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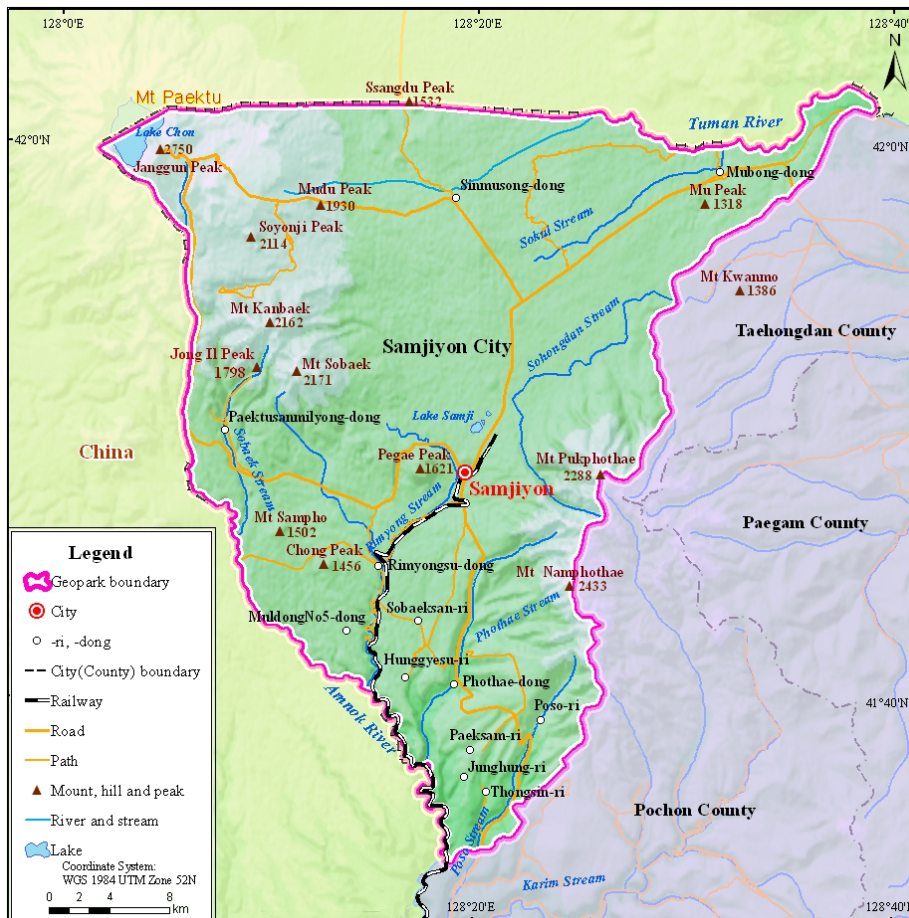
UNESCO
Global
Geoparks

Applicant UNESCO Global Geopark

Mt Paektu Global Geopark

Democratic People's Republic of Korea

Geographical and Geological summary



1. Physical and human geography

The territory of Mt Paektu Geopark match with the limit of Samjiyon City, Ryanggang Province, DPR Korea, with an area of 1,326.1 km², (41°34'03" - 42°01'40" N and 128°02'31" - 128° 39'05" E), and is 69km away from Hyesan City, the seat of Ryanggang Province. It borders China on the northwest and Taehongdan, Paegam and Pochon counties on the east.

The geopark has an average annual temperature of -0.6°C with minimum of -19.8°C in January and maximum of 16.4°C in July. The annual average rainfall is about 800mm. The relative humidity changes throughout the year, reaching at the top in summer and followed by autumn, spring and winter, with the annual average of 74%.

By the Paektu range running from northwest to southeast through the middle of the Mt Paektu Geopark to connect Mt Paektu and Mt Pukphothae, the aspiring geopark area is largely divided into two zones. The highest altitude is 2,750 m in the Janggun Peak and the lowest one is 800 m in the Amnok River in Thongsin-ri.

The geopark area, with a typical alpine climate, is characterized not only by the coldest temperature but also by ever changing weather conditions such as high and low temperature, fine and rainy, claim and windy even in a day.

Administratively, Mt Paektu Geopark includes a city town, 6 dongs and 6 ris. The geopark has the population of 32,261 inhabitants from the 2016 Census. Presently, 40.8% of labour population is employed in primary sector including forestry and agriculture, 18.5% in manufacturing sector, 19.5% in service sector and 21.2% in other sectors.

Recently, with the implementation of the 1st phage of the large-scale national project, Samjiyon City was completely transfigured into a model of mountainous civilization; the infrastructure including railway, road, electric power and communication was reconstructed, and service and productive facilities of tourism, sports, conservation of nature and local economy newly built, in modern style, so as to contribute to the sustainable development of the territory.

2. Geological features and geology of international significance

Spectacular volcano-geological heritages and landscapes made up by volcanic eruptions and geological evolution show the most important geological highlight of the Mt Paektu Geopark. Mt Paektu is the biggest centre of volcanic eruptions that had made the Paektu volcanic plateau.

The Mt Paektu volcano had numerous eruptions and continued its magmatic eruptions with distinctive stages of eruption in the history and different chemical compositions, from alkali to acid, often combining both explosive and effusive in contrast with other volcanoes. At around 1000 AD, volcano activity in the territory induced a tremendous explosive eruption (i.e., The Millennium Eruption), when a subsequent collapse formed a caldera (Lake Chon) atop Mt Paektu, at an altitude of 2,190 meters.

Most importantly, it keeps volcanic products preserved in original state, showing the stages of both shield volcano and stratovolcano, and geological sections with the rising channel of magma well-preserved as it were (for example, laccolith in Janggun Peak). In addition, the territory is of well-developed glacial geography in different ways. There are cirques by glacial erosion and other topographical features such as moraine hill, moraine plain and outwash plain by glacial deposition. Thus the area of Mt Paektu typifies volcanic and alpine area in the Northeast Asia.

Mt Paektu has been regarded as a volcano with great potentiality of further eruption. It had undergone several eruptions even after the Millennium Eruption, including in 1597, 1668, 1702 and 1903, and also gaseous efflux leaking out in recent years. The geophysical research on the Mt Paektu volcanic zone shows that it is underlain by a magma chamber, which frequently causes volcanic earthquakes accompanied by changes in contents of some components in springs in the area.

Thus, the Mt Paektu area constitutes an integrated area in which natural spectacles (e.g., high volcanic geographies rare in the world, flora and fauna, hydrology and weather etc.) are well organized with humanistic scenery of historical, cultural and traditional things. The Mt Paektu Geopark, therefore, hits the first in the tourism destinations of the country.