

## Trends of Floods and Freshets in Georgia and in the World

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One of the most complex problems of the humankind is natural calamities. Natural calamity is any catastrophic (destructive) natural phenomenon or process (earthquake, volcano eruption, drought, landslide, flood, etc.) capable of causing human victim and inflicting material damage to the country.

The number of hydrological catastrophes in the world (38%) exceeds that of other natural catastrophes, while the number of floods reaches 33.3% of all other catastrophes in the world being one of the highest indicators.

It is a humans' natural wish to improve their living conditions, and they often make risky decisions for this purpose. In particular, people tend to build houses and engineering structures on the riverbanks or in the coastal areas of lakes and seas despite an increased risk of natural and technogenic catastrophes, including that of floods, in those areas.

The economic development of the coastal areas during the river high-water periods, contributes to an increased risk of flooding and moral and material damage. The volume of damage caused by floods depends on a number of reasons, such as hazardous water level and duration, flooded area and season of the year when the flood occurs.

The work presents the classification of floods, mechanisms of their origination, conditions and hydrometeorological factors determining the spatial scale, intensity and duration of floods. The climatic change of these factors – the observed and the expected – causes and will cause relevant changes in the nature of the flood, which can be evaluated in quantitative terms.