

# ThinkHazard!

Identify natural hazards in your project area  
and understand how to reduce their impact





River flood



Earthquake



Drought



Cyclone



Coastal flood



Tsunami



Volcanic ash



Landslide

## AT-A-GLANCE

- ThinkHazard! is a new, open source resource pioneered by the Global Facility for Disaster Reduction and Recovery (GFDRR).
- ThinkHazard! analyses global, national and local hazard data in a first-of-its-kind digital platform.
- Hazard information is available for all 196 countries across 8 different natural hazards.
- With this tool, users can have a quick, simple-to-use overview of all hazards in an area of interest.
- Visit [ThinkHazard.org](http://ThinkHazard.org)

Assessing the potential disaster and climate risk in development is critical for development experts, project developers, planners, officials, and other decision makers. But determining the risk can be a highly technical and time-consuming process.

To make this understanding of risk more accessible and increase the resilience of projects around the world, GFDRR's Innovation Lab has collaborated with the World Bank Group, BRGM (the French geological survey), Camptocamp, and Deltares, to develop ThinkHazard!. This new online tool provides a level of hazard - down to the district level - across 8 types of natural hazards.

ThinkHazard! is a free, open source tool that puts information in the public domain that was previously proprietary or for expert use only. It not only helps users better understand relevant climate and disaster risk, but provides recommendations and resources to help address those risks. The open data platform means new data can be contributed by the global community, improving the tool over time.

## How can ThinkHazard! be used?

Here's an example of how ThinkHazard! can make an impact: A group of project developers and city officials have plans to build a school in the area west of Jakarta, Indonesia. They want to understand how earthquake could affect their project, but don't have the information they need.

With ThinkHazard!, this group can enter their location – from a district to country name – and see the levels of hazard that are present, in the project area. This tool would show the developers that the project site is at high risk of earthquake, volcanic eruption, landslide, tsunami, and river floods.

ThinkHazard! also presents a set of recommendations for addressing each specific risk. For example, the project developers in Jakarta could receive a recommendation to contact the government agencies responsible for managing those risks to get more specific information on the potential risks.

Because it is open source, it is possible to groups to create their own sector- and institution-specific versions. For example, it is possible to build a ThinkHazard! version that is focused just on the educational sector, so that there are detailed recommendations and resources on schools provided to the user.

The development and use of ThinkHazard! is open and transparent, with openly available documentation. The tool's architecture and code are open source.

The screenshot displays the ThinkHazard! web application interface. At the top, there is a search bar and navigation links for 'About' and 'FAQ'. The location is set to 'Indonesia - Banten'. A navigation menu includes icons for 'River flood', 'Earthquake', 'Water scarcity', 'Cyclone', 'Coastal flood', 'Tsunami', 'Volcano', and 'Landslide'. The 'Earthquake' section is highlighted, showing a 'Hazard level: High' warning. The main content area provides detailed information about the hazard level, including a text explanation, a list of recommendations (such as 'Earthquake history and hazard', 'Local building regulations', 'Site and soil conditions', 'Technical expertise', 'Design considerations', and 'Utilities and access'), and a 'Further resources' section with links to various disaster management documents and databases. A map on the right shows the location of Banten within Indonesia.

GFDRR's Innovation Lab is actively looking for partners who might be interested in using and contributing to the future development of ThinkHazard!. The tool relies on underlying hazard data sets to communicate levels of hazard, and incorporating newly developed local, national, and global hazard datasets is an ongoing priority.

Visit [www.ThinkHazard.org](http://www.ThinkHazard.org) for more info.

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