



Briefing for journalists:

The impact of **climate change** on the environment and its connection to natural hazards

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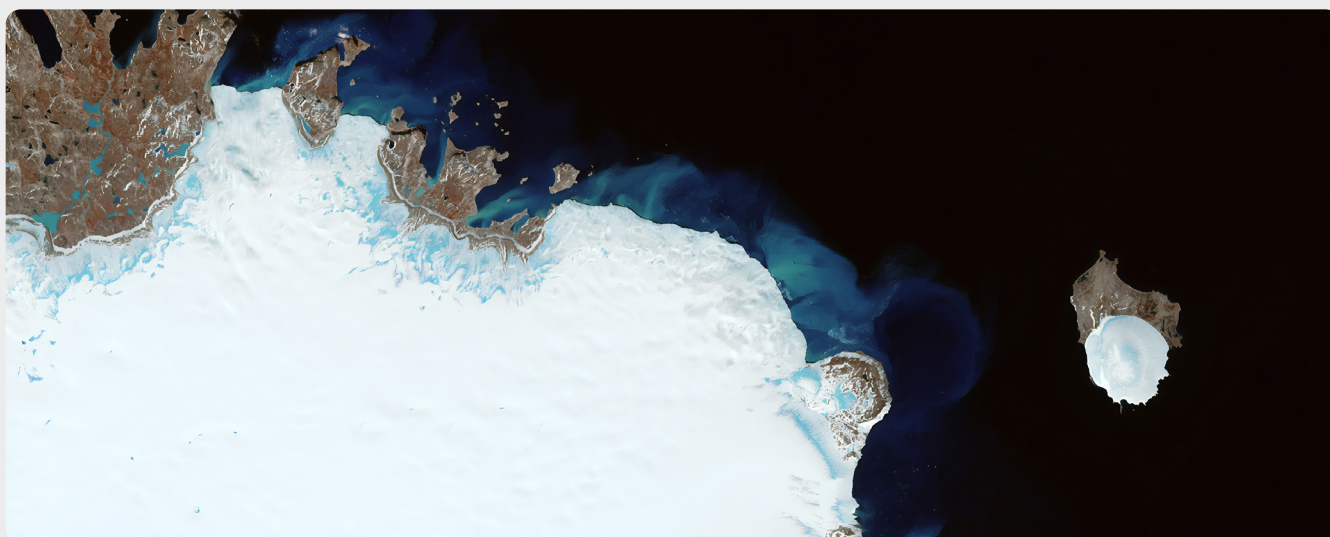


Climate change has negatively affected the environment and human life. Climate extremes, and progressive changes such as higher average temperature, rising sea levels, and the melting of ice (including polar), have led to severe consequences, some of them irreversible, for natural and human systems¹. Moreover, the latest [report](#) from the Intergovernmental Panel on Climate Change (IPCC) highlights the close connection between climate change and the occurrences of climate hazards. Science is now unequivocal that human activities, primarily the emission of greenhouse gases, are causing the climate to change on the Earth, leading to increases in a range of natural hazards posing significant risks to societies, economies, and ecosystems.

“The number of weather, climate, and water extremes are increasing and will become more frequent and severe in many parts of the world as a result of climate change,” says WMO Secretary-General Prof. Petteri Taalas².

Climate change results in gradual changes in the environment, such as rising sea levels and a shift in climate zones due to increased temperature and alterations in precipitation patterns. It also has widespread and far-reaching impacts due to the increased frequency and severity of climate and weather extremes, including hot temperatures on land and in the ocean, heavy precipitation, droughts, and forest fires³.

Furthermore, growing urbanization and climate change create complex [risks](#), particularly for cities that are plagued by poorly managed urban growth, high poverty levels, unemployment, and a deficiency of essential services⁴.



¹ IPCC, 2022: Summary for Policymakers. Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change pp. 3–33, doi:10.1017/9781009325844.001.

² Weather-related disasters increase over past 50 years, causing more damage but fewer deaths, World Meteorological organization, 2021

³ IPCC, 2022: Summary for Policymakers. Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change pp. 3–33, doi:10.1017/9781009325844.00

⁴ IPCC Climate change: a threat to human wellbeing and health of the planet. Taking action now can secure our future

What is the story for the media?

The media has a critical role in educating society about the risks posed by natural hazards and about the responses of governments and businesses. Good journalism can provide vital information to the public about the steps necessary for reducing vulnerability and increasing resilience, and the options for reducing carbon emissions.

“Climate change is critical context for understanding extreme weather. It’s not activist to mention it, it’s accurate⁵”, - states Covering Climate Now (CCNow), a global news collaboration of more than 400 news outlets.

What is missing from the media coverage of natural hazards in Georgia?

CLIMATE CHANGE CONTEXT

Journalists may find it challenging to say that natural hazards are the direct results of climate change. However, it is possible to provide the context and perspectives on individual weather events by referencing what climate scientists have said about the likelihood of such occurrences in a changing climate; and in some cases, science may be able to confirm that climate change increased the chances of the extreme weather, or increased its severity. Journalists can use this information to provide insight and connect the dots between individual weather events and the larger picture of climate change⁶.

SOCIAL DIMENSIONS OF NATURAL HAZARDS

The impact of climate change-related natural hazards is often most acutely felt at the local level. Journalists should explore the intersection of natural hazards and social issues, such as poverty, inequality, and discrimination, which can make communities more vulnerable to climate change related impacts.

FOLLOW-UP STORIES

Natural hazards are often followed by intense media coverage, but as time passes, stories fade from the public's attention. Follow-up stories can help to keep the needs of the affected communities in the public eye, ensuring that they continue receiving support and resources. Furthermore, it can provide a deeper understanding of the events and the social-political or environmental contexts in which they occurred. Sometimes scientists publish research looking at global or regional changes that shed light on how things are changing in Georgia; this provides an opportunity to report on both the global trends driving events in Georgia, and to link the national experience to the global trend.

EXPLORE THE UNDERLYING CAUSES OF NATURAL HAZARDS

including factors such as climate change, land use, and development patterns. This can help to provide a complete understanding of the challenges of communities and to encourage action to address the root causes of the hazards.

⁵ <https://coveringclimatenow.org/wp-content/uploads/2021/09/Climate-Connection.pdf>

⁶ Getting the Message Across Reporting on Climate Change and Sustainable Development in Asia and the Pacific: A Handbook for Journalists

LOCAL STORIES

In the context of climate change, media reporting on natural hazard risks at a local level is important for several reasons. Local stories raise awareness about the specific dangers communities face from natural hazards. Additionally, it helps to create a sense of urgency and encourages governments, organizations, and individuals to take action to reduce the impact of these hazards.

LOCAL SOLUTIONS

Explore solutions to minimize the susceptibility of communities and ecosystems to the adverse effects of natural hazards.

Climate Change Risks for Georgia

Due to political, socio-economic, and geographic reasons, Georgia is vulnerable to climate change impacts, ranking 42nd out of 182 countries in the [ND-GAIN Index](#)⁷. According to Georgia's Climate Risk [Profile](#), agriculture, water resources, forestry, energy, waste, mineral resources, and health are highly vulnerable sectors projected to climate change. [Georgia's Fourth National Communication to the United Nations Climate Change Convention \(UNFCCC\)](#) states that adaptation to the adverse impacts of climate change is one of the main priorities for the Government of Georgia. Up to today, Georgia does not have a national adaptation plan (NAP) (adaptation strategic document), thus evaluating vulnerabilities and prioritizing approaches to manage or minimize the impacts of climate change has not been researched. Georgia's National Communications also states that without international support, the country cannot deal with the negative effects of climate change. Estimate economic losses without adaptation measures during 2021-2030 is about \$US 10-12 Billion USD, while adaptation measures will cost \$1.5-2 Billion USD⁸.



The surrounding area of Mkhinvartsveri, Kazbegi Municipality | Photo: Agency of Protected Areas

⁷ The ND-GAIN Country Index captures a country's Vulnerability to climate change and other global challenges, and its Readiness to improve resilience. <https://gain-new.crc.nd.edu/country/georgia>

⁸ Scaling-up Multi-Hazard Early Warning System and the Use of Climate Information in Georgia; Green Climate Fund. UNDP. 2017



Forest fire, Borjomi municipality | photo: Ministry of Environmental Protection and Agriculture of Georgia

Natural Hazards in Georgia

Georgia is facing increased threats from hydrometeorological hazards and natural disasters, including frequent landslides, floods, flash floods, mudflows, droughts, avalanches, high winds, and storms. These dangers are largely attributed to the country's complex mountainous relief. However, climate change is forecast to increase the frequency and severity of heavy precipitation, earthquakes, floods, and landslides, putting Georgia even at greater risk of natural disasters⁹.

Georgia is ranked 139th out of 191 countries in terms of its ability to manage and respond to disasters. A preliminary assessment by the UNDP's, that the disaster risk profile of Georgia is much worse than the overall figures suggest. Due to the complex mountainous terrain and climate, Georgia is subject to both geological and hydro-meteorological natural hazards¹⁰.

According to the [Fourth National Communication of Georgia to the UNFCCC](#), due to climate change, the number and severity of natural disasters in recent years have increased in the country, with floods and freshets being the most destructive in terms of both economic losses and human fatalities. Moreover, Georgia's scale and quantity of landslide-gravitational and mudflow processes have significantly increased. Future climate scenarios show an increased risk of fire hazards too.

Furthermore, in recent years, the quantity and magnitude of landslides and mudflow processes have increased significantly in Georgia. As of 2018, 18% (647 settlements) of Georgia's populated areas were at high risk of geological hazards¹¹.

The Government of Georgia has adopted "[the National Disaster Risk Reduction Strategy of Georgia 2017-2020](#)" and its Action Plan. The documents state that the average number of extreme hydrometeorological events increased by 15% and the average number of extreme geological events – by 58%. Consequently, the damage caused by extreme events also increased. According to recent estimations, only in 2015, the damage caused by extreme geological and hydrometeorological events reached 389 million GEL¹².

The National Disaster Risk Reduction Strategy has not been renewed since 2020. Overall, the country lacks a definitive mapping of hazards, risks, and vulnerabilities for any of the hydrometeorological threats it faces.

⁹ <https://climateknowledgeportal.worldbank.org/country/georgia/vulnerability>

¹⁰ Scaling-up Multi-Hazard Early Warning System and the Use of Climate Information in Georgia; Green Climate Fund. UNDP. 2017

¹¹ Fourth National Communication of Georgia Under the United Nations Framework Convention on Climate Change, 2021

¹² National Disaster Risk Reduction Strategy of Georgia 2017-2020