

Thinking Ecologically, Not Economically: The Impact of Climate Change on Tatra Mountains

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When we talk about climate change, we usually think of massive glaciers melting, forests ablaze in California, or else coral reefs dying on an ocean floor. We live under the illusion that Slovakia is not affected by climate change as intensely as other regions of the world. However, our country is affected just as severely. Dealing with the effects of climate change and the impact of global industrialization is a topic that is starting to concern Slovakia.

Just as people associate Japan with Mount Fuji, East Europeans associate Slovakia with the Tatra Mountains. The High Tatras are one of the most beautiful natural phenomena in Slovakia. They attract not only Slovaks, but also foreign tourists. Located on the northern border with Poland, their highest peak is Gerlachovský štít, which stands 2655 m.²

The Tatra Mountains, both High and Low, are probably the most popular vacation spots in Slovakia. In summer, it is a great place for hiking and camping, while in winter the area is full of skiers. When I was a child, my family would go there every year for winter vacation. I was not a particularly skilled skier, but I enjoyed the snow, nonetheless. Sometimes I would go there during summer as well, with my grandparents. We used to collect berries in the forest and cook food over a campfire. These memories are from over 15 years ago. In recent years, we stopped going to the Tatras. The cottage where we used to stay was sold and demolished to make way for a resort, which meant there were no more berries to pick as other people had already taken everything before we arrived. The camping grounds where we cooked over an open fire were also done away with since the resort had its own restaurant.

This development was spurred on by a natural disaster, a windstorm, which saddened most of the Slovak population. Wind is considered the main factor in damaging forests not only in the Tatra Mountains but also in the whole of Slovakia. In 2004, a windstorm destroyed 12,600 hectares of forests in the High Tatras. The strong gusts of the Boer wind reached over 200 km/h in some places and destroyed almost 3 million trees.³ Since then, the area's climatic conditions have also changed.

Opinion was divided on how best to revive the forests of the High Tatras. Logging interests warned that the felled trees posed a fire hazard. Moreover, the wood needed to be collected quickly as rotting trees would attract insects. Environmental groups maintained that reviving the forests should be carried out in a natural way without interference. In the end, a compromise was adopted, by which the two valleys with the highest degree of protection (the *Tichá* and *Kôprová dolina* nature reserves) were left without human intervention while the remaining

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² <http://tanap.soposr.sk/projekty/> (accessed 03.02.2022)

³ Kolektív Dnes 24, TÁTO apokalypsa navždy zmenila Vysoké Tatry!, dnes24.sk, <https://www.dnes24.sk/apokalypsa-ktora-navzdy-zmenila-vysoke-tatry-kalamita-udrela-presne-pred-16-rokmi-foto-375970>, (accessed 28.01.2022)

areas would be cleared of wind-damaged trees. In 2007, loggers were given permission to harvest trees in this area as well, which sparked protests from environmentalists.⁴ Before the elections, large business companies and political groups organised actions to plant new trees. The restoration affected 5,200 hectares of forest land, with forestry workers planting more than 8 million tree seedlings.⁵

As a result of the calamity, a new potential was discovered in the Tatras. Developers started to draw up plans for new ski slopes, ski trails and accommodations. They claimed that the "new" Tatras needed a spark of life. And so, the commercialisation of the national parks began.

The year 2020 was the hottest in at least 140 years, according to statistics.⁶ The main problem was the increasing concentration of greenhouse gases from anthropogenic sources in the atmosphere, though, changes in the use of the Tatra Mountains area were equally important. We are witnessing an uncontrolled increase in the construction of unnecessary apartments, car parks and tourist attractions, together with the harvesting of timber in national parks in disregard of their status as protected areas.

One of the new projects under development is a giant indoor recreational ski facility.⁷ Residents objected to habitat destruction, interference with groundwater flow, and increased noise from snowmaking equipment essential to the year-round operation of the facility.⁸ Another aspect of the construction is the impact on the visible environment resulting from deforestation and landscaping. In addition, the increased use of land, not only for the construction of buildings but also car parks and roads, causes the soil to dry out, leading to a loss⁹ of soil moisture and to drought conditions in adjacent areas, resulting in less food for wild animals. Moreover, artificial snowmaking takes additional water from nature.

Another megacomplex that the developers want to build are apartments with underground garages in Tatranská Lesná. This is a land in the third level of protection, where a new forest is growing. "This will become a housing estate similar to counterparts in Bratislava or Poprad. In practical terms, "The trees planted in the wake of the disaster of 2004 will be cut down and the land smoothed out," a local inn owner explained.¹⁰ The director of the Tatra conservationists warns that every new building in the Tatras means more pressure on water, traffic, waste and a

⁴ Štátne Lesy TANAPu, Chcú zmierniť dôsledky lykožrútskej kalamity, lesytanap.sk, <https://www.lesytanap.sk/sk/tlacove-spravy/sprava/252-252/> (accessed 02.02.2022)

⁵ SITA, Po kalamite z roku 2004 zasadili v Tatrách osem miliónov sadeníc, spis.korzar.sme.sk <https://spis.korzar.sme.sk/c/22262935/po-kalamite-z-roku-2004-zasadili-v-tatrach-osem-milionov-sadenic.html> (accessed 02.02.2022)

⁶ Minárik, Peter, Klimatické zmeny sa týkajú každého. Nevyhnú sa ani Slovákom, imeteo.sk, <https://www.imeteo.sk/clanok/klimaticke-zmeny-sa-tykaju-kazdeho-nevyhnu-sa-ani-slovakom> (accessed 28.01.2022)

⁷ TASR, Spor o project lyžiarskej haly na Donovaloch zrejme skončí na súde, bystricoviny.sk, <https://www.bystricoviny.sk/bystricoviny-tv/spor-o-projekt-lyziarskej-haly-na-donovaloch-zrejme-skonci-na-sude/> (accessed 02.02.2022)

⁸ Ibid

⁹ Potocký, Erik, Stavenisko Tatry, postoj.sk, <https://www.postoj.sk/55871/stavenisko-tatry> (accessed 04.02.2022)

¹⁰ Ratkovská, Ivana, Developeri plánujú ďalšiu výstavbu v Tatrách. Ochránari namietajú, spravy.rtvs.sk, <https://spravy.rtvs.sk/2021/09/developeri-planuju-dalsiu-vystavbu-v-tatrach-ochranari-namietaju/> (accessed 04.02.2022)

shrinking area for protected animals.¹¹ Fewer trees means less water retention in nature resulting in floods. Deforestation equals less space for animals and plants. More glass and concrete, which is required for construction, will cause overheating and changes in climate conditions. More hotels will bring more people, more cars, more parking lots and ultimately more waste. The developers want to turn the High Tatras into a commercial resort where the main indicator is profitability and the protection of nature assumes a low priority.¹²

The essence of spending time in the Tatra Mountains should be to enjoy nature, physical exercise through hiking or skiing, and quiet time away from the city. One should be prepared for a certain degree of discomfort, a small price to pay to become more in tune with nature. I remember when we went hiking, sometimes my shoes would get soaked through; sometimes I would get hungry or tired along the way, with no other option but to go on. Whenever this happened, I got grumpy, but we pressed on and once we reached the peak, all of my complaints were forgotten. But the essence of spending time in nature will fade into the past if we do nothing to prevent climate change from affecting our mountains.

Nature has already given us a warning sign. One of the symbols of the High Tatras, *Skalnate Pleso* lake, has been completely without water since February 11, 2021, in fact, it is not currently a lake at all.¹³ The water has completely disappeared leaving only dry rocks at the bottom. Climatologists explain that since the lake is supplied by rainwater, it is logical that in periods without precipitation the water level will drop. In Slovakia, most of the water comes from precipitation, hence the amount of groundwater depends on the volume of precipitation. Recent dry winters present a serious problem. The absence of snow in the lowlands has disturbed the natural water cycle triggering alternating periods of drought and flooding. Dry spells last longer than in the past, and rain though less frequent, is often torrential, lasting many hours. The dry soil suddenly becomes so wet that it cannot absorb all the water.

But how can we find solutions to the above problems? That is a question we have yet to answer. Recently, young people in Slovakia have been awakened to the dangers of environmental degradation, with more people turning towards sustainable alternatives in their everyday lives. Nowadays, we separate trash more diligently and actively search for local products in supermarkets. However, most of these actions depend only on individual choices. I think that most young people are aware of climate change and what is happening in the Tatra Mountains but do not feel motivated enough to take action. The easiest way of coordinating their concerns would be to vote for local representatives who share their views. However, as local governments are elected by the people who live in the region, I, for example, as a resident of Bratislava County, cannot vote in the Tatra region. The election results depend solely on the interests of residents of the locality, who in this case seem to have priorities other than environmental protection. There are also parliamentary elections, in which the entire nation votes. We do have a Slovak Green Party, however, since their establishment in 1991, they have

¹¹ Ibid

¹² See for example Armeria Residence project, available at <https://www.armeria.sk/> or Lake Resort project, available at <https://www.lake-resort.sk/sk/o-projekte/developer>

¹³ RTVS, Tatranské Skalnaté pleso vyschlo. Môže za to klimatická zmena?, spravy.rtv.s.sk, <https://spravy.rtv.s.sk/2021/11/tatranske-skalnate-pleso-vyschlo-moze-za-to-klimaticka-zmena/> (accessed 26.01.2022)

never gained enough votes to enter parliament.¹⁴ I think that the issue here is that people are concerned about the environment but it is not their primary concern. They are more focused on imminent problems which affect their lives here and now, such as healthcare or education, and therefore they choose who to vote for based on their stance on these issues. If young people really want to achieve change, they may join an environmental activist group. However, even though many people are concerned about nature, few choose to join these initiatives. Being an activist takes time and resources, and can become frustrating when results fail to match activists' efforts. This is especially true given that the developers often have better contacts and deeper pockets. I believe that change needs to come from above, that is, from ministers and government officials.

In recent years, extreme weather events have threatened our environment. Lack of moisture affects our agricultural production, and longer and more intense periods of drought will increase the pressure on river ecosystems and on groundwater supplies. Only by consistently protecting our ecosystem will we achieve the preservation of natural resources for future generations. The Tatra Mountains are at a critical point where the direction and conditions are being set for how the life of people in the region and their surroundings will look in the near future.

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¹⁴ <https://www.vysledkyvolieb.sk/parlamentne-volby/strana/218-strana-zelenych-slovenska> (accessed 04.02.2022)

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