

The logo for the Global Assessment Report on Disaster Risk Reduction (GVR) features the letters 'GVR' in a bold, white, sans-serif font. The 'V' is stylized with a downward-pointing triangle integrated into its center. The logo is positioned at the top of a large teal circle that serves as the background for the main text.

Global Assessment Report
on Disaster Risk Reduction

Our World At Risk

Transforming Governance for
a Resilient Future



UNDRR

UN Office for Disaster Risk Reduction

By 2030, global disasters could increase by 40%. This amounts to 540 disasters every year, or **more than 1.5 per day**.

The number of **droughts** are forecast to double by 2030, and **extreme temperature events** set to triple.

Every year, low- and middle-income countries lose **10 times more of their GDP** to disasters than high-income countries.

By 2020, **120 countries** had adopted disaster risk reduction strategies.

A large satellite dish antenna is positioned on the right side of the image, set against a backdrop of a sunset sky with orange and blue hues. The dish is mounted on a complex metal structure. In the foreground, there is a field of dry grass and a dirt path leading towards the dish. The background shows distant mountains under a clear blue sky. A large white circle with a red border is overlaid on the left side of the image, containing a quote.

“Progress on disaster risk reduction must be urgently prioritized as a precondition for sustainable development.”

António Guterres
UN Secretary-General

Systemic risks are undermining sustainable development

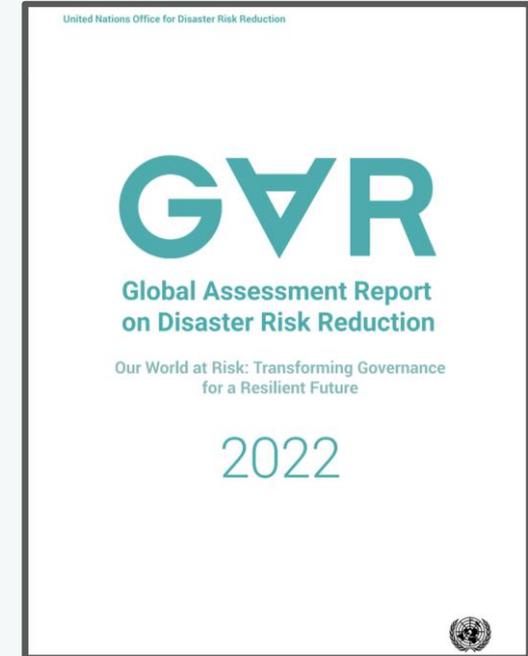


- COVID-19 and climate change are rapidly making it clear that, in today's crowded and interconnected world, disaster impacts increasingly cascade across geographies and sectors.
- Despite progress, risk creation is outstripping risk reduction. Disasters, economic loss and the underlying vulnerabilities that drive risk, such as poverty and inequality, are increasing just as ecosystems and biospheres are at risk of collapse.
- How can governance systems evolve to better address the systemic risks of the future in an destabilizing and volatile climate future?

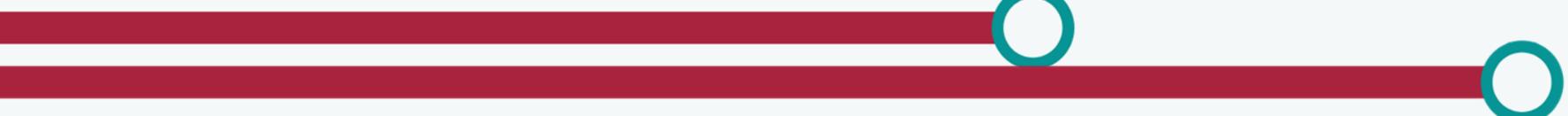
Transdisciplinary approaches for resilience building and climate change adaptation



- Building resilience to systemic risks requires legislation to foster learning and collaboration across silos and systems
- The inherent volatility and uncertainty of climate change requires governance systems that are more agile, flexible and responsive to change.
- Combining scientific/ modeling information with participatory approaches to verify and 'ground-truth' analysis to co-create solutions with impacted citizens is key



Design systems to factor in how human minds make decisions about risk



Policymakers and providers of disaster risk reduction products and services to households and communities continue to undervalue how risk perceptions, including cognitive biases, influence decision-making.

Key actions:

- Recognize the role of people's perceptions of risks and biases to close the gap between intention and action in reducing risk.
- Recognize the value of risk analytics as a tool but not a panacea.

Decision making support tools can help

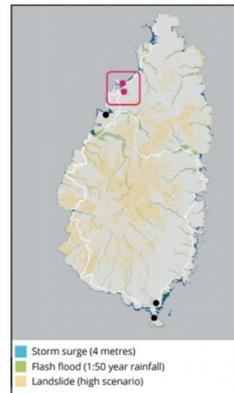
New methods to assess emerging systemic risks and impacts do not enable prediction of the exact tipping points, such as on which day the stock markets will crash, when supply chains will cease to function or when the 1.5°C safe global climate change target is breached.

However, they do allow prediction, given a trigger event, of what the consequences will be throughout the system. Models can also show how cascading systemic risk affects wider sustainable development.

Figure S.12. Analysis of port and freight exposure to climate-related hazards in Saint Lucia and interdependent impacts on SDG targets

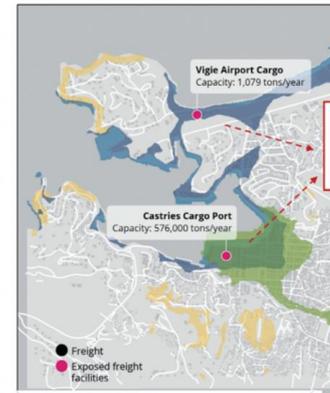
Hazards and asset data

High resolution (10-20 metres)



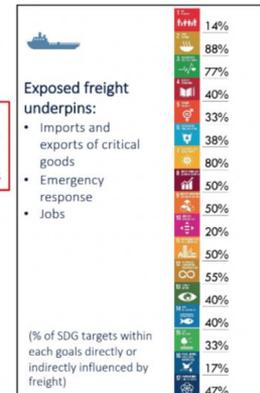
Exposure of freight assets

Exposed freight value: 577,000 tons/year: \$446 million



Impact

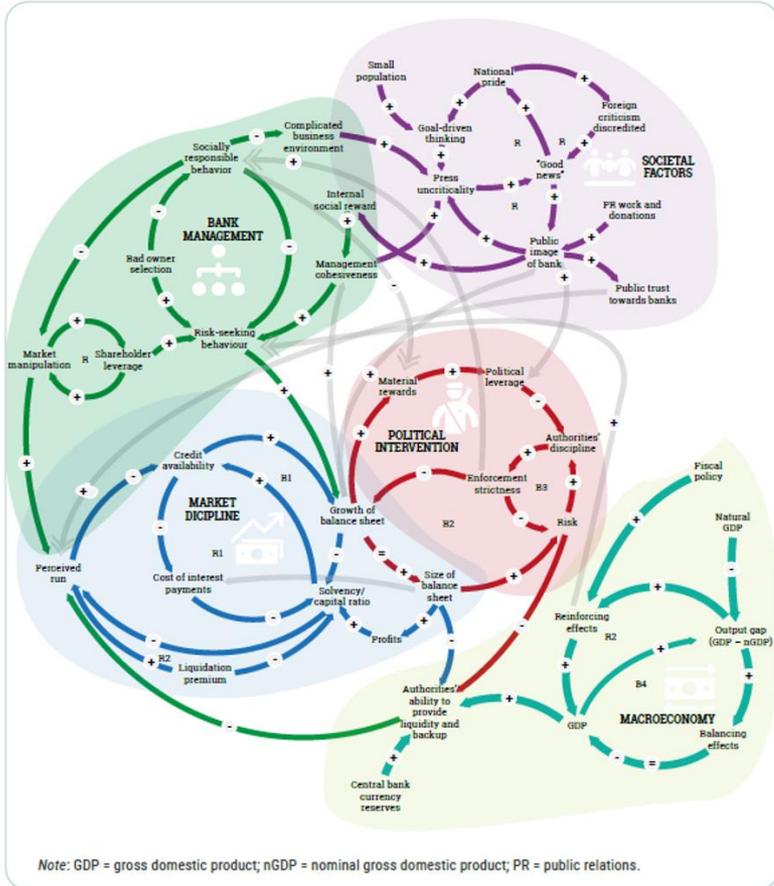
Affecting 75 SDG targets



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations

Source: Pant et al. (2022) based on Adshead et al. (2020)

Figure S.10. Systemic risk in the Icelandic financial system, 2007



Plan with, not against,
how people take
decisions about risk

Measure what we value



Balance sheets ignore key variables, particularly undervaluing climate change risk, costs to ecosystems and the positive social benefits of risk reduction. The real costs of extensive risk are especially undervalued, and this gap is widening as major climate change impacts such as sea-level rise gather pace.

Key actions:

- **Rework financial systems** to account for the real costs of risk particularly long-term risks, and rework investment and insurance systems to incentivize risk reduction.
- **Adapt national fiscal planning and risk financing** to consider risk and uncertainty, and especially climate change risks.

Barbados

- Prone to hurricane risk
- National DRR planning on economic impacts of hurricane disaster
- Multi-hazard loss estimation looked at displacement, unemployment rates, and tourism
- Demonstrated the need for resilience building across sectors





Measuring What We Value: The Netherlands

In 2020, the **De Nederlandsche Bank** became the first ever central bank to consider biodiversity a financial risk. The bank found that 36% of the portfolio values of the Dutch financial institutions were exposed to nature-related risks.

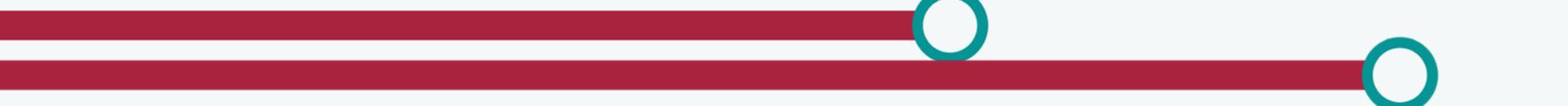
The choices that we make can create new risk – but it can also build resilience. We must **better measure what matters to us.**

Incentivize Resilient Financial Products: Green Resilience Bonds



- Demonstrate a cross-sectoral solution to resilience
- Increases innovation to resilience from climate-related risks
- Tool for climate legislators

Reconfigure governance and financial systems to work across silos and design in consultation with affected people



Governance and financial systems are not yet embracing transdisciplinary approaches and tend to take top-down approaches. This is affirmed by Sendai MTR consultations that found:

- Need to develop a road map for the financial sectors on how to incorporate systemic risk;
- Demand for stepped up capacity building for decision makers on disaster risk reduction;
- Opportunities to realign parliamentary committees for purposes of risk reduction or to establish risk caucuses or other for a to address risk reduction in a transdisciplinary manner;
- Need to tighten weak legislation to make corporations accountable for failure to invest in renewable energy over fossil fuels or to account for climate risk and resilience building in financial reports;
- Opportunities to improve data quality and accessibility of disaggregated, sub-national data to better inform decision making.

Food for Thought



- We live in a time of certain uncertainty
- The first line of defense is to reduce the vulnerability, inequality and exposure that drive disasters
- Investing in understanding how disasters impact countries and communities improves effective decision making
- Systemic risks require systemic solutions- transboundary and multi-sectoral
- Investments in systemic risk analytics are essential, but are tools not predictions, so they need to be backed up by more flexible, agile consultation and governance systems
- Reworking financial systems to value sustainable development and to take into account the real costs of risk is key

Some key questions to ponder

- How agile are your planning systems to uncertainty? How quickly can your systems pivot?
- Do you have information on what drives vulnerability and exposure in your country? Who is often left out of data? What safety nets are in place for these groups specifically?
- Do your planning and budgets include provisions for investing in resilience building and in protecting essential infrastructure like hospitals, schools etc.? If not, how can that happen?
- Have you begun to look at knock-on or cascading impacts of disasters? Do you have modeling that can do this? If not, can you start, and who needs to be part of discussions to interpret and use that analysis?
- Do your fiscal planning systems value people, and the planet or just prosperity? How can this become more balanced in your context? Do you value your children's generation too when planning?



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**Full report available at
<https://www.undrr.org/gar2022/>**

Check-out: #StoptheSpiral

