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CLIMATIC AND HYDROMETEOROLOGICAL PHENOMENA OF RISK ON THE TERRITORY OF THE REPUBLIC OF MOLDOVA

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The paleoclimate of the planet Earth demonstrates the cyclicality and evolution of the climate for certain geological periods of the Earth manifested in time and space, where flora and fauna have confronted and adapted to certain climatic conditions and hydrometeorological phenomena.

Weather and climate have been and are the basic elements of the planet Earth that condition and influence the daily existence and evolution of both man and the environment.

The weather and climate parameters monitored for a period of more than 30 years have become climatic norms, and serve as benchmarks both for anthropogenic activities and for the state and evolution of the environment.

But deviations from the climate norm are classified as climatic and hydrometeorological risk phenomena, so the greater the gap from the climate norm, the greater the intensity and damage caused by hydrometeorological risk phenomena, sometimes reaching catastrophic levels.

The territory of the Republic of Moldova in the context of climate change is increasingly affected by risky climatic and hydrometeorological phenomena, such as: storms, heat waves, cold waves, gusts of wind, storms, torrential rains, floods, hail, droughts, late frosts. In this article I made the statistical analysis of the evolution and of the damages produced as a result of the production of the climatic and hydrometeorological phenomena of risk from the period 2007-2021.

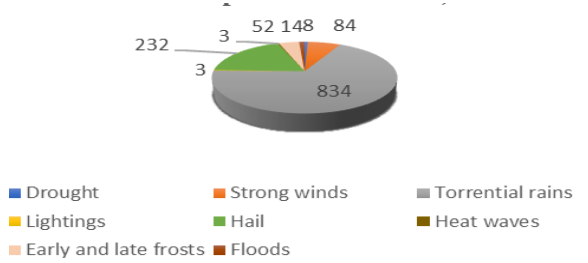


Fig.1 Number of climatic and hydro meteorological phenomena of risk (2007-2021)

The material damages caused by the climatic and hydrometeorological phenomena of risk have a direct impact on the socio-economic development of the country. World experience has shown that the most vulnerable countries to climate and hydrometeorological risk are poorly developed or developing countries such as the Republic of Moldova, because they do not have the financial support for national programs to adapt to climate change.

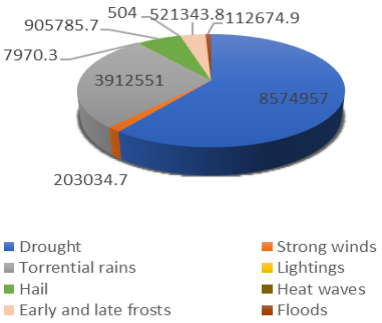


Fig. 2. Material damages caused by climatic and hydrometeorological phenomena of risk (2007-2021)

At the same time, the statistical analysis of the data provided by the General Inspectorate for Emergency Situations showed which of the climatic and hydrometeorological phenomena most often have deviations from the climatic norm and consequently cause major material losses and also what is their tendency.

Keywords: climate change, climate norm, climate parameters, risk phenomena, material damages.