

InnovationLab

Further your understanding of disaster risk



GLOBAL FACILITY FOR DISASTER REDUCTION AND RECOVERY **GFDRR**

Risk Identification

Advancing resilience through information

Recognizing, assessing, and understanding risks from natural hazards and climate change are the first steps toward reducing their adverse effects. With access to comprehensive disaster risk information, policymakers and the public can better understand the potential impacts of natural hazards, and carry out risk-sensitive planning and investment before a disaster strikes.

The first step – Assessing risk

To enable evidence-based decision-making, risk identification is the important first step toward leveraging larger and better-targeted investments in risk reduction, preparedness, financial protection, and resilient recovery. GFDRR Innovation Lab supports clients in the development and use of risk information by:

- ▶ Identifying gaps in country risk information
- ▶ Managing the risk assessment process, from designing targeted analytics to the communication of results
- ▶ Communicating complex data into understandable, actionable information
- ▶ Helping governments use risk assessments as evidence for decision making

After risk assessments

Providing risk information is the first step in the DRM cycle. With risk information, agencies can proactively respond to disaster risk through activities such as retrofitting buildings, developing new land-use planning guidelines, designing financial protection measures, and equipping and training emergency responders. Risk information is beneficial across a range of sectors.

Best practices of risk assessments

As a leader in disaster risk assessment, the Innovation Lab team produces risk assessments that:

- ▶ Clearly define the purpose of the risk assessment prior to beginning the process
- ▶ Enable and promote ownership of the process and mitigation efforts
- ▶ Promote open data generation
- ▶ Prioritize risk communication
- ▶ Foster multidisciplinary, multi-institutional, and multi-sectoral collaboration at all levels
- ▶ Consider the broader risk context, such as multiple hazards
- ▶ Keep abreast of evolving risk
- ▶ Account for uncertainties and limitations of risk information
- ▶ Are transparent and credible
- ▶ Encourage open source software innovations

The need for open data

A risk assessment is only as good as the data it uses. The Open Data for Resilience Initiative (OpenDRI) gathers and stores risk-related datasets to ensure that the high-quality risk assessments produced are using the most up-to-date and accurate data available.

In turn, OpenDRI ensures that the data generated through risk assessments are widely available and reusable by uploading them onto online open data platforms. These data include hazard, exposure, and vulnerability information, the components that comprise disaster risk (see box).

BOX: Components of disaster risk

Hazard:	Physical phenomena of nature, e.g. earthquake, flood
Exposure:	Characteristics of assets that are important to a community, e.g. buildings, people, agricultural land, infrastructure
Vulnerability:	Likelihood of assets being damaged or disrupted when a hazard strikes, e.g. 60% chance of building collapse



Case study

Facilitating risk assessments

GFDRR has facilitated the development of risk information in more than 60 countries.

Most notably, high-level analysis of national and sub-national risks from floods and earthquakes were undertaken for over 30 European and Central Asian countries, in which GFDRR secured access to risk analytics that were substantially below market rate and could be undertaken within a period of less than six months. From this information, GFDRR and the World Bank are developing risk profiles for non-technical audiences to support client countries in better understanding their disaster risk.

In the Africa region, GFDRR is facilitating access to new risk information and providing technical assistance to client countries in the Southwest Indian Ocean Islands, with plans to scale up this leadership to other regions. The data from this initiative will be stored on an open data platform supported by the Open Data for Resilience Initiative (OpenDRI).

Additionally, GFDRR supported a school safety project in Armenia by working with partners to identify an Armenian expatriate engineer, who specialized in seismic risk, leveraging his expertise and knowledge of local languages and cultures to train local engineers.

① More info at www.gfdr.org/area/Pillar1



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