CDRI
Coalition for Disaster Resilient Infrastructure

UNDP

GIRI
Global Infrastructure Risk Model and Resilience Index

The first publicly available fully probabilistic risk model with respect to major geological and climate related hazards.

Improves understanding and makes the global landscape of infrastructure risk and resilience visible.

Interprets the capacity of a country to absorb, respond and recover, represented by its resilience performance curve.

Measures resilience in major critical and social infrastructure sectors.

Natural hazards modeled within GIRI

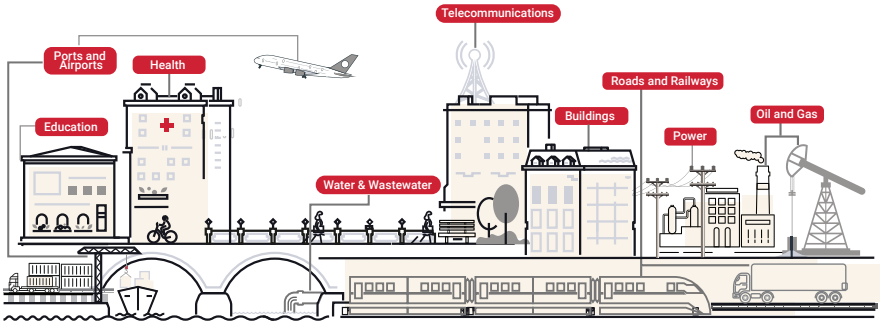
Geophysical

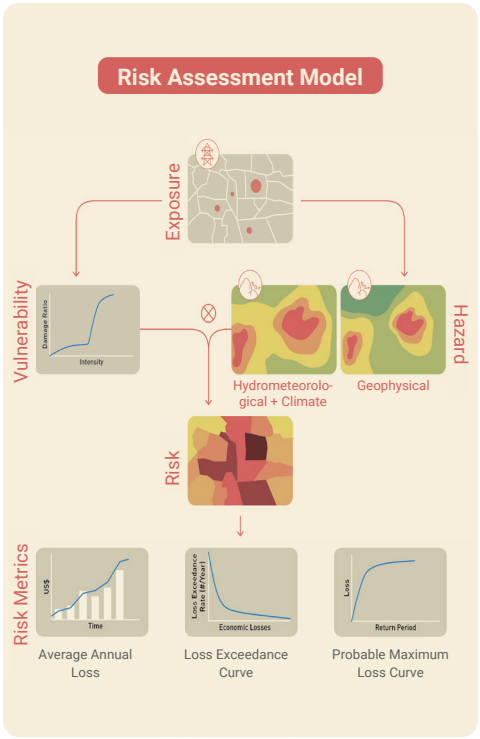
- Earthquake
- Tsunami
- Landslide (Earthquake triggered)

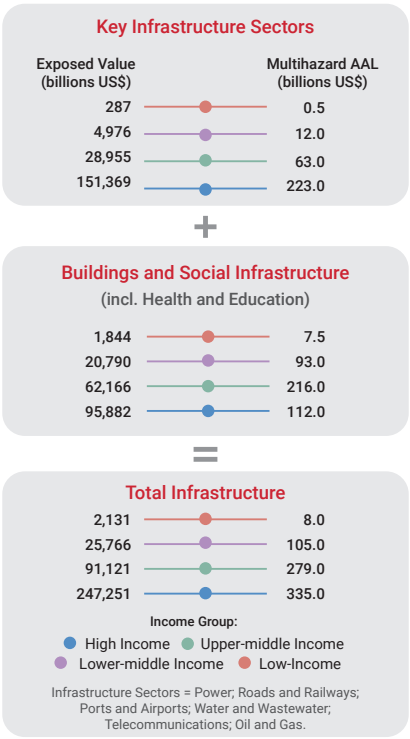
Meteorological forcing modified by climate change

- Tropical Cyclone
- Flood
- Landslide (Rainfall triggered)
- Drought

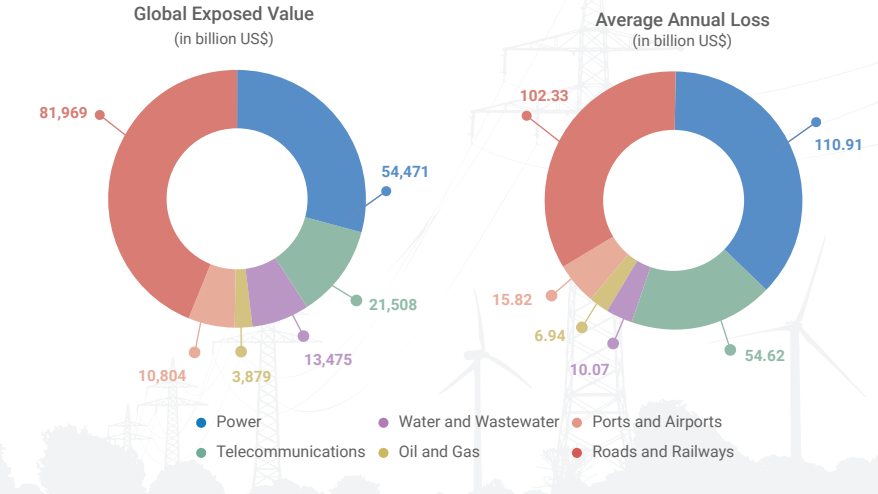
Vulnerability and risk information for critical and social infrastructure covered under GIRI

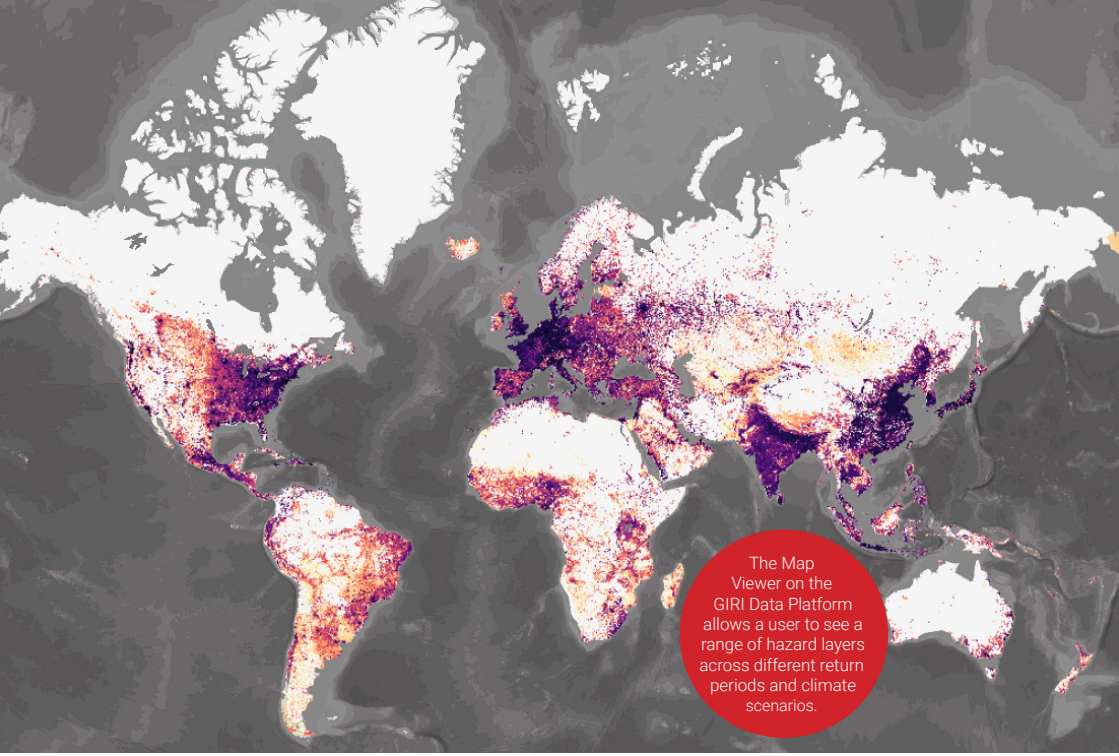






GIRI can be utilized to monitor changes in vulnerability and capacities over time and it can be disaggregated into risk indicators and individual capability indicators. One of the outputs from the GIRI model is a set of loss function metrics – Probable Maximum Loss (PML) Curve, Loss Exceedance Curve (LEC), and Average Annual Loss (AAL).





Scale and Application

Understand the fiscal risk for all infrastructure sectors

Formulate strategies and plans

Develop national resilience policies

Visualize data

Analyze the data

Download the data

Consortium

www.cdri.world/giri