# DISASTER RISK MANAGEMENT IN ARMENIA



Located on the Alps-Himalaya seismic zone, **Armenia** has historically been prone to earthquakes. The last devastating earthquake in 1988 rocked Spitak, killing 25,000 people and injuring 19,000, severely damaging 517,000 homes and causing an estimated economic loss of US\$ 15-20 billion in Northern parts of the country.

Floods in the country also pose serious danger. For instance, flooding in 2010 caused an estimated US\$ 10 million in damage. However, this list of natural disasters is not complete; Armenia also faces other hazards such as droughts, hail storms and landslides.

The Government of Armenia has recognized the importance of disaster risk management, highlighting that natural hazards threaten the country's development. In this regard, the World Bank Group is offering support to further advance disaster resilience in the country by launching the *Armenia National Disaster Risk Management Program*.

PROGRAM OVERVIEW: Funding: US\$1.75 million Duration: 2.5 years, starting from 2015

**Key counterparts:** Ministry of Territorial Administration and Emergency Situations, Ministry of Urban Development, Ministry of Education and Science, Ministry of Finance, other relevant government agencies, Yerevan Municipality and other relevant Marz and communities in Armenia.

The National Disaster Risk Management Program is aimed at supporting the Government of Armenia to further advance disaster resilience by: (1) improving disaster risk information; (2) enhancing disaster risk reduction; (3) strengthening disaster preparedness; and (4) improving understanding of fiscal disaster risks and risk financing options.









## **PROGRAM BACKGROUND**

To implement the Program, the World Bank team will work closely with relevant ministries to implement five components: institutional strengthening, risk identification, risk reduction, disaster preparedness and financial protection.

## Institutional Strengthening

Effective cooperation among government agencies in Armenia is critical for success in disaster risk reduction efforts. The Program will support adjusting Armenia's existing National Strategy on Disaster Risk Reduction to align with the Sendai Framework for Disaster Risk Reduction adopted in March 2015, as well as the UN Sustainable Development Goals. The Program will also draft a plan for its implementation through workshops and meetings with relevant stakeholder groups and partners.

# **Risk Identification**

Understanding hazards, exposure, and vulnerability is the first step towards managing disaster risk. Assessment and quantification of risks and anticipating the potential impacts of natural hazards can help governments make informed decisions to be better prepared. The Program will support compiling existing disaster risk information and improving open platform for geospatial data on disaster risks that will be shared with various ministries, government agencies, etc. Additionally, the Program will support conducting a national seismic hazard assessment and developing a new seismic zoning map, which will inform potential improvements to construction norms.

# **Risk Reduction**

Disaster risk information can advise various development strategies, plans and projects that can reduce risks. This may be done through anticipatory action that seeks to avoid the creation of new risks by, for example, considering disaster risks in urban master plans or improving building practices, and through investment to address existing risk, such as the retrofitting of critical facilities infrastructure. Armenian construction norms were updated in 1994 and it is a critical task to review them based on new

Team Leader:

Ko Takeuchi, Disaster Risk Management Specialist, the World Bank Group E-mail: ktakeuchi@worldbank.org seismic hazard information. Municipalities will benefit from the Program's support through the incorporation of disaster risk information in their development plans.

The Program will also support the implementation of the National Safe Schools Program to make schools more resilient to the impact of adverse natural exposures, as well as facilitate knowledge exchange on the topic of school safety with other countries.

## **Disaster Preparedness**

Adequate preparedness is essential as risks can never be completely eliminated or reduced. National emergency preparedness and response capacity has been improving in Armenia. Additional improvements at the local level can further help protect livelihoods and accelerate recovery from disasters. The World Bank's experience in other countries, such as Turkey and Kyrgyz Republic, will contribute to improvements on this topic.

#### **Financial Protection**

Financial protection aims at increasing financial capacity and preparedness, while protecting fiscal balance, to help reduce the economic burden of disasters on the government, businesses and households. The Program will support the government by carrying out an assessment to better understand the fiscal impacts of disasters and to provide the government with analysis and policy options for disaster risk financing and insurance using the world's best practices.

#### **PROJECT PARTNERS**

The Program was made possible with the financial support of the Japan-World Bank Program for Mainstreaming Disaster Risk Management in Developing Countries (through the Global Facility for Disaster Reduction and Recovery (GFDRR)) and other donors. It will also work in close cooperation with other development partners, such as UN agencies, International Financial Institutions, bilateral agencies, and civil society organizations working in Armenia.

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