

Causes and results of the disaster occurred in Mestiachala basin

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On July 25th, 2019 a natural disaster occurred in Mestiachala basin. The rocky mass fallen down from the glacier Murkvam triggered the morenic part at the foot of the glacier, which evolved into poured mud. The generated mass flowed through the Murkvami River and joined the Mestiachala gorge, temporarily blocking the river and eventually turning it into a lake, which broke through twice. The height of the flood wave was approximately 70-100 cm.

Among the causes of the disaster, global climate change is the most noteworthy which, among other things, increases the risk of rapid melting of the glacial surface resulting in accumulation the redeemed rocky masses at the foot of the glacier, which leads to a disaster.

The research results are interesting not only scientifically but also in a practical way, because in the 21st century such geodynamic processes are much more often found in mountainous areas, the intensity of their dynamics is increasing which in many cases endangers both the local population and the tourists. It also damages infrastructure and puts sustainable development at risk. These processes often change the living environment as well as the local environment. the local population, in most cases has to change their usual lifestyle. Mestiachala River valley is a place of residence, energy sustainability for local people and a significant area for tourism business.