

ACCELERATING RISK REDUCTION THROUGH FORWARD-LOOKING INVESTMENTS AND POLICIES IN ROMANIA

Building physical and financial resilience to strengthen Romania's future

AT A GLANCE

Country Romania

Risks Earthquakes, floods, drought, landslides, wildfires, and extreme weather events

Area of Engagement Promoting Resilience to Climate Change, Deepening Financial Protection, Science and Technology for Disaster Risk Management, Building Resilience at Community Level, Enabling Resilient Recovery

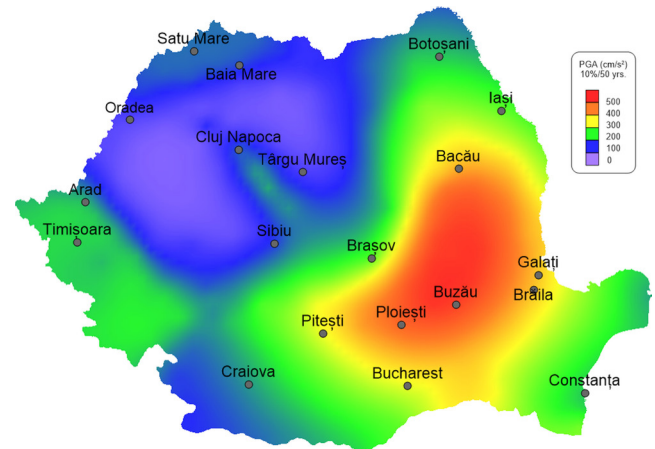
Amid high seismic and extreme weather vulnerabilities, Romania's government and civil society build towards a safer future.

A LAND OF GROWING OPPORTUNITIES AND RISKS

Known for its bustling technology sector and expanding economy, Romania is also among the most vulnerable in the European Union to earthquakes. More than 75% of the population lives in areas that could be hit by earthquakes at any time, and in the last 100 years more than 400,000 people have been affected by 13 separate quakes. Moreover, 45% of all critical transport, energy, water and communication services, as well as 70–80% of the country's gross domestic product (GDP) are located in high risk seismic zones. A single earthquake in 1977, for example, caused damages in excess of US \$2 billion and left 35,000 families without a home. Urban densification in areas like Bucharest, the third densest population center in the European Union, is only exacerbating impacts like this.

Climate change has also substantially increased risks from extreme weather in recent decades, bringing more frequent landslides, wildfires, drought, floods and extreme weather events. In 2010, for example, extreme floods caused economic damage equivalent to 0.6% of GDP. Today, more than one million Romanians spread throughout 900 communities live in high flood-risk areas.

A seismic hazard map of Romania



Source: Technical University of Civil Engineering Bucharest

HARNESSING INNOVATION TO INCREASE PREPAREDNESS

To address these growing risks, Romania has accelerated investments and undertaken policy reforms in disaster risk management (DRM) in recent years. In 2018, in collaboration with the World Bank (WB) and the Global Facility for Disaster Reduction and Recovery (GFDRR), Romania secured a US \$493 million DRM Development Policy Loan with a Catastrophe Deferred Drawdown Option (CAT DDO). The loan motivates stronger DRM institutions while also making emergency funds immediately available for an imminent disaster threat or after a disaster strikes to ensure quick recovery without disrupting other development priorities.

To further improve emergency response capacities, the WB is supporting the government with a series of investment projects (totaling US \$180 million) to modernize emergency infrastructure to provide thousands of first responders with disaster resilient, energy efficient, gender- and disability-friendly facilities that meet modern response requirements.

In addition, the WB is working with Romania's Ministry of Regional Development and Public Administration to develop a strategic framework to renovate and improve the seismic safety and energy efficiency of buildings. This includes a detailed diagnostic of the challenges that have inhibited seismic risk reduction in the past, as well as a roadmap to overcome them. Subsequently, through a deep consultative process, a new national strategy for seismic risk reduction and investment plan will be developed. The WB is also partnering with Bucharest to identify steps towards seismic resilience at the city level.

Romania is also increasing its focus on citizen engagement and empowering civil society and volunteer organizations. The Ministry of Internal Affairs is supporting the growth of a large volunteer and civil society network to enhance disaster response efforts. The WB and GFDRR are supporting this emerging collaboration by building partnerships and harnessing innovations, such as an app that will assist the Department of Emergency Situations in directing resources and volunteers provided by civil society groups in the event of a major earthquake or other disaster. This tool is being developed by Code for Romania, a local civic tech community supported by GFDRR.

LESSONS LEARNED

Pilot mapping projects can help reveal risks from previous building codes

Due to historically deficient building codes, many buildings across Romania are vulnerable to earthquakes, as was seen in a catastrophic 1977 earthquake that destroyed over 150,000 apartments and claimed over 1,500 lives in less than one minute. But early mapping work performed by civil society organization Make Better, for example, helped identify more than 8,000 people who lived in so-called 'red dot', or Class 1, buildings that are in severe danger of seismic collapse.

Partnerships at the global, regional, national, and local levels can amplify resilience

Romania boasts one of the fastest-growing and diverse DRM portfolios in the world thanks to robust partnerships with the WB and GFDRR, the European Union, the government, civil society organizations, research institutes, academia, and the private sector. The combination of horizontal and vertical approaches to resilience ensures that communities are well-informed of local risks, while national preparedness plans are better able to leverage international resources and expertise to accelerate investments in resilience.



**\$673
MILLION**
in investments and
contingent funding secured

FINANCIAL RESILIENCE STRENGTHENED

With support from GFDRR, the Romanian government secured \$493 million in contingent funding (CAT DDO) from the WB to provide dedicated emergency funding for response and recovery in the event of a major disaster.

RISK-INFORMED POLICY FRAMEWORKS

Access to the CAT DDO instrument was predicated on key policy reforms made by the government, the results of which will be tracked over the next 3 years. The WB and GFDRR also supported a DRM platform to promote collaboration between the government and civil society, and are working with the Ministry of Regional Development and Public Administration and Bucharest City Hall to streamline legislative and regulatory reforms, increase public awareness of disaster risk, and unlock further risk reduction investments.

EMERGENCY INFRASTRUCTURE MODERNIZED

With GFDRR support, the WB is also providing US \$180 million to reduce risk across more than 67 critical emergency response facilities which will ensure that more than 3,000 first responders can rely on safer and modernized facilities at any time.

“The World Bank has played a crucial role in ensuring the development of the first external resources management application for the Department of Emergency Situations in Romania, and also has set the necessary premises for long term collaboration between Code for Romania and the Romanian government.”

- Olivia Vereha, Co-founder/Chief Operations Officer, Code for Romania