of the Rights of the Memory of the Earth’, the Division of Earth Sciences of UNESCO introduced the concept of a UNESCO Geoparks Programme to support national and international endeavors in Earth heritage conservation. In 2000, representatives from four European territories met together to address regional economic development through the protection of geological heritage and the promotion of geotourism. The result of this meeting was the signing of a convention declaring the creation of the European Geoparks Network (EGN). The next significant step for the EGN was the signing of an official agreement of collaboration with UNESCO in 2001, placing the Network under the auspices of the organization. In 2004 the 17 existing European Geoparks joined with eight new Chinese national Geoparks to form a Global Network of National Geoparks under the auspices of UNESCO. This Global Network of National Geoparks has encouraged other countries such as Iran and Brazil to develop Geoparks programmes. By 2007, European Geoparks were distributed across 15 European countries. There are 31 members of the European Geoparks Network, bringing the total number of Global Geoparks to 52. Progress has not always been easy, however, and finding funding to develop the initiative and secure the future of individual Geoparks remains a significant challenge [1].

UNESCO emphasizes that the geopark concept shares a direct link with sustainable development in order to sustain the life of the geopark, the local economy and livelihoods of the local community [2]. Geoparks encourage sustainable development through tourism activities such as tour guiding operations, installation of cycling and walking trails, establishment of geology-inspired themed restaurants, souvenir stores, accommodation in the form of local lodges and backpackers, motels and hotels etc [3]. (Jones, 2008; Zouros & McKeever, 2009; McKeever et al., 2010). It is very important to understand that geoparks are not limited to visiting and studying the different types of rocks. Rather, geoparks expand to incorporate the wider environment inclusive of the local community who maintain, conserve, and contribute towards sustaining the earth’s heritage while at the same time earn a living from it [4]. Farsani argued that geoparks are “geological heritage, like other nature heritage, that offers numerous tourist attractions, natural resources and landscapes to visitors” while Fauzi and Misni (2016) sought the concept of geopark as an approach of conservation innovation that underlined the importance of public education, science and research and sustainable development for the local economy. Additionally, Fauzi and Misni (2016) described two principal components believed to be a planning tool for a geopark development [5]:

- 1) the proposed land area must hold a few geo-heritage sites in possession of high significance value and history at national level or international level and;
- 2) the proposed land area’s history must hold strong geological and landscape connections. These components not only contribute to the life of a geopark but draw in attractions and development of tourism activities through the concept of geotourism.



In many cases, geological boundaries, shaped by Nature, do not follow the boundaries drawn by people. UNESCO Global Geoparks, too, do not always follow human-made borders. Some UNESCO Global Geoparks therefore naturally cross national borders, connecting the peoples of different countries and encouraging intimate regional, cross-border cooperation. It is through this strong cross-border cooperation that transnational UNESCO Global Geoparks strengthen the relationship between countries and contribute to peacebuilding efforts. In 2008, the Marble Arch Caves UNESCO Global Geopark expanded from Northern Ireland across the border into the Republic of Ireland, becoming the world's first transnational Global Geopark. Situated in a former conflict area, this UNESCO Global Geopark is now seen as a global model for peacebuilding and community cohesion. Currently, transnational parks are successfully operating in Europe: Karawanken - Karavanke (Austria & Slovenia), Muscau Arch - Łuk Mużakowa (Germany & Poland), Novohrad-Nógrád (Hungary & Slovakia). UNESCO actively supports the creation of transnational UNESCO Global Geoparks – especially in regions of the world where there are none yet.

An example of state borders artificially created by people in a single Altai mountain system is the national border between Russia and Mongolia. The territory of the Chuya river basin is genetically united with the territory of Western Mongolia, including the Mongolian Altai and the basin of large lakes. They share a common geological and cultural history, and geographically, they complement each other. The territory of the Chuya river basin is already part of the Geopark "Altai", which is functioning in Russia.

The first Russian project of UNESCO Geopark "Altai" was established by the Decree №461 of the Altai Republic on December 31, 2015 [6]. Its management was entrusted to The State Budgetary Institution of the Republic of Altai "The center of the tourism and entrepreneurship development of the Altai Republic".

The project of Geopark "Altai" is located on the territory of the Kosh-Agach, Ongudai and Ust-Koksinsky regions of the Altai Republic with an area of 14,500 square kilometers, the Geopark is defined as "tourist and recreation zone, where the objects of geological heritage are part of an integrated concept of conservation, education and sustainable development of the territory, which traced the close relationship between geodiversity, biodiversity and culture, and between tangible and intangible heritage of the Altai Republic" [6].

The Geopark "Altai" was established with the aim of "stimulating entrepreneurial initiatives, creating new jobs by generating new sources of income related to the development of educational tourism, creating conditions for the preservation of objects of environmental, archaeological, cultural and geological value" [6].

According to the definition of UNESCO [7], the Geopark is a territory, geological objects of which are the main part of the unified concept of preservation of natural heritage, education and economic growth strategy of the region. The concept of each Geopark is based on the synergy between the geospatial diversity, biodiversity, cultural and sacred heritage of the region.

The activity of the Geopark UNESCO is aimed at three main objectives [8]: conservation of the geological heritage of the territory, popularization of geological and ecological knowledge and achievement of gradual but constant improvement of the quality of life of the population of the territory. To achieve the conservation of the geological and non-geological heritage of the territory in the Geopark there is no need to prohibit the use of objects of geological, cultural and sacred significance. The functions of the administration of the Geopark include work on the assignment of geological objects of legal status. In some areas of the territory of the Geopark, a special regime of visits is possible. Rules of conduct at the facilities, if they are not defined by the legislation, are developed by the staff, and they also exercise control over compliance with the rules and the state of natural attractions. The popularization of knowledge is achieved through interaction with the media, participation in scientific events, production of printed materials, work with the local population, organization of educational practices and promotion of scientific research in the Geopark. The development of geotourism in conjunction with other types of eco-tourism allows local residents to find new sources of basic or additional income, which entails an increase in the number of jobs and a gradual increase in the standard of living of the population [10].

The territory of Chuya river Basin belongs to the project of the Geopark "Altai". Administratively this area belongs to the Kosh-Agach district of the Altai Republic. The territory of the Chuya river basin represents two intermountain depressions (Chuya and Kuray basins) surrounded mountain ridges.

Chuya Cluster is a territory with unique natural features and georesources, where different types of landscapes are developed, such as nival-glacial, cryogenic, lake, alpine steppe, forest, mountain-meadow, alpine. Landscape diversity is due to a wide range of absolute heights. The valley of the Chuya river is a place of concentration of many archaeological monuments: barrow complexes, ancient mine workings, petroglyphic ensembles of different times and cultures. Ethnically, the territory of the Kosh-Agach district is extremely interesting. Here inhabited by indigenous people of Altai-Telengit, Kazakhs and Russians. All of them contributed to the unique culture of the region.

The result of the functioning of the Chuya cluster is the development of tourist infrastructure. In 4 years since the establishment of the UNESCO Geopark project, 24 new campsites have been built, a lot of cafes and eateries have appeared, an increasing number of local residents are involved in tourist activities. The tourist flow to the Kosh-Agach district has increased significantly and continues to grow.

Baruun Mongol Cluster is a region in Mongolia covering the provinces of Bayan-Ölgii, Hovd, Uvs, and Zavkhan. It is the most ethnically diverse, mountainous, and scenic region of Mongolia, with thousands of years of history. In addition to the ethnic diversity, Baruun Mongol is home to the Altai Mountain Range, with the highest peaks in Mongolia, Lake Uvs, Khar-Nur, Tolbo and many smaller lakes, mountains, rivers, forests, and steppe. Spread throughout the region are countless archeological sites with petroglyphs, cave paintings, standing stone monuments, monasteries, and ancient forts that date back as far as 10,000 years.

The main area of current glaciation in Mongolia is concentrated in the ranges of the Mongolian Altai, including the largest glaciers in Mongolia in the northern Altai - Potanin and Grane. The second largest node of modern glaciation in Mongolia is Tsambagarav, with 73.18 km² or 17% of the total area of the glaciers of the Mongolian Altai [10].

The combined knowledge of the distribution of the glacial landforms and the age of past ice advances in the Altai Mountains, will lead to an understanding of how the landscape has changed under the influence of past periods of global cooling and will help to inform understanding of the consequences of current global warming on the remaining glacier inventory. This information will be of considerable use to those involved in managing natural resources in Mongolia, as well as valuable for educational materials that would be a key component of building the glacial investigation and transnational geopark concept to enhance tourism and socio-economic development in Mongolia.

The creation of a transnational Geopark in Russia and Mongolia will strengthen the partnership between the scientific and public spheres of activity of the two States. This partnership will have a positive impact on the economic and environmental aspects of local society. At the same time, the unique resources of the Greater Altai will be rationally used for the benefit of nature and society.

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