

The Earth is our common home!

The severity and frequency of natural disasters has increased steadily in recent decades, partly as a result of climate change, urbanization, population increase and environmental degradation. Europe is a densely populated and economically developed continent. This means that when disasters occur, they can be very serious and cause serious economic damage.

Climate-related events such as floods, storms, heat waves, snowfall and droughts account for nearly ninety percent of all major disasters in the last two decades. Climate change is expected to increase the frequency and intensity of weather-related threats. This in turn would have a significant impact on economic and social development, with an inevitable cascading effect on poverty, food and water supply, urban systems, the spread of disease, human migration and human conflicts. Therefore, reducing the degree of exposure and vulnerability of people to weather-related threats is a common critical priority for both climate change adaptation and disaster risk reduction.

Floods represent the biggest natural disasters in the history of Europe and the UN expects the frequency of serious floods in Europe to double by 2050. Continued heat is becoming more common, as the heat wave in 2015 took 3,265 lives in France. In Italy, an average of 100 people per year have been killed in earthquakes in the last 50 years, with economic costs estimated at € 3 billion a year. Earthquakes can also cause tsunamis in many parts of southern Europe - from Lisbon to Cyprus.

Bulgaria is exposed to a number of natural threats such as floods, earthquakes, forest fires, droughts, landslides, strong winds, heavy snowfall, avalanches, extreme temperatures and hail.

Floods are the most common hazard and are responsible for the largest share of direct damage and the population affected. They are the result of heavy rainfall and storms, causing enormous damage to public and private buildings and sites of cultural heritage, destroying or damaging bridges and dams, disrupting drinking water supply systems, triggering landslides and flooding farmland.



The river Small Iskar which flooded the town of Roman in 2018

In recent years, **earthquakes** (displacement of earth layers) have been a relatively rare occurrence for Bulgaria. However, a reference 200 years back in time indicates that earthquakes have claimed the lives of hundreds of people and caused damage to tens of thousands of buildings. In addition, Bulgaria has suffered some of the most severe earthquakes in the history of Europe. The following events are particularly significant. The cities of Rousse, Silistra, Varna and Vidin were almost destroyed in 1802 by an earthquake of magnitude 7.9. The 1858 earthquake near Sofia, with a magnitude of 6.3, damaged 70-80 percent of buildings, including important cultural and historical sites. In 1928 an earthquake in Plovdiv took over 120 casualties. Last but not least,

in the recent 1986, a relatively weak earthquake (magnitude 5.7) made 80% of the buildings in the town of Strazhitsa uninhabitable.



The earthquake in Strazhitsa in 1986

Bulgaria is susceptible to **drought** due to its climatic, geographical and topographic characteristics. The country has undergone three major prolonged droughts in the 20th century: from 1902 to 1913, from 1942 to 1953 and from 1982 to 1994. In the last 13 years, droughts have been increasing for many of the member countries of the European Union. Cases of extreme heat are already a fact in Bulgaria and are likely to become worse as the climate warms. For example, in 2000, countries in Southeastern Europe, including Bulgaria, were hit by record heat waves leading to fatalities across the region as a result of heatstroke, high blood pressure and heart attacks.

Fires susceptibility maps have been prepared for the territory of Bulgaria, marking the areas affected by fires in the past. However, given the changing climatic conditions leading to prolonged dry and hot periods and the increased concentration of more flammable vegetation (farms, pine plantations, etc.), fires are expected to become more frequent and occur in areas that were not predisposed to them before.



The fire in Dragoman swampland – January 2020

Modern generations are growing up with the notion that everything can be replaced, that the sources are inexhaustible, and it is good to have many things. These ideas are usually not directly related to nature, but when children are confronted with the cycle of natural creation, they realize the importance of preserving, saving and restoring the surrounding world.



Drought in Bulgaria - 2019

844 students study at 40th Secondary School "Louis Pasteur" in Sofia. Since 2017 it has the status of an innovative eco school. The aim of innovation is to achieve a long-term positive change in students' attitudes towards the environment through the integration of environmental education into curricula. The whole activity of the school is oriented towards the protection of the environment and the principles of sustainable development.

At the beginning of each school year, new working groups are set up in the school to develop and implement the further development of eco-innovation.

They carry out environmental review, prepare an assessment of the school's environmental impact. The Eco Committee draws up a plan that includes actions to improve the environment and achieve energy and water savings: review utility bills, meters, number and type of luminaires, number of dripping taps. Our classmates are eager to participate in the various eco initiatives. There is an increased interest in the



protection of flora and fauna, raising the concern for the frugal use of natural resources.



Every year the Green Patrol Club at our school is the main organizer of the eco activities. We ourselves, who participate in the Olympiad, are its long-standing members.

Recognizing our responsibility to the Earth, our home, and our classmates to be informed of the consequences of the human activity, we carry out awareness campaigns for correct action in case of various disasters. We show our knowledge and skills every year at the regional

civil defense and Bulgarian Red Cross competitions. We are proud of our prize places annually, but more important, we make others empathetic to the cause - Keep the Earth - it's our common home!