



# Knowledge & Learning Catalog

*The Global Facility for Disaster Reduction and Recovery*

*2007-2018*



**GFDRR**  
Global Facility for Disaster Reduction and Recovery

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WORLD BANK GROUP

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GLOBAL NETWORK  
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COOPERATION



UNITED NATIONS  
DEVELOPMENT  
PROGRAMME



WORLD  
METEOROLOGICAL  
ORGANIZATION

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## About this Book

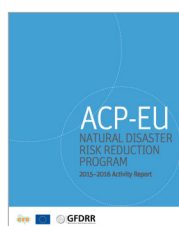
All the publications displayed in this book can be found at [gfdrr.org/publications](https://gfdrr.org/publications), and are freely available for download and use (with citation).

## Core Documents



### GFDRR Annual Reports

- 2017: Bringing Resilience to Scale
- 2016: Bringing Resilience to Scale
- 2016: Bringing Resilience to Scale
- 2015: Bringing Resilience to Scale
- 2014: Bringing Resilience to Scale
- 2013: Inroads to Resilience
- 2012: Towards a Resilient Future
- 2011: Building Resilience to Disasters
- 2010: Integrating Disaster Risk Reduction and Climate into the Fight against Poverty
- 2009: Integrating Disaster Risk Reduction into the Fight against Poverty
- 2008: Integrating Disaster Risk Reduction into the Fight against Poverty
- 2007: Integrating Disaster Risk Reduction into the Fight against Poverty



### ACP-EU Activity Reports

- 2015–2016 Activity Report: ACP-EU Natural Disaster Risk Reduction Program
- 2014–2015 Activity Report: ACP-EU Natural Disaster Risk Reduction Program
- 2014–2016 Activity Report: Building Disaster Resilience in Sub-Saharan Africa Program: Result Area 2
- 2014–2016 Activity Report: Building Disaster Resilience in Sub-Saharan Africa Program: Result Area 5



### Japan-World Bank Program Reports

- 2015–2016 Annual Report: Japan-World Bank Program
- 2015–2016 Program Profiles Report: Japan-World Bank Program
- 2014–2015 Annual Report: Japan-World Bank Program



### Strategies

- 2018–2021 GFDRR Strategy
- 2015–2017 GFDRR Strategy: Civil Society Engagement, Community Resilience, and Gender
- 2013–2015 GFDRR Strategy: Managing Disaster Risks for a Resilient Future



### Work Plans

- [2018 Work Plan: Bringing Resilience to Scale](#)
- [2017 Work Plan: Bringing Resilience to Scale](#)
- [2016-2018 Work Plan: Managing Disaster Risks for a Resilient Future](#)
- [2015-2017 Work Plan: Managing Disaster Risks for a Resilient Future](#)
- [2009-2011 Work Plan: GFDRR Track 1](#)



### Action Plans

- [2016-2021 GFDRR Gender Action Plan](#)
- [2016-2023 World Bank Group Gender Strategy](#)



### Partnership Documents

- [2013 Partnership Charter](#)
- [2007-2011 Retrospective: Strengthening Regional and Global Partnerships for Disaster Risk Reduction](#)
- [2010 Partnership Strategy](#)
- [2009-2012 Partnership Strategy](#)

# Areas of Engagement

## Engagement Notes

*A series of 8-page Notes on GFDRR's priority engagement areas*



### Open Access to Risk Information



### Resilient Infrastructure:

Resilient Transport

Global Program for Safer Schools



### Resilient Cities



### Hydromet Services



### Financial Protection



### Community Resilience



### Resilience to Climate Change:

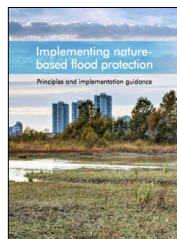
Small Island States Resilience Initiative



### Resilient Recovery

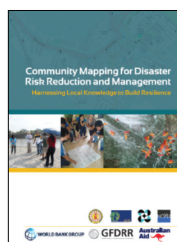
# Open Access to Risk Information

## Reports & Publications



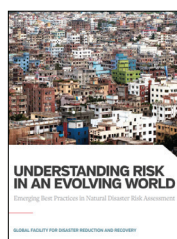
### Implementing Nature-based Flood Protection (2017)

Floods are the most frequent and damaging of all natural hazards globally. Between 1994 and 2013, floods accounted for 43% of all recorded natural events, affecting nearly 2.5 billion people. The objective of this document is to present five principles and implementation guidance for planning, such as evaluation, design, and implementation of nature-based solutions for flood risk management as an alternative to or complementary to conventional engineering measures.



### Community Mapping for Disaster Risk Reduction and Management (2015)

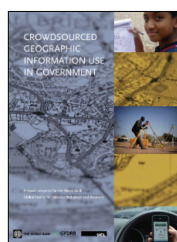
This report presents a disaster risk reduction program which provided training and capacity building using OSM and InaSAFE including development of learning materials, assistance in monitoring data edits and online forum support in the Philippines.



### Understanding Risk in an Evolving World: Emerging Best Practices in Natural Disaster Risk Assessment (2014)

This document highlights efforts to create and communicate risk information through a series of case studies spanning 40 countries. The case studies provide lessons and best practice in risk assessment and serve as evidence for continued investment in risk identification.

### Understanding Risk in an Evolving World: A Policy Note (2014)



### Crowdsourced Geographic Information Use in Government (2014)

Based on a six-month study of the use of volunteered geographic information by government, this publication aims to provide a guide for the successful implementation of fit-for-purpose crowdsourced information.



### Volunteer Technology Communities: Open Development (2010)

This publication describes how different communities of technology experts are working together with the World Bank and the United Nations that make supercomputers and other large storage mechanisms available for processing imagery, managing translation workflows, and serving large data sets.

## Programs & Tools



### Understanding Risk

#### Forum Proceedings

- 2017 Austria
- 2016 Venice
- 2015 Boulder
- 2014 Addis Ababa (Understanding Risk and Finance Conference)
- 2012 Cape Town
- 2010 Washington, D.C.

#### Reports & Evaluations

- Snapshot Performance Evaluation: Understanding Risk Forums (2017)
- Understanding Risk Producing Actionable Information Proceedings from the 2014 UR Forum (2015)
- Understanding Risk: Review of Open Source and Open Access Software Packages Available to Quantify R
- Risk from Natural Hazards (2014)



### Challenge Fund

#### Reports

- Performance Evaluation (2018)
- Program Overview (2017)
- A Deep Dive Case Study (2017)
- Phase 1 Results and Learning (2017)

#### Project Overviews

- IBIMET (2017)
- iMMAP (2017)
- NYU (2017)
- American Red Cross (2017)
- Flood Tags (2017)
- UNESCO (2017)
- IWMI (2017)
- GNDR (2017)
- FutureWater (2017)
- NIWA (2017)
- Darmouth Flood Observatory (2017)
- Deltares (2017)
- Institut de Recherche pour le Développement (2017)
- University of Bristol (2017)



### Open Data for Resilience Initiative (OpenDRI)

#### Reports

- Open Data for Resilience Initiative: Policy Note and Principles (2016)
- Open Data for Resilience Initiative: Field Guide (2014)
- Open Data for Resilience Initiative: Planning an Open Cities Mapping Project (2014)
- Program Overview (2013)



### ThinkHazard!

#### Reports

- ThinkHazard! A New Online Risk Tool from GFDRR (2016)

# Country Disaster Risk and Climate Adaptation Profiles

*Country program updates, notes, and risk profiles provide national policy makers with the information necessary to make risk-informed decisions on identifying risk and making their country more resilient to natural hazards.*

[Africa](#) | [East Asia & Pacific](#) | [Europe & Central Asia](#) | [Middle East North Africa](#) | [Latin America & the Caribbean](#) | [South Asia](#)

## Regional Reports & Compilations

- [Europe and Central Asia Country Risk Profiles for Floods and Earthquakes \(2016\)](#)
- [Disaster Risk Management in Latin America and the Caribbean Region: GFDRR Country Notes \(2010\)](#)
- [Disaster Risk Management and Climate Change Adaptation in Europe and Central Asia \(2008\)](#)

## Disaster Risk Profiles (2017)

<a href="#">Afghanistan</a>	<a href="#">Kyrgyz Republic</a>
<a href="#">Albania</a>	<a href="#">Latvia</a>
<a href="#">Armenia</a>	<a href="#">Lithuania</a>
<a href="#">Azerbaijan</a>	<a href="#">Macedonia</a>
<a href="#">Belarus</a>	<a href="#">Madagascar (EN/FR)</a>
<a href="#">Beliz</a>	<a href="#">Mauritius</a>
<a href="#">Bosnia and Herzegovina</a>	<a href="#">Moldova</a>
<a href="#">Bulgaria</a>	<a href="#">Montenegro</a>
<a href="#">Comoros (EN/FR)</a>	<a href="#">Nicaragua</a>
<a href="#">Costa Rica</a>	<a href="#">Panama</a>
<a href="#">Croatia</a>	<a href="#">Poland</a>
<a href="#">Cyprus</a>	<a href="#">Romania</a>
<a href="#">Czech Republic</a>	<a href="#">Russia Federation</a>
<a href="#">El Salvador</a>	<a href="#">Saint Lucia</a>
<a href="#">Estonia</a>	<a href="#">Serbia</a>
<a href="#">Georgia</a>	<a href="#">Seychelles</a>
<a href="#">Greece</a>	<a href="#">Slovak Republic</a>
<a href="#">Grenad</a>	<a href="#">Slovenia</a>
<a href="#">Guatemala</a>	<a href="#">Tajikistan</a>
<a href="#">Honduras</a>	<a href="#">Turkey</a>
<a href="#">Hungary</a>	<a href="#">Turkmenistan</a>
<a href="#">Jamaica</a>	<a href="#">Ukraine</a>
<a href="#">Kazakhstan</a>	<a href="#">Uzbekistan</a>
<a href="#">Kosovo</a>	<a href="#">Zanzibar</a>

## Country Profiles & Program Updates (2015)

<a href="#">Bangladesh</a>	<a href="#">Malawi</a>
<a href="#">Burkina Faso</a>	<a href="#">Mali</a>
<a href="#">Colombia</a>	<a href="#">Mexico</a>
<a href="#">Costa Rica</a>	<a href="#">Mongolia</a>
<a href="#">Djibouti</a>	<a href="#">Mozambique</a>
<a href="#">Ecuador</a>	<a href="#">Pakistan</a>
<a href="#">Ethiopia</a>	<a href="#">Panama</a>
<a href="#">Ghana</a>	<a href="#">Papa New Guinea</a>
<a href="#">Guatemala</a>	<a href="#">Senegal</a>
<a href="#">Haiti</a>	<a href="#">Solomon Islands</a>
<a href="#">Indonesia</a>	<a href="#">Sri Lanka</a>
<a href="#">Kyrgyz Republic</a>	<a href="#">Togo</a>
<a href="#">Lao PDR</a>	<a href="#">Vietnam</a>
<a href="#">Madagascar</a>	<a href="#">Yemen</a>

## Climate Risk & Adaptation Profiles (2011)

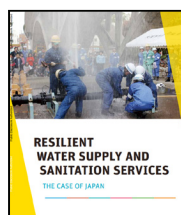
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<a href="#">Costa Rica</a>	<a href="#">Marshall Islands</a>
<a href="#">Djibouti</a>	<a href="#">Mozambique</a>
<a href="#">Ecuador</a>	<a href="#">Nepal</a>
<a href="#">Ethiopia</a>	<a href="#">Pakistan</a>
<a href="#">Guatemala</a>	<a href="#">Panama</a>
<a href="#">Haiti</a>	<a href="#">Philippines</a>
<a href="#">Indonesia</a>	<a href="#">Togo</a>
<a href="#">Kyrgyz Republic</a>	<a href="#">Vanuatu</a>
<a href="#">Lao PDR</a>	<a href="#">Yemen</a>
<a href="#">Madagascar</a>	

## Disaster Risk Financing Country Notes

<a href="#">Antigua &amp; Barbuda (2011)</a>	<a href="#">Honduras (2011)</a>
<a href="#">Belize (2011)</a>	<a href="#">Jamaica (2011)</a>
<a href="#">Bolivia (2011)</a>	<a href="#">Marshall Islands (2015)</a>
<a href="#">Colombia (2011)</a>	<a href="#">Nicaragua (2011)</a>
<a href="#">Cook Islands (2015)</a>	<a href="#">Peru (2011)</a>
<a href="#">Costa Rica (2011)</a>	<a href="#">St. Kitts and Nevis (2011)</a>
<a href="#">Dominica (2011)</a>	<a href="#">St. Lucia (2011)</a>
<a href="#">Dominican Republic (2011)</a>	<a href="#">St. Vincent and the Grenadines (2011)</a>
<a href="#">Ecuador (2011)</a>	<a href="#">Samoa (2015)</a>
<a href="#">El Salvador (2011)</a>	<a href="#">Solomon Islands (2015)</a>
<a href="#">Fiji (2015)</a>	<a href="#">Tonga (2015)</a>
<a href="#">Grenada (2011)</a>	<a href="#">Vanuatu (2015)</a>
<a href="#">Guatemala (2011)</a>	
<a href="#">Haiti (2011)</a>	

# Resilient Infrastructure

## Reports & Publications



### [Resilient Water Supply and Sanitation Services: The Case of Japan \(2018\)](#)

Japan has built the resilience of its water supply and sanitation (WSS) services through an adaptive management approach based on lessons learned from past natural disasters. This experience offers key insights for low- and middle-income countries seeking to sustain and build resilience of WSS services.



### [Project Brief: Resilient Industries \(2018\)](#)

This flyer describes the program to support developing country governments to increase resilience of their key industries to climate-related and other natural disasters through a focus on business continuity planning (BCP).



### [Armenia: Safer Schools Flyer \(2018\)](#)

This flyer summarizes the assessment of the resilience of Armenia's schools, and recommendations to improve the safety of the country's school buildings and students.



### [Solutions Brief: Resilient Water Supply and Sanitation Services \(2018\)](#)

Japan has built the resilience of its water supply and sanitation services through an adaptive approach based on lessons learned from past natural disasters. This experience offers key insights for low- and middle-income countries seeking to reduce their vulnerabilities in essential service provision.



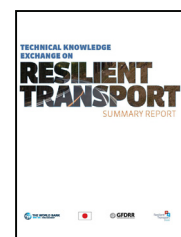
### [Resilient Infrastructure Public-Private Partnerships \(PPPs\): Contracts and Procurement \(2017\)](#)

This report presents a case study of infrastructure PPP projects in Japan. Japan's experience in structuring resilient infrastructure PPPs offers policy recommendations and insights on how disaster and climate risks can be managed under PPPs.



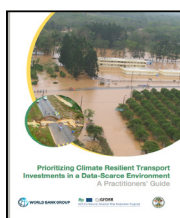
### [Solutions Brief: Resilient Infrastructure PPPs \(2017\)](#)

Japan is highly exposed to natural disaster risks ranging from earthquake, tsunami, cyclones, floods, and landslides to volcanic eruptions. Japan's experience in structuring resilient infrastructure public-private partnerships (PPPs) offers insights on how disaster and climate risks can be managed under PPPs.



### [Technical Knowledge Exchange on Resilient Transport \(2017\)](#)

On May 8–12, 2017, the World Bank Disaster Risk Management (DRM) Hub in Tokyo and the Resilient Transport Community of Practice (CoP) hosted a week-long Technical Knowledge Exchange (TKX) in Tokyo that convened clients and World Bank task team leaders (TTLs) from 16 countries to share concepts and practices on resilient transport, including systems planning, engineering and design, asset management, and contingency programming.



### Prioritizing Climate Resilient Transport Investments in a Data-Scarce Environment: A Practitioner's Guide (2017)

In Belize, the World Bank worked with the Government to increase the country's resilience to the impacts of natural hazards by improving key road segments in the road network. The prioritization process and lessons learned are presented and discussed in this Practitioners' Guide, which aims to provide guidance for the prioritization of climate- resilient investments in road infrastructure by presenting a general methodology, a conceptual framework, and a case study of the process that was conducted in Belize.



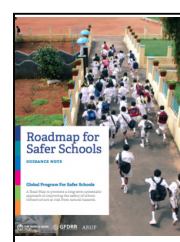
### Solutions Brief: Road Geohazard Risk Mgmt: Supporting Countries to Build Disaster Resilient Roads (2017)

Japan's experience in road geohazard risk management offers key lessons for the developing countries. This publication draws out best practice's from Japan's experience in addressing the challenges in an integrated manner that ensures institutional coordination, and applying structural and non-structural measures.



### Safer Schools Solutions Brief: Making Schools Resilient at Scale: The Case of Japan (2017)

The experience of Japan in bringing its schools to earthquake-resistant standard offers key lessons for developing countries across policy development, program design, financing modalities, and program implementation.



### Roadmap for Safer Schools (2016)

This Guidance Note is a Road Map to promote a long-term systematic approach to improving the safety of school infrastructure at risk from natural hazards.



### Making Schools Resilient at Scale: the Case of Japan (2016)

Since 2003, when Japan's Program for Earthquake-Resistant School Buildings accelerated, the share of earthquake-resistant public elementary and junior high schools has increased, from under half of schools in 2002 to over 95 percent in April 2015. Japan is sharing knowledge from this program with developing countries through its relationship with GFDRR.

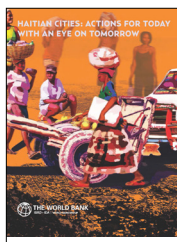


### Safer Schools Program Profile (2016)

The Global Program for Safer Schools (GPSS) aims to make school facilities and the communities they serve more resilient to natural hazards, and minimize the resulting negative educational outcomes.

# Resilient Cities

## Reports & Publications



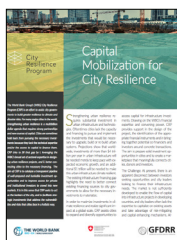
### Haitian Cities: Actions for Today with an Eye on Tomorrow (2018)

To better understand the factors that constrain the sustainable and inclusive development of Haitian cities, this Urbanization Review organizes the challenges along three dimensions of urban development namely planning, connecting, and financing.



### City Resilience Program Progress and Achievements (2018)

The Progress and Achievements brief provides updates on program milestones since June 2017. 30 active city engagements are under way, and 11 cities have been selected for targeted market testing and capital planning exercises to identify and structure priority investments with private sector participation.



### City Resilience Program Capital Mobilization Toolkit (2018)

The City Resilience Program provides for a structured, 3-phased engagement process with every participating city to analyze the city's potential for private sector financing and prepare a concrete capital investment plan.



### City Resilience Program: Technical Excellency for City Resilience (2018)

In order to consolidate and streamline technical support across sectors, CRP convenes a number of technical working groups that engage across the wide range of sectors that comprise urban resilience.



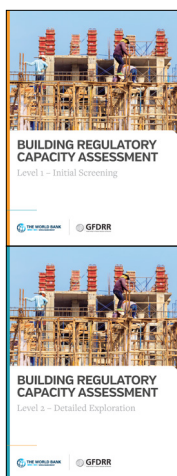
### City Resilience Program Profile (2017)

The development objective of the City Resilience Program is to catalyze a shift from a primarily siloed, single-stream city-level operations approach to longer term, more comprehensive, multi-disciplinary packages of technical and financial services, building the pipeline for "Bankable" projects at the city level that, in turn, build resilience. The Program will build on the extensive wealth of experience from active and past technical assistance engagements and lending, in order to support project teams in delivering greater value to cities.



### City Resilience Program Brochure (2017)

The City Resilience Program (CRP) aims to consolidate the World Bank Group's city-level engagements across sectors by providing a platform for resilience-building investments with clients in areas of infrastructure, governance and systems, and finance.

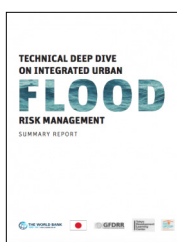


### Building Regulatory Capacity Assessment Level One: Initial Screening (2017)

### Building Regulatory Capacity Assessment Level Two: Detailed Exploration (2017)

The Building Regulatory Capacity Assessment offers cities, as well as project managers working with development agencies, a new resource to assess building and land use regulatory systems, and facilitate the collection of critical information about the building regulatory framework in any given city or country. The assessment identifies critical gaps, and provides the necessary information to develop a baseline for formulating technical assistance to clients, as well as drawing findings that can be used to determine areas for improvement and investment.

- Level 1 - Initial Screening is designed for government officials and project managers undertaking rapid preliminary assessments.
- Level 2 - Detailed Exploration provides a set of guidelines for team members and contractors who are tasked with gathering and analyzing data and information about the building regulatory capacity of the target country, region, or municipality.



### Technical Deep Dive on Integrated Urban Flood Risk Management (2017)

This is a summary report of the Technical Deep Dive on Integrated Urban Flood Risk Management that took place on April 18-21, 2016. The workshop was co-organized by the World Bank Disaster Risk Management Hub, Tokyo, and the World Bank Tokyo Development Learning Center, in partnership with the government of Japan, the Urban Floods Community of Practice, and GFDRR.



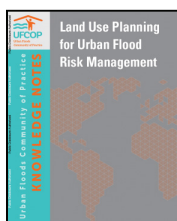
### Flood Risk Management at River Basin Scale: The Need to Adopt a Proactive Approach (2017)

This note focuses on flood risks (with a particular focus on river flood risks) with the objective of providing guidance to government officials, specialists, and other stakeholders across various disciplines involved in flood risk management.



### Solutions Brief: Transforming Disaster Experience into a Safer Built Environment: The Case of Japan (2017)

Japan's experience in increasing the safety of the built environment through an incremental, context-specific approach to building regulation offers key lessons for developing countries seeking to mitigate disaster risk.



### Land Use Planning for Urban Flood Risk Management (2017)

This publication outlines the key land use principles that guide land use planning for flood risk management, presents an overview of land use solutions for managing flood risk, and identifies the challenges to developing and implementing flood risk-sensitive land use plans.



### The Role of Green Infrastructure Solutions in Urban Flood Risk Management (2016)

With adverse impacts of floods growing, interest in a more integrated approach to urban flood risk management is growing as well. Green infrastructure (GI) solutions have emerged as a key component of this integrated approach.



### Resilient Cities Program Profile (2016)

The Resilient Cities Program aims to help cities adapt to a greater variety of changing conditions and withstand shocks as they grow increasingly vulnerable to natural hazards.



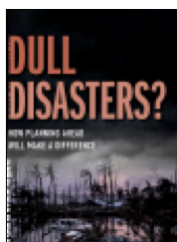
### Building Regulation for Resilience Program Profile (2016)

The Building Regulation for Resilience program, an integral part of the World Bank's broader Resilient Cities agenda, seeks to develop a new stream of activities to increase regulatory capacity and in turn promote a healthier, safer, and less risky built environment in low- and middle-income countries.



### Building Regulation for Resilience Report (2016)

This publication focuses on how the building regulation process can be enhanced in order to save lives and reduce destruction from disaster and chronic risks.



### Dull Disasters: How Planning Ahead Will Make A Difference (2016)

This book lays out the key problems that can cause extreme natural events to turn into natural disasters; takes the reader through a range of solutions that have been implemented around the world to address these problems; provides an overview of what works and what does not based on the evidence; and presents a framework that ties all of this together.



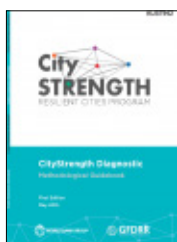
### Addis Ababa, Ethiopia - Enhancing Urban Resilience (2016)

In February 2015, Addis Ababa invited a team of specialists from GFDRR and the World Bank Group to implement the CityStrength Diagnostic in close collaboration with local officials, technical staff, and stakeholders. The objective of this publication is to share the findings of the diagnostic and the priority actions and investments agreed with local leaders.



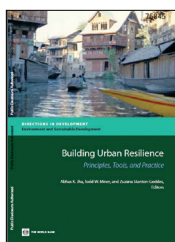
### Can Tho, Vietnam - Enhancing Urban Resilience (2016)

In June 2014, a team of specialists from the GFDRR and the World Bank Group worked with stakeholders in Can Tho to identify the priority actions and investments that will enhance the city's resilience to these current and future challenges.



### CityStrength Diagnostic Methodological Guidebook (2016)

The CityStrength Diagnostic was developed to help World Bank staff apply this new holistic approach to urban resilience to operations. It was designed to help facilitate a dialogue among stakeholders about risks, resilience, and the performance of urban systems.



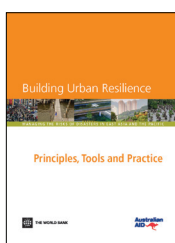
### Building Urban Resilience: Principles, Tools, and Practice (2013)

Cities face heavy losses of life and property from disaster unless governments take proactive measures. Building Urban Resilience is a practical guide for city planners and other practitioners on how to avoid the mistakes of the past when including disaster resilience in urban development.



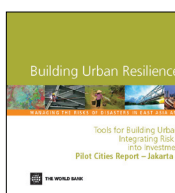
### Flood Risk Management and Urban Resilience Workshop (2012)

Held on May 2-3, 2012 at the Shangri-La Hotel, Jakarta, Indonesia, brought together over 50 policy makers from national and local levels from seven East Asian countries, as well as experts, donors and partner organizations. The workshop was held to increase technical knowledge, share good practice from around the region, and foster a community of committed leaders dealing with flood risks.



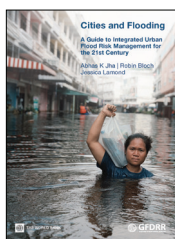
### Building Urban Resilience: Managing the Risks of Disasters in East Asia and the Pacific (2012)

This handbook is a resource for enhancing disaster resilience in urban areas. It summarizes the guiding principles, tools and practice in key economic sectors that can facilitate the implementation of resilience concepts into decisions over infrastructure investments and general urban management.



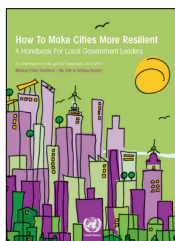
### Building Urban Resilience: Tools for Building Urban Resilience: Integrating Risk Information into Investment Decisions Pilot Cities Report – Jakarta and Can Tho (2012)

This report explores practical approaches to building urban resilience. It focuses on tools and methodologies that can facilitate the use of risk information in public infrastructure investment and urban management decisions as integral elements of reducing disaster and climate risks.



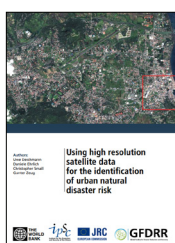
### Cities and Flooding: A Guide to Integrated Urban Flood Risk Management for the 21<sup>st</sup> Century (2012)

Provides forward-looking operational assistance to policy makers and technical specialists in the rapidly expanding cities and towns of the developing world on how best to manage the risk of floods. It takes a strategic approach, in which appropriate risk management measures are assessed, selected and integrated in a process that both informs and involves the full range of stakeholders.



### How to Make Cities More Resilient: A Handbook for Local Government Leaders (2012)

Applying the guiding principles of the “Making Cities Resilient” Campaign and the information in this Handbook will help cities and local governments to share learning, access information, develop indicators and performance, measures and track progress.



### Using High Resolution Satellite Data for Identification of Urban Natural Risk (2011)

The value of detailed risk information has been recognized in high income countries, where earthquake or flood risk maps are routinely prepared for populated areas. Urban Risk assessments have also been conducted in some megacities in low and middle income countries that face frequent hazard events.

# Hydromet Services

## Reports & Publications



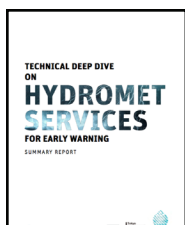
### **Afghanistan: Establishing Critical Risk Information (2018)**

To better understand natural hazard and disaster risk, the World Bank and the Global Facility for Disaster Reduction and Recovery (GFDRR) are supporting the development of a comprehensive multi-peril hazard and risk assessment in Afghanistan, as well as a first-order analysis of the costs and benefits of resilient reconstruction and risk reduction strategies.



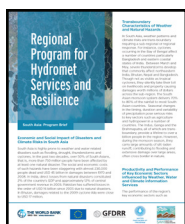
### **Report on the Global Weather Enterprise Seminar (2018)**

This report provides a summary of the outcome of discussions that took place at the Global Weather Enterprise (GWE) Seminar. The GWE Seminar was organised by the World Bank Group in collaboration with the World Meteorological Organisation (WMO), and was held in Washington DC on 28 November 2017.



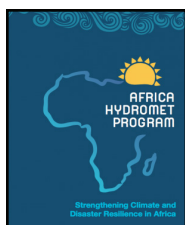
### **Technical Deep Dive on Hydromet Services for Early Warning (2017)**

This is a summary of the Technical Deep Dive (TDD) on Hydromet Services for Early Warning, held on September 12–15, 2016, in Tokyo. The event, which brought together more than 40 officials from 11 developing countries, allowed developing country clients to learn from Japan's approach to hydrological and meteorological (hydromet) hazards.



### **Regional Program for Hydromet Services and Resilience – South Asia: Program Brief (2017)**

South Asia is highly prone to weather and water related disasters. While strengthening hydro-meteorological services and associated institutions at the country level is an essential first step, regional collaboration is crucial. The main objective of this program is to strengthen institutions, facilitate knowledge exchange and enhance cooperation with respect to hydro- meteorological risks and hydromet services between South Asian countries.



### **Africa Hydromet Program Brochure (2017)**

The Africa Hydromet Program is an international partnership that aims to address the development challenge of repeated disasters and inadequate forecasting, and build climate and disaster resilience in Africa. The program envisages a total investment of approximately \$600 million for the modernization of 15 countries' hydrological and meteorological services and systems, and for the strengthening of early warning and response systems that fortify African cities and build resilience against climate change and impending disasters.



### **Solutions Brief Hydromet Services: Modernizing Weather, Climate, and Hydrological Hazards (2017)**

The Regional Framework Program to Improve Hydrometeorological Services in Sub-Saharan Africa aims to improve hydromet services on the national, sub-regional, and continental levels in order to increase the accuracy of weather forecasts that can save lives and livelihoods.



### Implementing Multi-Hazard Impact-based Forecast and Warning Services (2017)

A report on a Workshop organized by China Meteorological Administration – Shanghai Meteorological Service and the Global Facility for Disaster Reduction and Recovery.



### Modernization of Meteorological Services in Japan and Lessons for Developing Countries (2016)

In Japan, the damage caused by natural disasters and the impacts on socio-economic activities have been significantly reduced in accordance with the development of infrastructure and enhancement of society's coping and adaptive capacities to reduce vulnerability to natural hazards. The lessons learned in Japan in the modernization of meteorological services and the experiences in international programs and projects can be utilized as comprehensive strategic guidance for developing countries.



### Modernization of Japan's Hydromet Services: A Report on Lessons Learned for Disaster Risk Management (2016)

This summary report aims to provide a knowledge base for policy and decision makers that will allow governments and sponsor organizations to understand the fundamental operations of weather, climate, and hydrological services (together constituting "hydromet" services) and consequently target effective funding, in particular to developing countries.



### Modernization of Hydrological Services in Japan and Lessons for Developing Countries (2016)

Attempts to promote more advanced integrated management of river basins have provided the foundation of social and economic development in Japan today. Based on its long experience and River Law, Japan employs a unique river management system, in which river management authorities have centralized control over rivers in the country and provide hydrological services.



### Africa Hydromet Program Profile (2016)

The Regional Framework Program to Improve Hydrometeorological Services in Sub-Saharan Africa aims to improve hydromet services on the national, sub-regional, and continental levels in order to increase the accuracy of weather forecasts that can save lives and livelihoods.



### European Union-South Asia Capacity Building for Disaster Risk Management Program Profile (2016)

The European Union-South Asia Capacity Building for Disaster Risk Management Program, launched in 2015, is a five-year program that helps build the resilience of South Asia to weather and climate-related disasters by strengthening DRM and hydro-meteorological (hydromet) service capacity.



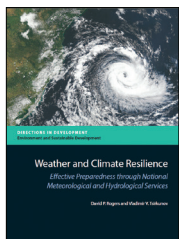
### Meeting Summary: Development Partners Roundtable (2016)

On 13-14 April 2016, the World Meteorological Organization and the World Bank's Global Facility for Disaster Reduction and Recovery co-hosted a roundtable for development partners interested in strengthening hydrometeorological services to better support sustainable development worldwide.



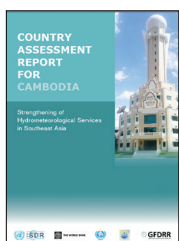
### Review of InterMET Asia 2016 (2016)

InterMET Asia 2016 was the third annual event in the series. The primary focus of the event is on those applications and areas which are likely to become more important users of meteorological technology and value added information as a result of the growing frequency of extreme weather events and climate change.



### Weather and Climate Resilience: Effective Preparedness through National Meteorological and Hydrological Services (2013)

Faced with the growing impacts of weather and climate disasters on development, the global community needs to quickly transform national weather agencies in developing countries into robust professional ones that can alert and protect people in time to avert catastrophe. This report explains how.



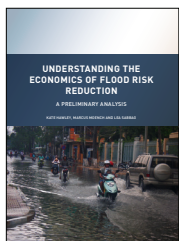
### Country Assessment Reports: Strengthening of Hydrometeorological Services in Southeast Asia (2013)

GFDRR's Country Assessment Reports for Cambodia, Indonesia, Lao PDR, the Philippines, and Vietnam investigate the capacity of these countries' national hydrological and meteorological services. The reports recommend improvements via regional cooperation to reduce the impact of natural disaster and climate change.



### The Role of Hydrometeorological Services in Disaster Risk Management (2012)

Natural hazards cannot be avoided, but timely, accurate prediction of hydro-climate extremes helps societies to prepare for and mitigate disasters and to reduce losses in infrastructure and productive activities. This publication is the proceeding from March 2012 workshop on this matter.



### Understanding the Economics of Flood Risk Reduction: A Preliminary Analysis (2012)

The purpose of this desk review is to explore literature on the costs and benefits of the flood risk reduction strategies being implemented by cities, local agencies, and national authorities.

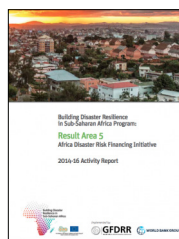
# Financial Protection

## Reports & Publications



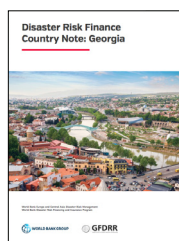
### Disaster Risk Finance Analytics (2017)

The Disaster Risk Finance (DRF) Analytics program, part of the Disaster Risk Finance and Insurance Program (DRFIP), aims to strengthen the financial management of disaster risk by providing quantitative financial & economic information and tools for decision-making.



### Building Disaster Resilience in Sub-Saharan Africa Program: Result Area 5 – Africa Disaster Risk Financing Initiative (2017)

This is the activity report 2014-2016 of the Africa Disaster Risk Financing (ADRF) Initiative, one of five components of the ACP-EU Program Building Disaster Resilience in Sub-Saharan Africa. Available in French.



### Disaster Risk Finance Country Note: Georgia (2017)

This Disaster Risk Financing Country Note is the first activity of the World Bank's support to the Government of Georgia on financial protection against natural disasters. It takes stock of existing mechanisms and instruments used to finance disaster response in Georgia and lays the foundation for the development of a comprehensive disaster risk financing strategy.



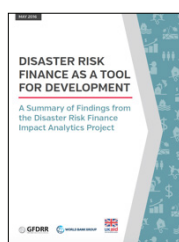
### Disaster Risk Finance Country Note: Serbia (2016)

Following the catastrophic floods in 2014, the government of Serbia began an ambitious transformation of its disaster management system from one of response to one of prevention and mitigation. This DRF Country Note is the first activity to take stock of existing mechanisms and instruments to finance disaster response and lay the foundation for the development of a comprehensive disaster risk financing strategy.



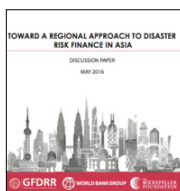
### Sovereign Disaster Risk Financing in Middle Income Countries (2016)

Switzerland's State Secretariat for Economic Affairs (SECO) and the World Bank's Disaster Risk Financing and Insurance Program (DRFIP) launched a partnership to support middle-income countries (MICs) to strengthen their financial resilience against natural disasters. This Program Overview recognizes the promising outcomes in that the Program has seen in four years.



### Disaster Risk Finance as a Tool for Development: A Summary of Findings from the Disaster Risk Finance Impact Analytics Project (2016)

The Disaster Risk Finance Impact Analytics Project has made significant contributions to the understanding of how to monitor and evaluate existing or potential investments in disaster risk finance from a development perspective, and to the evidence base for where such investments have development impact. This note summarizes the findings of this project, presenting the key messages of a book, a technical report, and 14 research papers.



### **Towards a Regional Approach to Disaster Risk Finance in Asia (2016)**

Asia is at high risk of catastrophic disaster and climate shocks that cause damage and erode welfare and economic gains. Financial protection strategies have been recognized by countries and their development partners as important tools to protect countries from these effects and to thereby support them in reducing poverty and increasing shared prosperity.



### **Overviews – Disaster Risk Financing & Insurance Program (2016)**

These two four-page brochures provide an overview of the Disaster Risk Financing & Insurance Program.



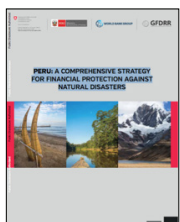
### **Disaster Risk Financing Country Profile – Philippines (2016)**

This profile outlines key statistics on disaster risk and disaster risk finance in the Philippines.



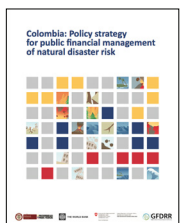
### **Disaster Risk Financing Country Note – Philippines (2016)**

It is estimated that on average the Philippines is hit by 20 typhoons each year, and earthquakes are common as well. The financial impact of these disasters hurts efforts to reduce poverty and promote sustainable economic growth in the country.



### **Peru: A comprehensive strategy for financial protection against natural disasters (2016)**

To strengthen the management of contingent fiscal risks that might result from natural disasters and to preserve the macroeconomic stability and sustainability of fiscal policy during such events, the MEF has defined six priority strategic lines of action for evaluating, reducing, and managing disaster-related fiscal risk.



### **Colombia: Policy strategy for public financial management of natural disaster risk (2016)**

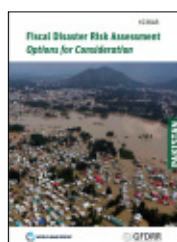
This document presents the priority policy objectives that have been established to assess, reduce, and manage fiscal risk due to natural disasters. It also describes the Ministry of Finance and Public Credit's (MHCP) efforts to progress its policy objectives in the long term.

**Available in Spanish**



### **Fiscal Disaster Risk Assessment and Risk Financing Options (2016)**

The objective of the report is to raise awareness of the fiscal impacts that natural disasters have on the budget of the Government of Sri Lanka.



### Fiscal Disaster Risk Assessment: Options for Consideration – Pakistan (2016)

This report aims to raise awareness of the financial impacts that disasters have on the budget of the Government of Pakistan (GoP) and to form the basis for a continued dialogue between the GoP and the World Bank on the potential development of a strategy for financing disaster losses.



### Disaster Risk Financing and Insurance Country Snapshot – Panama (2016)

This two-page overview summarizes some of the development challenges in Panama and how disaster risk financing can help to solve them.



### Disaster Risk Financing and Insurance Country Snapshot – Mexico (2016)

This two-page overview summarizes some of the development challenges in Mexico and how disaster risk financing can help to solve them.



### Development Solutions for Disaster Risk Finance (2016)

This brief draws details the growing financial impact of disasters caused by natural hazards.



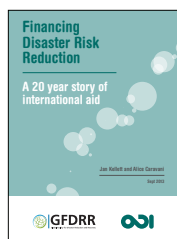
### Unlocking the Triple Dividends of Resilience - Why Investing in DRM Pays off (2015)

The risk of a disaster can cause economic losses even before they occur. This report showcases that investing in disaster resilience can yield a triple dividend by unlocking development potential due to reduced “background risk”, enjoying the co-benefits of investments to reduce risk even before a disaster does not happen for many years, and avoiding losses when disaster does strike.



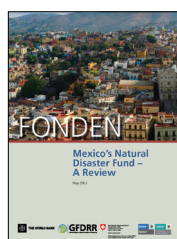
### Financial Protection Against Natural Disasters (2014)

This report takes stock of the global progress on financial protection against natural disasters over the last decade and bring together the latest thinking on disaster risk financing and insurance. It is designed to inform the drafting of the Global Assessment Report on Disaster Risk Reduction 2015 as well as deliberations for the successor to the Hyogo Framework for Action.



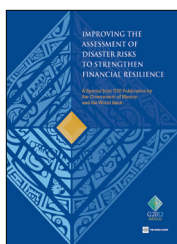
### Financing Disaster Risk Reduction: International Aid over 20 Years (2013)

The international financing of disaster risk reduction is coming under increasing scrutiny. This report examines the international community's record and priorities to date, and asks questions about the equity and adequacy of past efforts. It also points to the future of more rational, targeted investments.



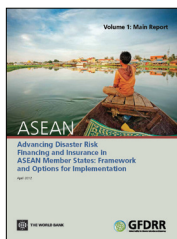
### FONDEN: Mexico's Natural Disaster Fund – A Review (2012)

Prepared jointly by the GFDRR Disaster Risk Financing and Insurance Team, the World Bank's Latin America Disaster Risk Management Unit, and the government of Mexico, this publication shares the experience of Mexico's Fund for Disaster Relief and Reconstruction (FONDEN) to date.



### Improving the Assessment of Disaster Risks to Strengthen Financial Resilience: A Special Joint G20 Publication by the Government of Mexico and the World Bank (2012)

Responding to a G20 mandate, this publication brings together the experiences of G20 countries in protecting their populations and assets against natural hazards. It includes contributions by 15 G20 members and invited countries (Argentina, Australia, Brazil, Chile, China, Colombia, France, Germany, Italy, Japan, Republic of Korea, Mexico, Turkey, United Kingdom, and the United States).



### Advancing Disaster Risk Financing and Insurance in ASEAN Member States: Framework and Options for Implementation (2012)

This report is a first collaborative effort to present a comprehensive body of knowledge on the state of disaster risk financing and insurance in ASEAN Member States and share examples of best practice and lessons from international experience.



### Disaster Risk Management and Multilateral Development Banks (2012)

The Multilateral Development Banks (MDBs) are uniquely positioned to further advance the global disaster risk management agenda. In addition to integrating risk consideration in their own operations, MDBs have the opportunity to use their convening power to build strategic partnerships between governments, donor agencies, civil society, and the private sector. The range and reach of their services and programs provide incentives to proactively prevent and prepare for natural disasters.



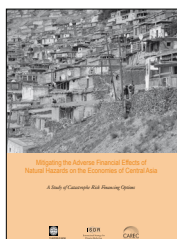
### The Commonwealth Finance Ministers Report 2012-2013: Building Financial Resilience against Natural Disasters and Climate Change (2012)

The Commonwealth Finance Ministers Report 2012-2013 has published an article written by GFDRR staff. The article discusses the challenges created by natural disasters and climate change to fiscal account management and outline steps that governments should take to overcome them.



### Indonesia: Advancing a National Disaster Risk Financing Strategy – Options for Consideration (2011)

This study presents options for a national disaster risk financing strategy in Indonesia, drawing heavily on international experience. It benefits from the international experience of the World Bank, which has assisted several countries in the design and implementation of sovereign catastrophe risk financing strategies.



### Mitigating the Adverse Financial Effects of Natural Hazards on the Economies of Central Asia (2009)

A study of catastrophe risk financing options.

# Community Resilience

## Reports & Publications



### Five Actions for Disability-Inclusive Disaster Risk Management (2018)

A recent survey of the literature and experience identified five broad actions that development institutions and governments, as well as their partners and stakeholders, can take to improve disability-inclusive disaster risk management.



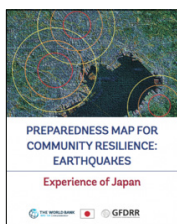
### Disability Inclusion in Disaster Risk Management (2017)

The world's one billion persons with disabilities disproportionately impacted by the immediate and long-term effects of natural hazards. Achieving disability-inclusive DRM can empower persons with disabilities to take their rightful place as agents of change, and as active contributors to the development and effective implementation of DRM policies, plans and standards. This paper provides information to assist World Bank and GFDRR staff in effecting disability-inclusive DRM. It is based upon desk reviews of existing practice, as well as consultations with experts in the field of disability-inclusive DRM.



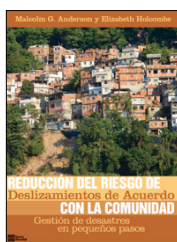
### Promoting Disaster Resilient Cultural Heritage (2017)

Cultural heritage is vulnerable to the adverse impacts of natural disasters, and climate change is adding to the urgency of addressing this challenge. Countries around the world are employing a variety of measures to safeguard cultural heritage against disaster risks, drawing on relevant conventions, policy frameworks, and guidance.



### Preparedness Map for Community Resilience: Earthquakes – Experience from Japan (2016)

This manual focuses on Japanese Seismic Preparedness Maps, one of the tools used in Japan to communicate earthquake risks for better preparedness at the community level. Produced by local governments, these maps aim to help communities prepare for future potential seismic events with information on hazard and risk levels, estimated damages, and evacuation routes and sites.



### Community-Based Landslide Risk Reduction: Managing Disasters in Small Steps (2016)

This book has two main aims: 1) To demonstrate to international development agencies, governments, policy makers, project managers, practitioners, and community residents that landslide hazard can often be reduced in vulnerable urban communities in the developing world, and 2) To provide practical guidance for those in charge of delivering MoSSaiC on the ground.



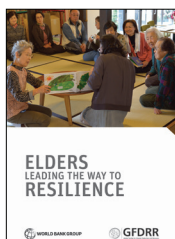
### Disasters, Conflict, and Fragility: A Joint Agenda (2016)

At the Fall 2015 meeting of the Consultative Group of the Global Facility for Disaster Reduction and Recovery (GFDRR) (Berlin, 28-29 October, 2015), the GFDRR Secretariat was asked to prepare a discussion paper on the nexus between natural disasters, conflict and fragility in order to guide GFDRR activities in the future. This version of the paper is jointly sponsored by the GFDRR and the Government of Germany.



### Another Nargis Strikes Every Day - Post-Nargis Social Impacts Monitoring Five Years On (2015)

Three rounds of Post-Nargis Social Impacts Monitoring (SIM) accompanied the post-disaster recovery period from 2008-10. By focusing on a limited set of villages, SIM provided in-depth information on how village life was changing post-Nargis and insights into how aid responses could best help Delta communities.



### Elders Leading the Way to Resilience (2015)

This report presents the experience of community members in Ofunato, Japan, where community elders were empowered to help the community recover. It assesses the experience of the Ibasho approach on post-disaster recovery and strengthening social capital.



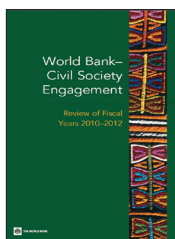
### Building Social Resilience: Protecting and Empowering Those Most at Risk (2015)

This documents focus on the need to address the underlying causes of vulnerability to reduce the impacts of disasters on poor communities. The paper highlights practical ways of funneling disaster and climate risk financing directly to those most in need and approaches to empowering poor communities to drive their own risk management efforts based on their development goals.



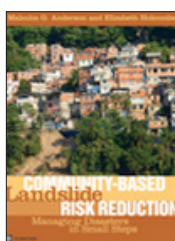
### Community-Led Partnership for Resilience (2015)

This report documents a number of case studies where grassroots women's organization are working in partnership with their local or national governments to effectively manage disaster and climate risk in poor communities. The report aims to demonstrate the value of facilitating community-led partnerships for strengthening disaster and climate resilience.



### World Bank Civil Society Engagement Review FY2010-2012 (2013)

The world witnessed a new level of civil society activism in recent years, from the Arab Spring to the "Occupy" movement in Western countries. Civil society is also engaging more with the World Bank Group, seeking to influence policies and to work together.



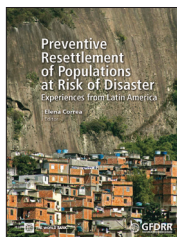
### Community-Based Landslide Risk Reduction: Managing Disasters in Small Steps (2013)

This book shows how landslide hazards can often be reduced in vulnerable urban areas in the developing world, and provides practical guidance for those in charge of doing so.



### International Disaster Risk Reduction Day 2012: Gender Inclusion for Social Resilience – A Key Factor in Disaster Reduction, Relief and Recovery (2013)

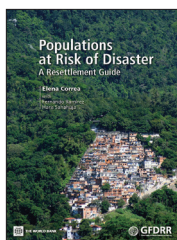
This report offers a brief review of the concept of social resilience, especially in relation to natural disasters and with specific attention to women and girls as victims of disasters and active participants in disaster prevention and response.



### Preventive Resettlement of Populations at Risk of Disaster: Experiences from Latin America (2011)

Rapid and unplanned urbanization has worsened already existing vulnerabilities to natural disasters in Latin America and the Caribbean. As a preventive measure, some countries in the region have resettled people and communities who are at risk. This publication provides case studies from Argentina, Brazil, Colombia, and Guatemala.

[Available in Spanish](#)



### Populations at Risk of Disaster: A Resettlement Guide (2011)

This guide is for governments, institutions and professionals, and civil society organizations in charge of preparing and implementing preventative resettlement and risk reduction programs for communities that are highly vulnerable to disaster.

[Available in Spanish](#)

# Resilience to Climate Change

## Reports & Publications



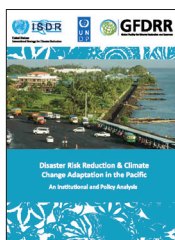
### [Resilience to Climate Change \(2016\)](#)

This report offers an overview of the support provided by GFDRR.



### [Building Resilience Integrating Climate and Disaster Risk into Development \(2013\)](#)

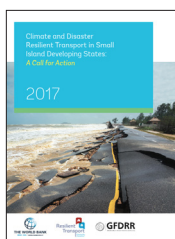
This report presents the World Bank's experience in climate and disaster resilient development, and contends that such development is essential to eliminating extreme poverty and achieving shared prosperity by 2030.



### [Disaster Risk Reduction and Climate Change Adaptation in the Pacific \(2012\)](#)

This study provides an analysis of the current level of integration of DRR and CCA in the region, with an emphasis on the policy and institutional environment. The report outlines some of the barriers to integration and makes recommendations on how they can be addressed. The analysis presented includes seven Pacific island countries (Cook Islands, Federated States of Micronesia, Fiji, Palau, Samoa, Tonga and Vanuatu), however, a more detailed analysis was undertaken of only four of those countries (the Cook Islands, Fiji, Palau and Vanuatu).

## SMALL ISLAND STATES RESILIENCE INITIATIVE



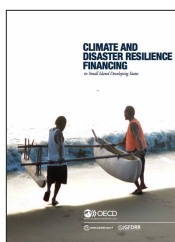
### [Climate and Disaster Resilient Transport in Small Island Developing States : A Call for Action \(2017\)](#)

The transport sector plays a central role in the vulnerability of small island developing states (SIDS), and resilient transport policies can significantly reduce future losses in assets and well-being. This report proposes solutions to integrate climate and disaster risk considerations in transport infrastructure lifecycle management and, in this way, enhance the resilience of transport systems. It proposes a path forward for replicating best practices and deploying resilient transport infrastructure in SIDS.



### [Our Home, Our People \(2017\)](#)

Our Home, Our People is a storytelling project produced by the Fijian Government, in partnership with the World Bank, Global Facility for Disaster Reduction and Recovery (GFDRR), and the ACP-EU Natural Disaster Risk Reduction Program. It explores climate change vulnerability and resilience in Fiji through the stories of four people. Their memories, hopes, fears and resilience reveal to audiences how rising sea levels and extreme weather impact Fijian people today, and what support is required in the future.



### Climate and Disaster Resilience Financing in Small Island Developing States (2016)

This joint World Bank/GFDRR/OECD report is the first attempt at quantifying the flow and patterns of concessional finance in support of climate and disaster resilience in SIDS. The report, coordinated in GFDRR by the SISRI team, aims to inform policy and decision makers, in both SIDS recipient governments as well as among funding providers, and promote a more effective provision and use of financing for resilience funds.



### SISRI Program Profile (2016)

Through the GFDRR-supported Small Island State Resilience Initiative, the World Bank and partners will work with the SISRI countries to deliver coherent and predictable funding to reduce climate and disaster risks to their people, economies and ecosystems.



### SISRI Knowledge Notes: Managing Population Retreat from At-Risk Areas (2016)

Relocating populations away from at-risk areas is a challenging process, but increasingly necessary in Small Island States where communities face where communities face imminent hazards to life and property due to factors such as sea-level rise, coastal erosion and flood risks. A participatory process of population retreat can save lives and enhance the livelihoods of community lives. São Tomé and Príncipe and Samoa offer valuable lessons on how to manage such a process.



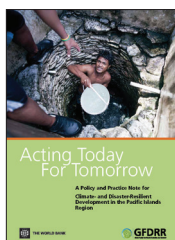
### SISRI Knowledge Notes: Building Resilience through Social Protection (2016)

Small Island States can work towards adaptive and responsive Social Protection systems at varying levels of maturity and sophistication. By aligning Social Protection provision with resilience objectives, countries could more effectively help vulnerable households adapt to climate change, prepare for disasters, and restore livelihoods quickly should a disaster strike.



### PCRAFI Program: Phase II (2016)

This note focuses on efforts to enhancing the financial resilience of Pacific Island Countries against natural disaster and climate risk.

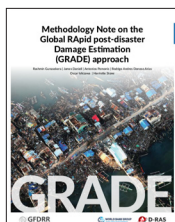


### Acting Today for Tomorrow: A Policy and Practice Note for Climate and Disaster Resilient Development in the Pacific Islands Region (2012)

Pacific island countries continue to be among the most vulnerable in the world: they combine high exposure to frequent and damaging natural hazards with low capacity to manage the resulting risks. Their vulnerability is exacerbated by poorly planned socioeconomic development, which has increased exposure and disaster losses, and by climate change.

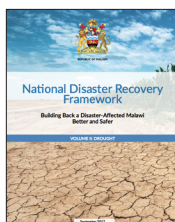
# Resilient Recovery

## Reports & Publications



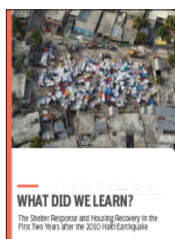
### [Methodology Note: The Global RAPid post-disaster Damage Estimation \(GRADE\) approach \(2018\)](#)

This technical note describes the utility and outputs of the Global RAPid-post-disaster Damage Estimation (GRADE) approach for governments and other key stakeholders who are involved in post-disaster damage assessment, relief, and recovery phases.



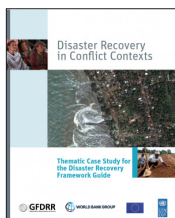
### [National Disaster Recovery Framework: Malawi – Volume II: Drought \(2017\)](#)

Malawi has in the past consecutive two years experienced disasters that caused severe devastation in all sectors. This NDRF is a living document for guiding recovery and reconstruction. Recovery efforts defined within the NDRF are guided by a central vision and goal. Following the 2015 floods, an initial vision and goal were determined; these have been updated in response to the 2015/16 drought.



### [What Did We Learn? The Shelter Response and Housing Recovery in the First Two Years after the 2010 Haiti Earthquake \(2016\)](#)

The World Bank, GFDRR, and their partners joined forces beginning in 2013 to analyze what was learned from the 2010 Haiti earthquake shelter response and housing recovery experience. This report – based on research and reflections among people and organizations involved in the international community's urban shelter and housing assistance efforts following the 2010 Haiti earthquake – is the outcome of that process.



### [Disaster Recovery in Conflict Contexts: Thematic Case Study for the Disaster Recovery Framework Guide \(2016\)](#)

This document focuses on how recovery frameworks must be informed within a disaster-conflict nexus. At a structural level, a recovery framework for disasters in a conflict context resembles other disaster recovery frameworks. However, that should not overshadow the critical need for conflict sensitivity through a nuanced consideration of the local political context, the two-way relationship between intervention/action and conflict, and how both will inform the recovery effort.



### [Disaster Recovery Framework Program Profile \(2016\)](#)

The Disaster Recovery Framework program gathers best-practices from a variety of stakeholders to ensure that affected countries recover efficiently and build back better after a disaster.



### [Disaster Recovery Framework: Tropical Cyclone Winston \(2016\)](#)

Tropical Cyclone (TC) Winston, an extremely destructive Category 5 cyclone, struck Fiji on 20th February 2016. This Disaster Recovery Framework (DRF) sets out a Vision and Guiding Principles for medium-term recovery over the next two years (from mid-2016 to mid-2018).



### Crisis Assessment Series: Syria (2016)

The Syrian crisis has devastated the country and set it back decades in terms of development. The objective of this assessment was to estimate the effects of the crisis on the population, infrastructure, and service delivery, and understand the preliminary recovery needs.



### Crisis Assessment Series: Gaza Strip (2016)

The Palestinian Authority (PA), with the support of key donors, requested the Gaza Detailed Needs Assessment (DNA). The DNA aimed to articulate the GERRP and develop a medium- to long-term recovery plan by formulating and prioritizing programming interventions across sectors, and guiding institutional and implementation arrangements.



### Crisis Assessment Series: Nigeria (2016)

The Recovery and Peace Building Assessment (RPBA) informed a collective vision and strategy on peace building and recovery, and provided a framework for coordinated and coherent support to assist conflict affected people in the North-East. The assessment covered the six states of Borno, Yobe, Adamawa, Gombe, Taraba, and Bauchi, and provided an overarching framework for stability, peace building, and recovery.



### Crisis Assessment Series: Ukraine (2016)

In view of the continuing conflict, the Eastern Ukraine Recovery and Peacebuilding Assessment (RPA) was launched in October 2014 as a two-stage process. The first stage was a rapid assessment completed in March 2015 that assessed government-controlled areas. It provided an analytical and programmatic baseline for recovery efforts and identified urgent interventions. It also supplied the basis for a subsequent, more detailed phase of the assessment.



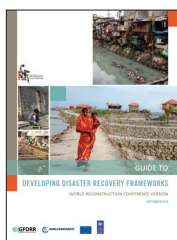
### Nepal Earthquake 2015: Post-Disaster Recovery Framework 2016-2020 (2016)

The Post-Disaster Recovery Framework (PDRF) lays out strategic recovery objectives and summarises in an integrated manner the policy decisions, institutional arrangements, financing and financial management strategies, as well as implementation and monitoring systems that are being put in place to plan and manage recovery and reconstruction. It also sets out sector priorities that will contribute to the achievement of the strategic recovery objectives.



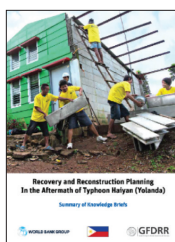
### Resilient Recovery: An Imperative for Sustainable Development (2015)

Resilient Recovery: An Imperative for Sustainable Development documents the challenges and progress around the world in integrating disaster risk reduction measures into post-disaster recovery and rehabilitation, and introduces the new way forward for achieving sustainable development gains through resilient recovery process.



### Disaster Recovery Framework (DRF) Guide (2015)

The DRF Guide provides guidance and recommendations to countries on how to better plan, design and implement effective post-disaster recovery and reconstruction programs.



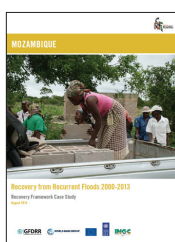
### Recovery and Reconstruction Planning in the Aftermath of Typhoon Haiyan (2014)

This report highlights GFDRR's technical assistance to the government of the Philippines in the aftermath of Typhoon Haiyan (Yolanda).



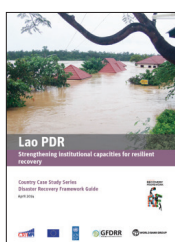
### Haiti Case Study Recovery Framework Case Study (2014)

This case study highlights the coordinated efforts of the Haitian government and the international community to implement a plan for post-earthquake recovery and reconstruction, to be incorporated into the country's long-term development goals.



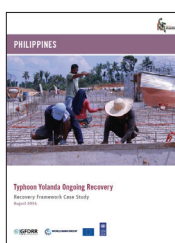
### Mozambique Recovery Framework Case Study (2014)

This report details Mozambique's efforts to transition from emergency response to incorporate disaster recovery considerations into the country's development plans following devastating flooding.



### Lao PDR Recovery Framework Case Study (2014)

This case study examines Lao's Progress in working towards developing a National Disaster Recovery Framework following a series of tropical storms, including Typhoons Ketsana and Haima/Nok Ten.



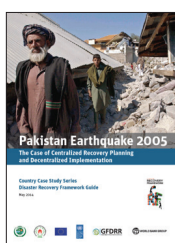
### Philippines Recovery Framework Case Study (2014)

This case study documents the processes, standards and criteria employed for recovery planning following Typhoon Yolanda. It highlights good practices from the ongoing post-Yolanda recovery process that the Philippine government can institutionalize and share with the international community.



### Senegal Recovery Framework Case Study (2014)

A post-disaster needs assessment conducted by GFDRR helped inform a strategic action plan for recovery and reconstruction in Senegal following severe flooding. This case study examines the good practice and challenges in implementing a Disaster Recovery Framework in Senegal.



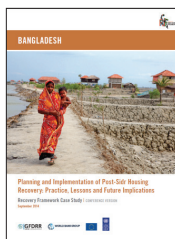
### Pakistan Recovery Framework Case Study (2014)

This case study details efforts by the Pakistani government to develop a public subsidy program for housing reconstruction after the devastating 2005 earthquake that destroyed 600,000 homes.



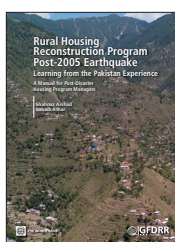
### Yemen Recovery Framework Case Study (2014)

This case study details efforts, in coordination with the international community, to design and implement an effective post-disaster recovery program following the 2008 tropical storm.



### Bangladesh Recovery Framework Case Study (2014)

This case study illustrates strides in the post Cyclone Sidr recovery process in 2007, focusing on the housing sector, and details challenges remaining to institutionalize a disaster recovery framework.



### Rural Housing Reconstruction Program Post-2005 Earthquake Learning from the Pakistan Experience - A Manual for Post-Disaster Housing Program Managers (2013)

A manual for professionals tasked with responding to post-disaster housing reconstruction needs. It uses Pakistan's 2005 post-earthquake Rural Housing Reconstruction Program as a case study, drawing on experiences and lessons learned to provide recommendations for future post-disaster housing reconstruction programs.



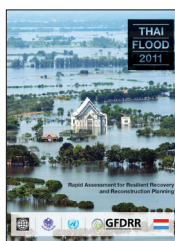
### Handbook for Estimating the Socioeconomic and Environmental Effects of Disasters (2012)

A publication by the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC) and the World Bank, this handbook covers the conceptual and methodological aspects for measuring the damage caused by a disaster in the capital gains and output streams of goods and services.



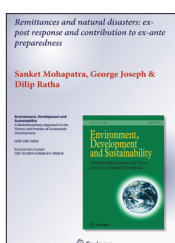
### Supporting Sustainable Post-Earthquake Recovery in China (2012)

This study evaluates and outlines the government response in terms of reconstruction following the May 12, 2008 magnitude 8.0 Wenchuan earthquake in China's western Sichuan province that killed over 69,000 people and destroyed most of the buildings and infrastructure in affected areas.



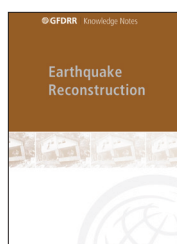
### Thai Floods: Rapid Assessment for Resilient Recovery and Reconstruction Planning (2012)

In response to the prolonged and widespread flooding throughout Thailand in 2011, the Royal Thai Government, in conjunction with the World Bank and other development partners, undertook this rapid assessment of the impact of the floods in 26 of the 66 affected provinces.



### World Bank / GFDRR - Remittances and Natural Disasters: Ex-post Response and Contribution to Ex-ante Preparedness (2012)

Evidence suggests a positive role of remittances in preparing households against natural disasters and in coping with the loss afterward. Analysis of cross-country macroeconomic data shows that remittances increase in the aftermath of natural disasters in countries that have a larger number of migrants abroad.



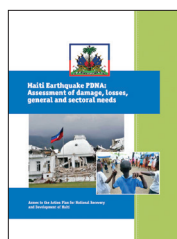
### Earthquake Reconstruction Knowledge Note (2011)

The “Earthquake Reconstruction Knowledge Note” is the first piece among a series of knowledge notes GFDRR produces for different types of disasters to assist policymakers and practitioners potentially facing post-disaster situations.



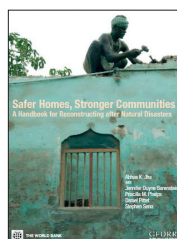
### World Reconstruction Conference (WRC) Proceedings 2011 (2011)

The World Bank, GFDRR, and UNISDR organized the 2011 World Reconstruction Conference as a part of the Third Global Platform for Disaster Risk Reduction. It was the first global conference to focus on natural disaster recovery and reconstruction. Conference proceedings fed into the World Reconstruction Report.



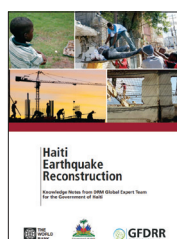
### Haiti Earthquake Post-Disaster Needs Assessment (2010)

A post-earthquake disaster needs assessment for Haiti that assesses damages, losses, general needs across sectors including health, education, and other development areas.



### Safer Homes, Stronger Communities—The Handbook for Reconstructing after Natural Disasters (2010)

A guide to how to reconstruct large-scale housing and communities.



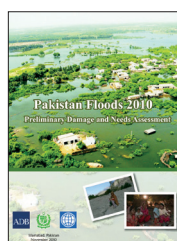
### Haiti Earthquake Reconstruction (2010)

This publication provides a series of “knowledge notes” put together by GFDRR’s disaster risk management global expert team on behalf of the government of Haiti.



### 2010 Haiti Earthquake: Post-Disaster Building Damage Assessment Using Satellite and Aerial Imagery Interpretation, Field Verification and Modeling Techniques (2010)

This report provides a detailed account of how technology, inspiration, and collaboration were used to quickly assess the amount of damage caused by the January 12, 2010 Haiti earthquake that killed close to a quarter of million people and devastated its capital city.



### Pakistan Floods-2010: Preliminary Damage and Needs Assessment (2010)

At the request of the government of Pakistan, the World Bank and the Asian Development Bank launched a damage and needs assessment exercise in August of 2010 to assess and quantify flood damage, losses and resulting needs in order to address medium- to long-term post-flood reconstruction.

# Post-Disaster Needs Assessment (PDNA) Guidelines



**PDNA Guidelines**  
• Volume A



**PDNA Guidelines Volume B**

- Agriculture, Livestock, Fisheries and Forestry
- Commerce
- Community Infrastructure
- Culture
- Disaster Risk Reduction
- Education
- Employment, Livelihood and Social Protection
- Environment
- Gender
- Governance
- Health
- Housing
- Macroeconomic Impact of Disasters
- Manufacturing
- Telecommunications
- Tourism
- Transport
- Water & Sanitation

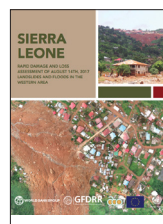
## PDNAs and Damage & Loss Assessments



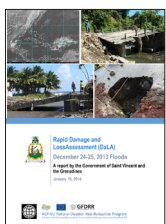
Dominica: PDNA following Hurricane Maria, September 2017



Sri Lanka Rapid PDNA: Floods and Landslides, May 2017



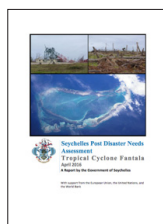
Sierra Leone Rapid Damage and Loss Assessment: August 2017 Landslides and Floods



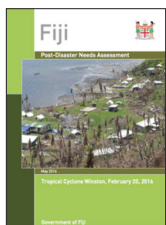
Saint Vincent and the Grenadines Rapid DaLA: Floods 2013



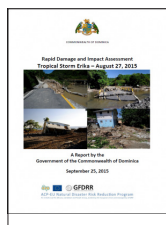
Vietnam 2016 Rapid Flood Damage and Needs Assessment



Seychelles Post Disaster Needs Assessment: Tropical Cyclone Fantala



Fiji Post-Disaster Needs Assessment (Tropical Cyclone Winston) with funding from ACP-EU



Dominica 2015: Rapid Damage and Impact Assessment



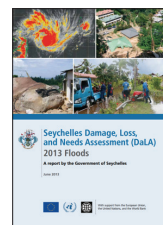
Fogo Volcanic Eruption 2014-2015



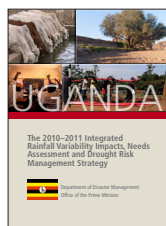
Vanuatu Tropical Cyclone Pam



Tbilisi 2015 Floods



Seychelles 2013 Floods



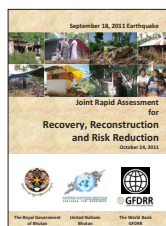
Uganda 2010-11 Drought



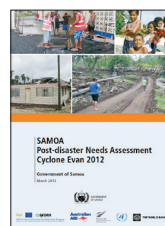
Fiji Tropical Cyclone Evan 2012



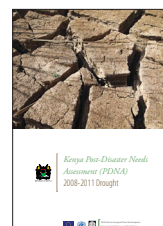
Malawi 2012 Flood



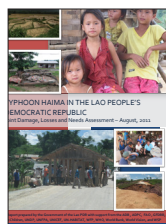
Bhutan 2011 Earthquake



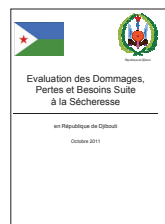
Samoa PDNA - Cyclone Evan 2012



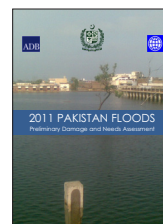
Kenya 2011 Drought



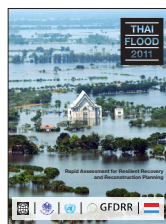
Lao PDR 2011 Typhoon



Djibouti 2011 Drought



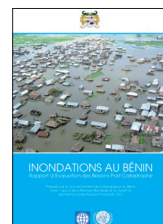
Pakistan 2011 Flood



Thailand 2011 Flood



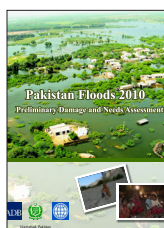
Lesotho 2011 Flood



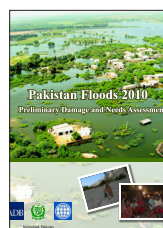
Benin 2010 Flood



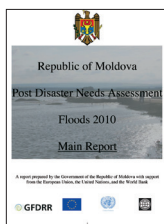
Guatemala 2010 Tropical Storm



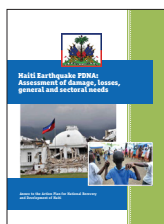
Pakistan 2010 Flood



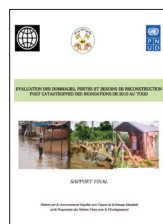
Pakistan 2010 Flood



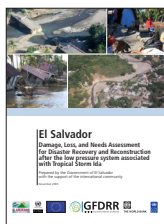
Moldova 2010 Flood



Haiti 2010 Earthquake



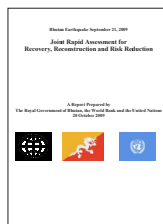
Togo 2010 Flood



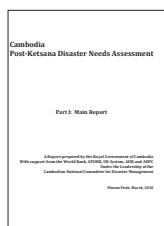
El Salvador 2010 Tropical Storm



Burkina Faso 2009 Flood



Bhutan 2009 Earthquake



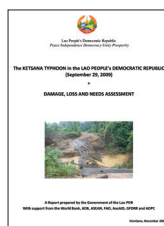
Cambodia 2009 Cyclone



Central African Republic 2009 Flood



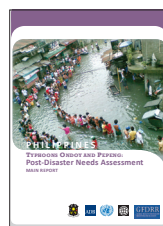
Indonesia 2009 Earthquake



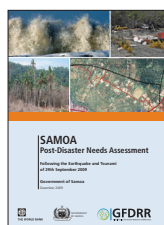
Lao PDR 2009 Cyclone



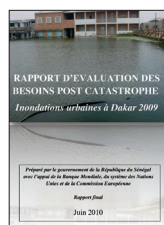
Namibia 2009 Flood



Philippines 2009 Cyclone



Samoa 2009 Tsunami



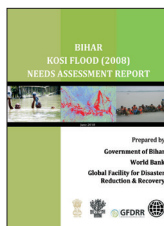
Senegal 2009 Flood



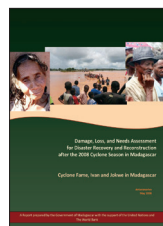
Bolivia 2008 Flood



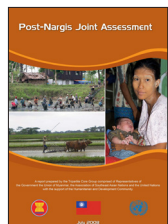
Haiti 2008 Hurricane



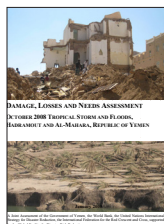
India 2008 Flood



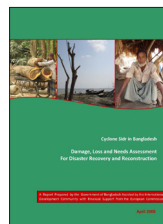
Madagascar 2008 Cyclone



Myanmar 2008 Cyclone



Yemen 2008 Tropical Storm



Bangladesh 2007 Cyclone

## Damage, Loss, and Needs Assessments: Knowledge

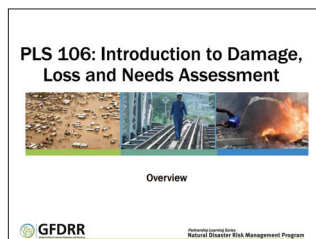
The damage, loss and needs assessment (DaLA) methodology, developed by the Economic Commission for Latin America and the Caribbean (ECLAC) in the 1970s, has evolved as a globally recognized and applied tool to quantify the impacts of disasters, and to determine the necessary financial resources to achieve full reconstruction and recovery. The following DaLA-related knowledge products have been created for practitioner training.



### DaLA Guidance Notes (3 Volumes)

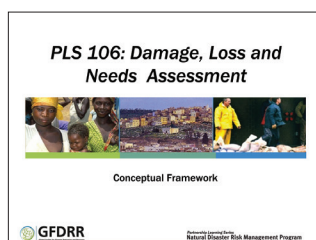
Available in Arabic, Chinese, English, French, Russian, Spanish, the DaLA Guidance Notes were prepared by GFDRR to help practitioners and staff from national and international agencies to assess the impact of disasters and to develop the recovery and reconstruction framework.

[https://www.gfdr.org/sites/gfdr/files/publication/TTL%20Vol1\\_WEB.pdf](https://www.gfdr.org/sites/gfdr/files/publication/TTL%20Vol1_WEB.pdf)



### PLS 106 Training Materials

This introductory DaLA course introduces the damage, loss and needs assessment methodology. <https://www.gfdr.org/sites/gfdr/files/Final.pdf>

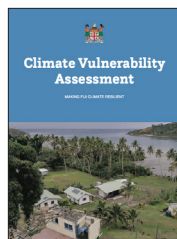


### PLS 308 Training Materials

This advanced DaLA course includes concepts, methodology, processes and sector specific characteristics of the methodology. <https://www.gfdr.org/sites/gfdr/files/308%20training%20material-8-9-11.pdf>

# Other Knowledge & Research

## Flagship Reports



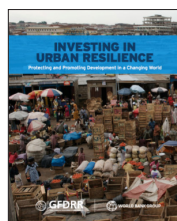
### [Fiji Climate Vulnerability Assessment \(2017\)](#)

The Fijian Government led the preparation of Fiji's first-ever Climate Vulnerability Assessment ('CVA'), with support from the World Bank and GFDRR, to put facts and numbers behind the climate experiences of the Fijian people. The CVA will inform Fiji's development planning and investment decisions for years to come, and provides a specific blueprint that quantifies the resources necessary to climate-proof Fiji, giving a full account of the threat that climate change poses to the country's national development.



### [Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters \(2016\)](#)

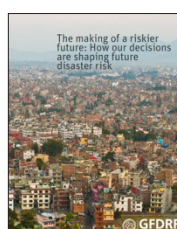
This GFDRR and World Bank report looks at the impact of extreme natural disasters and climate change on global poverty. The report, through new research, warns that the combined human and economic impacts of extreme weather on poverty are far more devastating than previously understood.



### [Investing in Urban Resilience: Protecting and Promoting Development in a Changing World \(2016\)](#)

This report by the World Bank and the Global Facility for Disaster Reduction and Recovery (GFDRR), highlights the need for investment in resilience, how cities can take action to build resilience, how the World Bank can help – and how, by investing together, we can protect hard-won development gains, and create a safer, more prosperous future.

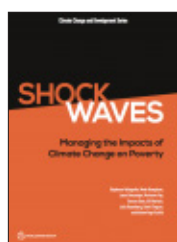
### [Investing in Urban Resilience: Overview Brochure \(2017\)](#)



### [The Making of a Riskier Future: How our decisions are shaping future disaster risk \(2016\)](#)

Most disaster risk assessment today is static, focusing only on understanding current risks. A paradigm shift is needed toward dynamic risk assessments. Accurate assessment and continuous reevaluation of risk are required to enable effective risk reduction and prevent drastic increases in future losses.

### [Making a Riskier Future: How Our Decisions Are Shaping Future Disaster Risk \(Interactive Report\) \(2016\)](#) [The Making of a Riskier Future: Executive Summary \(2016\)](#)



### [Shock Waves \(2015\)](#)

This report brings together two overarching objectives of ending poverty and addressing climate change, and explores how they can be more easily achieved if considered together.  
<https://www.gfdr.org/shock-waves>

### [Shock Waves - Policy Notes \(2016\)](#)

A series of three policy notes linked to the Shock Waves report.



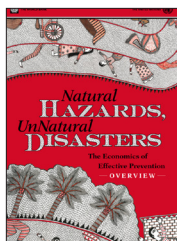
### **The Triple Dividend of Resilience (2015)**

This report provides evidence for three types of benefits – or dividends of resilience – that disaster risk management investments can yield.



### **The Sendai Report (2012)**

This report argues that the practice of disaster risk management (DRM) is a defining characteristic of resilient societies, and should therefore be integrated into all aspects of development.



### **Natural Hazards, UnNatural Disasters: The Economics of Effective Prevention (2011)**

A World Bank-United Nations joint publication that looks at disasters through an economic lens.

## Reports & Publications



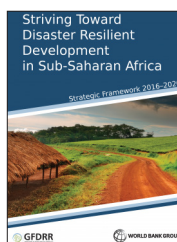
### **Toward Integrated Disaster Risk Management in Vietnam: Recommendations Based on the Drought and Saltwater Intrusion Crisis and the Case for Investing in Longer-Term Resilience (2017)**

This report takes a deeper look at the 2015–2016 drought and saltwater intrusion (SWI) crisis faced by Vietnam, identifies the gaps across key sectors, and recommends the principal short- and longer-term actions needed for integrated disaster risk management.



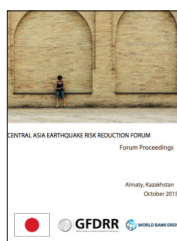
### **ISMEP Success Stories (2017)**

This book commemorates 10 years of implementation of the Istanbul Seismic Risk Mitigation and Emergency Preparedness Project (ISMEP), which was prepared by the World Bank and the Government of Turkey, with support from GFDRR, in the aftermath of the devastating 1999 Marmara earthquake.



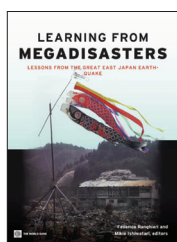
### **Striving Toward Disaster Resilient Development in Sub-Saharan Africa (2016)**

This strategic framework presents the programmatic approach for supporting Africa towards climate and disaster-resilient development in 2016–2020.



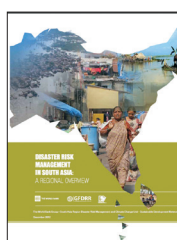
### **Central Asia Earthquake Risk Reduction Forum Proceedings (2016)**

In order to share regional and international experiences on seismic risk management and improve knowledge and understanding of seismic risks on both national and regional scales, the World Bank held a Central Asia: Seismic Risk Session on May 12, 2014 in Almaty, Kazakhstan. During this session, representatives from Kazakhstan, Kyrgyz Republic, Tajikistan and Uzbekistan presented on each of the country's statuses on seismic risk and ongoing reduction and mitigation initiatives, and discussed the needs and challenges that they face.



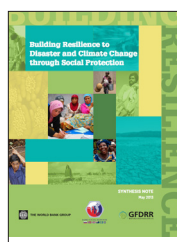
### **Learning from Megadisaster: Lessons from the Great East Japan Earthquake (2014)**

The successes of Japan's disaster risk management (DRM) system as well as the ways in which that system could be improved are reflected in the lessons drawn from the Great East Japan Earthquake (GEJE) and presented in the initial reports from the Learning from Megadisasters project.



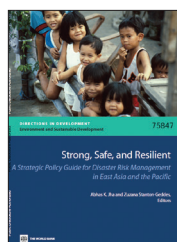
### **Disaster Risk Management in South Asia: A Regional Overview (2013)**

The number of disasters in South Asia has quadrupled over the past four decades, resulting in cumulative damages of over US\$25 billion in the past five years alone. Despite this increase, regional awareness and understanding of disaster risk by people and governments remains low.



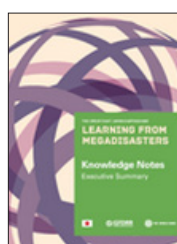
### Building Resilience to Disaster and Climate Change through Social Protection (2013)

This toolkit provides guidance on how to prepare social protection programs to respond to disasters and climate change. The toolkit offers guidance on both ex ante and ex post social protection measures to mitigate and reduce the impact of disasters and climate change and to accelerate recovery.



### Strong, Safe, and Resilient: A Strategic Policy Guide for Disaster Risk Management in East Asia and the Pacific (2013)

Strong, Safe, and Resilient provides a disaster risk management framework for the most disaster-stricken region in the world, including policy action and investments that take into account the communities most at risk from disaster as well as the needs of the poor and most vulnerable.



### Learning from Megadisasters Knowledge Notes (2012)

This project collected and analyzed information, data, and evaluations from the Great East Japan Earthquake of March 11, 2011, with the objective of sharing Japan's knowledge on disaster risk management (DRM) and post-disaster reconstruction with countries vulnerable to disasters.



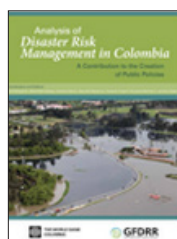
### World Bank East Asia and Pacific Economic Update 2012, Volume 2: Remaining Resilient (2012)

As the most disaster-stricken region in the world, disaster risk management is essential for supporting sustainable growth in East Asia and the Pacific. Policy makers need to develop practical tools for risk identification and communication, invest in disaster preparedness, and resilient development.



### Turn Down the Heat: Why a 4°C Warmer World Must Be Avoided (2012)

This report provides a snapshot of recent scientific literature and new analyses of likely impacts and risks that would be associated with a 4°C warming within this century. It is a rigorous attempt to outline a range of risks, focusing on developing countries and especially the poor.



### Analysis of Disaster Risk Management in Colombia: A Contribution to the Creation of Public Policies (2011)

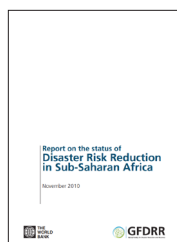
Colombia has been a pioneer in Latin America in developing a comprehensive vision in risk and disaster management, which has resulted in a relative decrease in casualties. However, damage to property, infrastructure, and livelihoods continues to increase.

[Available in Spanish](#)



### East Asia Pacific Disaster Risk Management (DRM) Knowledge Notes (2010-2011)

The Knowledge Note series was launched by the Governor of Bali, Indonesia, on May 18, 2009, as part of a joint forum on disaster risk reduction organized by the Association of Southeast Asian Nations, the United Nations, and the World Bank.



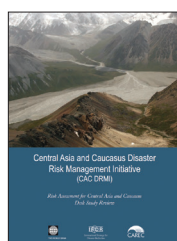
### Disaster Risk Reduction in Sub-Saharan Africa (2010)

Over the last four decades, Sub-Saharan Africa has experienced more than a thousand disasters. This report covers how Sub-Saharan Africa's disaster profile is closely linked to the vulnerability of its population and economies and their often-low capacity to cope with natural hazards.



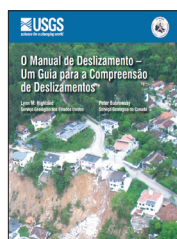
### It's Not Too Late: Preparing for Asia's Next Big Earthquake—with Emphasis on the Philippines, Indonesia and China (2010)

This report focuses on how to prepare the Asia region for the next major earthquake. It is only a few decades, at most, before a major earthquake occurs near a metropolitan area. The region is generally not prepared for such an event but much can be done before a disaster strikes.



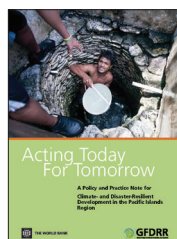
### Central Asia and Caucasus Disaster Risk Management Initiative (2009)

This desk review presents an initiative that aims at reducing Central Asia and the Caucasus' vulnerability to the risk of disasters, in line with the Hyogo Framework for Action 2005–15.



### Landslide Handbook—A Guide to Understanding Landslides (2008)

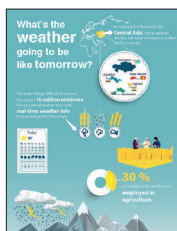
This handbook is intended to be a resource for people affected by landslides to acquire further knowledge, especially about the conditions that are unique to their neighborhoods and communities.



### Risk Analysis Manual (2011)

This manual provides an overview of GFDRR's online risk analysis course through a series of presentations, case studies, and additional readings.

## Infographics



### Central Asia Hydrometeorology Modernization Project (2018)

Extreme weather is rolling back development gains in Central Asia. Modernizing weather services can reduce climate & disaster risk. This infographic describes efforts to reduce climate & disaster risk in Central Asia.



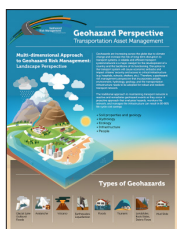
### Resilient Housing for Resilient Cities (2017)

This infographic examines some solution for cities and governments to ensure that housing is both resilient and affordable, and that home is a safe place for all their residents.



### Solving the Puzzle: Innovating to Reduce Risk (2017)

A recently launched report, Solving the Puzzle: Innovating to Reduce Risk, takes an in-depth look at gaps in key areas of disaster risk management, and provides decision-makers with a roadmap to help bridge them - including new collaborative efforts, targeted investments in data and modeling, and improved risk communication.



### Geohazard Perspective Transportation Asset Management (2017)

Geohazards are increasing across the globe due to climate change and increase the risk of long-term disruption to transport systems. A reliable and efficient transport system/network is a major catalyst for the development of a country and the backbone of its functioning.



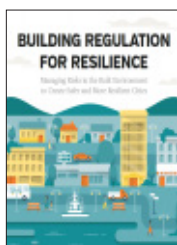
### Vulnerable to Shocks: Malawi (2016)

In 2013, Malawi's modest poverty gains were in jeopardy due to high variability of rainfall and other shocks; Malawi's poorest households, who depend on rain-fed agriculture, were the most vulnerable.



### Investing in Urban Resilience: Protecting and Promoting Development in a Changing World (2016)

By 2030, without significant investment to improve the resilience of cities around the world, climate change may push up to 77 million urban residents into poverty. Those are the findings of a new report by the World Bank and GFDRR released in advance of the United Nations Conference on Housing and Sustainable Urban Development (or Habitat III).



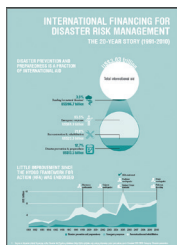
### Building Regulation for Resilience (2016)

Managing Risks in Built Environments to Create Safer and More Resilient Cities.



### Cyclone Pam (2016)

Cyclone Pam was the worst disaster to hit the Pacific region in recent memory, causing huge damage and loss in Vanuatu.



### International Financing for Disaster Risk Management - The 20-Year Story (2016)

Development partners are feverishly deliberating on setting disaster risk goals for the post-2015 development agenda. Irrespective of these discussions, natural disasters continue to devastate lives and livelihoods across the world and erode the development gains achieved over many decades of hard work.



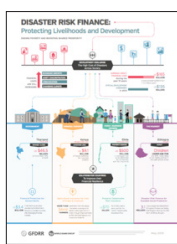
### Vulnerable to Shocks: Uganda (2016)

This infographic examines drivers of Uganda's poverty reduction, its vulnerabilities, and proposes recommendations for action. The content is adapted from the study "Welfare, Income Growth and Shocks in Uganda: Understanding Poverty Trends From 2005/6 to 2011/12", by Ruth Hill, Senior Economist In the Africa Region of the Poverty Practice of the World Bank, and Carolina Mejía-Mantilla, Economist in the East Asia Pacific Region of the Poverty Practice of the World Bank.



### The Making of a Riskier Future (2016)

Most disaster risk assessment today is static, focusing only on understanding current risks. A paradigm shift is needed toward dynamic risk assessments, which reveal the drivers of risk and the effectiveness of policies focused on reducing risk. This infographic examines how global disaster risk is changing extremely fast, due to combined dynamics of hazard, exposure, and vulnerability.



### Disaster Risk Finance: Protecting Livelihoods and Development (2016)

This infographic shows how disaster risk financing can contribute to ending poverty and boosting shared prosperity.



### Investing in Resilience (2015)

The Sendai Report argues that the practice of disaster risk management is a defining characteristic of resilient societies, and should therefore be integrated—or 'mainstreamed'—into all aspects of development.



### East Asia Pacific: Region at Risk (2013)

East Asia Pacific is the most disaster-stricken region in the world. Many megacities are densely populated, with slums growing fast in high-risk areas. Already, the region alone sustained 61 percent of global disaster loss in the past 20 years.

# Results

## Results in Resilience Series (2015-2018)



### Furthering Disaster Risk Finance in the Pacific

Following a successful pilot program, Pacific Island Countries established a sovereign catastrophe risk insurance company for the region, increasing resilience and access to short-term funds needed to respond to disasters.



### Integrated Disaster Risk Management in Morocco

In an effort to mitigate impacts from natural hazards, the government of Morocco has moved forward with an integrated approach to disaster risk management.



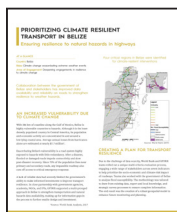
### Gender Inclusion in Post-Disaster Housing in India

The government of India and the government of the Indian state of Uttarakhand have integrated gender into their disaster response and recovery efforts through the Uttarakhand Disaster Recovery Project.



### Fisheries Livelihood Support in India

The governments of Tamil Nadu and Puducherry have adopted a comprehensive strategy to improve the sustainability and resilience of fisheries in their respective coastal regions.



### Prioritizing Climate Resilient Transport in Belize

Collaboration between the government of Belize and stakeholders has improved data availability and reliability on roads to strengthen resilience to weather hazards.



### Open Cities Kathmandu Project

In earthquake-prone Nepal, the government has implemented the Open Cities Kathmandu Project which builds seismic resilience by training civilians to map local areas.



### Mainstreaming Disaster Resilience in Vietnam

The government of Vietnam has implemented a comprehensive approach to disaster risk management which prioritizes engagement with local communities.



### Urban Wetlands Management in Colombo

In response to devastating floods, the government of Sri Lanka has prioritized urban wetlands management in the Sri Lankan capital Colombo as a key pillar of its climate and disaster resilience strategy.



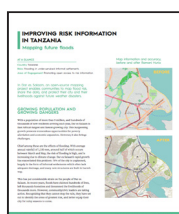
### Building Back Better in Bosnia and Herzegovina

In Bosnia and Herzegovina, close local and regional coordination allowed for quick recovery from devastating floods.



### Central Asia Hydrometeorology Modernization Project

The Central Asia Hydrometeorology Modernization Project is helping countries in the region adapt to disaster and climate risk by bolstering their weather forecasting and early warning efforts.



### Improving Risk Information in Tanzania

In Dar es Salaam, an open-source mapping project enables communities to map flood risk, share the data, and protect their city and their livelihoods against future weather disasters.



### Comprehensive Disaster Risk Management in Serbia

After catastrophic flooding, the Government of Serbia takes proactive steps to better predict and lessen the impact of future disasters.



### Reducing Multi-Hazard Risks Across Tajikistan

In Tajikistan, the Government is investing in improving infrastructure to connect communities, improve economic outcomes, and achieve a more resilient future for its citizens.



### Bangladesh Urban Resilience Project

In the megacities of Bangladesh, GFDRR and the World Bank work with local stakeholders to address the challenges of seismic and climate risk in a rapidly-urbanizing environment.



### Comprehensive Financial Protection in the Philippines

In the Philippines, the government has prioritized risk reduction and financial protection to protect lives and communities, and minimize physical damage and economic losses from seismic and weather disasters.

## Stories of Impact Series (2015-2017)



### Amplifying Serbia's Financial Resilience Against Natural Hazards

Building on its National DRFI strategy that was established in the wake of historic floods, Serbia will take advantage of the Cat-DDO – the first mechanism of its kind in the Europe and Central Asia Region – to better manage budget volatility associated with disasters.



### Fisheries Livelihood Support in India's Coastal Regions

In India's coastal regions of Tamil Nadu and Puducherry, over 200,000 families depend on fishing and related activities for their livelihoods. A GFDRR-supported project aims to improve the sustainability and resilience of fisheries in the coastal regions, benefiting 300 families' livelihoods, with 400 additional families projected to benefit from the project.



### Harnessing Geospatial Data through GeoNode

With missing or inadequate risk information hindering resilience in many developing countries, GFDRR developed GeoNode, a web-based, open source software that enables users to access, share, and visualize geospatial data. Today, GeoNode is a public good relied on by hundreds of organizations around the world.



### Understanding Risk: A Growing Global Community

In an effort to bridge gaps in risk information and create a self-sustaining culture of resilience, together with partners around the world, GFDRR formed the Understanding Risk (UR) community in 2010. Today, UR is an open and global community of more than 6,500 experts and practitioners in the field of disaster risk assessment, representing a diverse array of organizations in government, academia, civil society, and more from 135 countries. The UR community seek to better facilitate non-traditional partnerships, encourage innovation, and promote best practices.



### Gender Inclusion in Post-Disaster Housing Reconstruction in India

The GFDRR- and World Bank-supported Uttarakhand Disaster Recovery Project, launched in response to flash floods and landslides from unprecedented rainfall in June 2013, is designed to give women in Uttarakhand, India – many of whom single-handedly manage their homes, crops, and livestock – an equitable say in financing home reconstruction.



### Making Senegal's Cities More Flood-Resilient

Two GFDRR- and World Bank-supported projects have reduced vulnerability by building the disaster risk management of local communities – with equal participation of men and women in disaster planning as the key component. The project has resulted in more than 300 cyclone shelters so far, with 226 maintenance committees and 149 village-level emergency-response task forces that comprise both women and men.



### Building Capacity for Drought Resilience in Tanzania

In the two vulnerable districts of Same and Kishapo, a grant (awarded to UNICEF in the framework of the GFDRR-managed Africa Caribbean Pacific-European Union Natural Disaster Risk Reduction Program) enabled communities to learn to identify, address, and report on disaster risks and vulnerabilities.



### Prioritizing Climate Resilient Transport in Belize

GFDRR is working with the Government of Belize to boost the climate resilience of Belize's road network and transport sector. Engaging 35 agencies and a wide range of stakeholders, the innovative project gathered and analyzed data to ensure that road planning and maintenance is risk-informed and more efficient.



### Roads to Recovery in Myanmar

After heavy rains from July through September of 2015 resulted in intense flooding and landslides, the government of Myanmar, GFDRR, the World Bank, and more than 17 partner organizations conducted a PDNA. The assessment was crucial in mobilizing resources for recovery, including through the first-ever use of the World Bank's Immediate Response Mechanism.



### Building Back Better in Bosnia and Herzegovina

After heavy flooding in May 2014, which affected more than 25% of the nation's population, the Governments of Bosnia and Herzegovina launched a Recovery Needs Assessment (RNA), with support from GFDRR, the World Bank, the EU, and UNDP. The assessment helped inform a recovery plan that has thus far benefited more than 180,000 people – nearly half of whom are women – through rehabilitated infrastructure and flood protection.



### Building Climate and Disaster Resilience in Timor-Leste

With support from the GFDRR-managed Africa Caribbean Pacific-European Union Natural Disaster Risk Reduction Program (ACP-EU NDRR), Timor Leste established a program focused on generating and using quantified data to assess risk along the Dili-Ainaro and other linked road corridors.



### Communicating Flood Risk Along Guyana's Coast

After catastrophic flooding in January 2005, the government of Guyana launched the Conservancy Adaptation Project to address flood risks in the country's coastal areas, disseminating vital technical information and key knowledge on disaster risk measures.



### Integrated Disaster Risk Management and Resilience in Morocco

Since 2008, the Government of Morocco, GFDRR, the World Bank, and the Swiss Government have been working together to build a disaster risk management and resilience system for Morocco. The country has taken bold action to reduce the impact of disasters, including reforming its natural disaster response fund to make it a "Resilience Fund" focused on risk reduction, and approving a new disaster risk insurance law. natural hazards.



### Building a Stronger Emergency Management System in the Kyrgyz Republic

Funding from GFDRR is helping to enhance the emergency response preparedness of the country's civil protection system by setting up crisis management centers, improving emergency warning systems, and reducing response time.



### Making Senegal's Cities More Flood-Resilient

A GFDRR-supported PDNA helped pave the way for the government's Storm Water Management and Climate Change Adaptation Project (PROGEP), which aims to improve sewage and drainage infrastructure in urban areas.



### Mapping Local Communities to Inform Response and Recovery in Nepal

Information gathered as part of the Open Cities Kathmandu project proved crucial to informing response and recovery efforts when two high-magnitude earthquakes with an epicenter near Kathmandu struck Nepal in April and May 2015.



### Building the Foundation for Resilience in Serbia

Following a RNA supported by GFDRR, the government launched a National Disaster Risk Management Program to build resilience, reduce disaster risks, and mobilize recovery funding for priority sectors.



### Strengthening Haiti's Preparedness for Weather and Climate Hazards

Assistance from GFDRR's Code for Resilience initiative provided training to Haitian students to develop SMS-Lapli, a program to help the new Hydromet Unit at the Ministry of Agriculture collect, analyze, archive, and disseminate rainfall data.



### Building Back Better in Tonga after Cyclone Ian

After Tropical Cyclone Ian swept through the Pacific Island nation of Tonga in 2014, the government, and GFDRR, with funding from the ACP-EU Program, worked to rapidly assess the damages, and implement a recovery program which would strengthen the housing and transport infrastructure sectors against future natural hazards.



### Supporting reforms towards disaster resilience in the Philippines

Since 2009, GFDRR and the World Bank have supported the government of the Philippines in mainstreaming disaster resilience through technical assistance, which strengthens pre-disaster planning and risk reduction interventions. They have also worked to implement a comprehensive disaster risk financing strategy.



### Shaping Ukraine's Recovery

After the unrest escalated beginning in early 2014, the Government of Ukraine sought to better understand its impact and how to recover. At the government's request, GFDRR, in partnership with the World Bank, the EU and UN, helped assess the damage of Ukraine's conflict-affected areas.



### Urban Wetlands: A New Model for Urban Resilience in Colombo

In response to the May 2010 flood, the government of Sri Lanka sought technical and financial assistance from the Global Facility for Disaster Reduction and Recovery (GFDRR) and the World Bank Group to address the flood risk in the metropolitan capital with a population of more than two million.



### Reducing Risk and Supporting Recovery in Nepal

Following the initial April 25 earthquake, GFDRR helped enable the Government of Nepal to conduct a PDNA, in collaboration with the Asian Development Bank, EU, Government of Japan, UN, the World Bank, as well as other partners, and with the financial support of Luxembourg.



### Supporting Resilient Recovery in Vanuatu after Cyclone Pam

Following the destructive Tropical Cyclone Pam that swept across the Pacific nation in March 2015, the Global Facility for Disaster Reduction and Recovery (GFDRR) and the World Bank quickly mobilized to respond.



### Identifying Risk and Guiding Recovery Efforts in Malawi

In January 2015, Malawi experienced some of the most devastating flooding in its history. In the aftermath, the Government of Malawi conducted a PDNA, with support from the EU, UN, GFDRR, and the World Bank.



### Strengthening Urban Resilience in Bangladesh

Bangladesh's path-breaking Urban Resilience Project, the product of a collaborative effort between the government, the World Bank, and GFDRR, equips key government agencies with state-of-the-art emergency management facilities and improves construction permitting processes.



### Safeguarding Against Disasters in Ethiopia

The World Bank and GFDRR are supporting the development of clearer early warning indicators and support for contingency planning and financing in Ethiopia, as well as the new National Policy and Strategy on Disaster Risk Management.



### Building Resilient Communities across Indonesia

The Government of Indonesia, with support from GFDRR and the World Bank, has empowered vulnerable communities and strengthened urban resilience against a wide range of risks triggered by natural disasters and climate change.



### Building Stronger Classrooms to Weather Disasters in Mozambique

The World Bank and GFDRR provided financial and technical assistance to support Mozambique's efforts to develop school safety guidelines for classroom facilities across the country.



### Building Financial Resilience against Natural Hazards in Panama

The Government of Panama has worked with the World Bank and GFDRR since 2010 to develop and implement a strategy to effectively manage the financial impact of natural disasters.



### Building Disaster Resilience in the Philippines

In the wake of devastating Typhoons in 2009, GFDRR extended analytical support to the Government of the Philippines to formulate a disaster risk financing strategy, which has reduced the fiscal burden arising from the recurring costs of disasters.



### Addressing Climate Risks in Sri Lanka

Technical assistance from GFDRR and the World Bank informed recent steps to enhance Sri Lanka's disaster resilience, including a \$110 million investment towards reducing immediate and future physical risks as well as provisions for accessing \$102 million in the immediate aftermath of a natural disaster.



### Mainstreaming Disaster Resilience in Vietnam

A combination of GFDRR's technical assistance and World Bank lending is mainstreaming disaster resilience in Vietnam, with large scale impacts across a variety of sectors including transportation, urban and rural development, hydrological and meteorological monitoring services, and water resource management.



### Bringing Disaster Risk Management to Scale in the Eastern Caribbean

A \$150,000 grant from GFDRR enabled the World Bank, in partnership with other development organizations, to establish a comprehensive program targeting disaster risk management and resilience in the Eastern Caribbean



### Encouraging Women's Contribution to Resilient Cities

The World Bank and GFDRR organized a Women Entrepreneurship Resilient Cities competition in Djibouti, Beirut and Cairo to promote the creation of women-led risk management start-ups.



### Stakeholders Engage to Build Belize's Climate Resilience

With the increasing incidence of climate-related disasters, the Government of Belize is working to improve its resilience by transforming the country's approach to economic and social development with a national plan that cuts across all sectors of the economy.



### Protecting School Infrastructure Against Earthquake Risks in Peru

GFDRR is working to strengthen Peru's structural and functional conditions of school infrastructure and reduce seismic vulnerability.



### Assessing Post-Disaster Needs in Nigeria

After severe flooding in 2012, Nigeria asked GFDRR and other key partners to conduct a comprehensive Post-Disaster Needs Assessment (PDNA).



### Community-Based Disaster Risk Reduction in Niger

The World Bank and GFDRR, with support from the ACP-EU Program have financed an almost \$1 million disaster risk reduction project in Niger to build capacity of local communities for early warning and response.



### Disaster-Proofing the Transport Sector in Vietnam

The government of Vietnam, with support from GFDRR and the World Bank, has made important strides in building the resilience of the transport sector against risk from natural disasters and climate change.



### Strengthening Financial Resilience in the Pacific

In response to requests from 15 countries, the World Bank, GFDRR, and other partners formed the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) in 2007 to help mitigate disaster and climate change risk.



### Disaster Planning Pays Off in Odisha, India

Effective disaster risk management significantly reduced casualties from Cyclone Phailin, and GFDRR is supporting the strengthening and scaling up of these efforts through the National Cyclone Risk Mitigation Project (NCRMP).



### Rapidly Assessing Flood Damage in Uttarakhand, India

GFDRR supported the government to conduct a Joint Rapid Damage Needs Assessment (JRDNA) for the Uttarakhand region soon after the devastating 2013 monsoons, completing a thorough analysis of damage and providing the necessary foundation for recovery efforts to begin.



### Enhancing Seismic Preparedness in Istanbul

To protect the city from this risk, in 2005, the Governorship of Istanbul, with support from the World Bank and GFDRR, launched a comprehensive program to help the city prepare for and respond to earthquakes.



### Building Back Better in Tonga after Cyclone Ian

After Tropical Cyclone Ian swept through the Pacific Island nation of Tonga in 2014, the government, and GFDRR, with funding from the ACP-EU Program, worked to rapidly assess the damages, and implement a recovery program which would strengthen the housing and transport infrastructure sectors against future natural hazards.



### Weathering Future Storms in the Seychelles

When Tropical Cyclone Felleng battered the multi-island country of Seychelles with heavy rain in January 2013, the government, with support from the World Bank and the ACP-EU NDRR Program, an initiative managed by the GFDRR worked to assess the damages and ensure that recovery efforts mitigate the effects of future natural hazards.



### Resilient Recovery in Samoa After Cyclone Evan

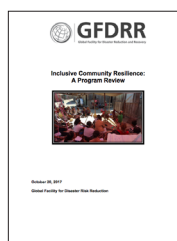
Following the powerful Tropical Cyclone Evan that swept across the island of Samoa in July 2012, GFDRR, with funding from the ACP-EU Program, worked to assess damages, launch a comprehensive disaster recovery and reconstruction plan to make the transport and agriculture sectors more resilient, and strengthen the country's financial capacity to manage future shocks from natural disasters.



### Managing Drought, Sustaining Growth in Djibouti

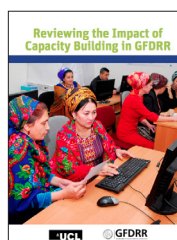
With funding and guidance from GFDRR, Djibouti established a vulnerability and risk assessment and communication platform comprised of hydrological early warning systems, flood and drought early warning systems, and seismic and floods vulnerability and risk assessment—the first of its kind in Africa.

## Evaluations & Progress Reports



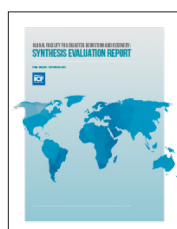
### **Inclusive Community Resilience: A Program Review (2017)**

The Inclusive Community Resilience program (the ICR program) was established in May 2015 to enhance community capacity for disaster and climate risk management by influencing country investment programs that put resources directly in the hands of poor households and communities (e.g., Community-Driven Development and Social Protection). This review assesses the relevance, effectiveness, and efficiency of the ICR program following internationally agreed OECD-DAC evaluation criteria.



### **Reviewing the Impact of Capacity Building in GFDRR (2017)**

GFDRR devotes up to 24 percent of its resources to capacity-building efforts. This study assesses the effectiveness of capacity building across the GFDRR portfolio. The report evaluated projects active in fiscal years 2014 and 2015 (FY14 and FY15), focusing on human capacity building – developing and sharing knowledge and skills, as well as consensus and network building.



### **GFDRR Synthesis Evaluation Report (2017)**

During January 20th and 21st of 2016, the city of Vienna hosted the first Understanding Risk Conference for a developed country, URAT. The conference brought together for the first time policy makers, risk modelers, insurance, risk communicators, academia, and practitioners (private and public sectors) from all the corners of Austria to meet, learn, and share best practices in disaster risk management and adaptation to climate change.



### **Country Evaluation Report 2015 (2016)**

This report presents the findings and recommendations of an evaluation of the Global Facility for Disaster Reduction and Recovery (GFDRR). The evaluation focuses on GFDRR activities between 2008 and 2014 in five countries in four regions: Bangladesh, the Eastern Caribbean (Saint Lucia and Dominica), Ethiopia, and Indonesia.



### **ICF Technical Evaluation Report (2016)**

This report presents the findings and recommendations of an evaluation of the Global Facility for Disaster Reduction and Recovery (GFDRR). The evaluation focuses on GFDRR activities between 2008 and 2014 in five countries in four regions: Bangladesh, the Eastern Caribbean (Saint Lucia and Dominica), Ethiopia, and Indonesia.



### **Country Updates: GFDRR Engagement in Focus Countries 2007-2012 (2012)**

Provides a snapshot of GFDRR programmatic engagement in 29 focus countries. Inputs to the country updates were provided by the country GFDRR Disaster Risk Management (DRM) Specialists, the World Bank's DRM Regional Coordinators, projects' Team Leaders, regional DRM teams, and Country Management Units.

## Videos & Multimedia



**Turkey Education Infrastructure for Resilience Project (2018)**

<https://www.youtube.com/watch?v=HF-9jbeXbkII>



**Central Asia Hyromet Modernization Project (2018)**

<https://www.youtube.com/watch?v=vtJFlzgNWXg>



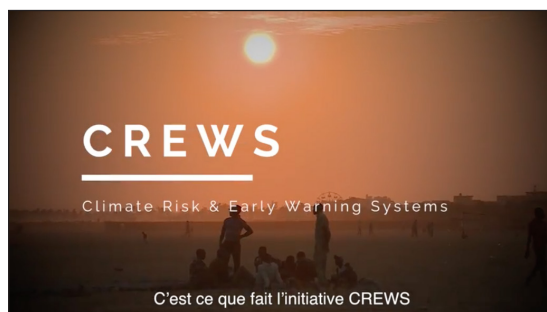
**ThinkHazard!: Is your project resilient to natural hazards?(2018)**

<https://www.youtube.com/watch?v=j9ei5PBLfL4>



**Building Safer Houses in Northern India (2017)**

<https://www.youtube.com/watch?v=5N-YYZLMaYI>



**Climate Risk and Early Warning Systems (CREWS) initiative (2017)**

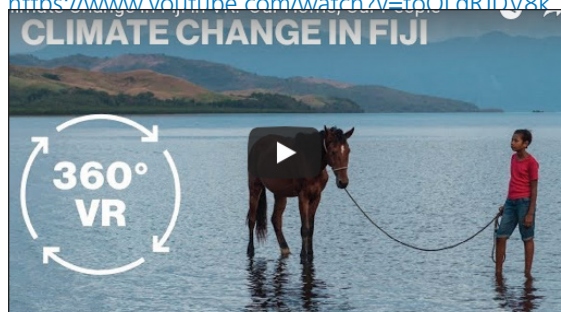
[https://www.youtube.com/watch?v=EFg\\_Ed69Mdl](https://www.youtube.com/watch?v=EFg_Ed69Mdl)



**'Our Home, Our People': Stories of Fijians (2017)**

This video series tells the story of four Fijians in a country severely impacted by climate change.

<https://www.youtube.com/watch?v=tpOLnRIDV8k>



**Climate Change in Fiji VR: 'Our Home, Our People' (2017)**

<https://www.youtube.com/watch?v=toOLqRJDV8k>



**Building Seismic Resilience in Megacities: Turkey and the Philippines Exchange Knowledge (2017)**

<https://www.youtube.com/watch?v=0OxyhuTB0cs&t=75s>



**Investing in Urban Resilience (2016)**

<https://www.youtube.com/watch?v=WIEGFr75PAA>



**Building Regulation for Resilience (2016)**

<https://www.youtube.com/watch?v=cFEJF5Dpvl>



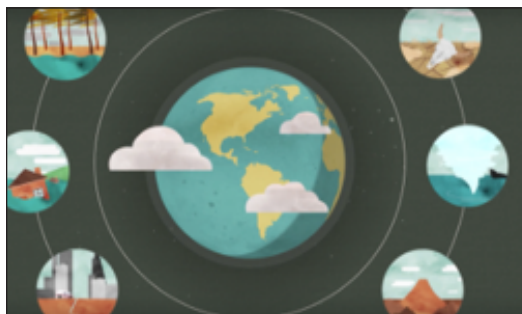
**Code for Resilience (2016)**

<https://www.youtube.com/watch?v=KYnkZE9r0UQ>



**Panamá: Ordenar el territorio para gestionar el riesgo (2016)**

<https://www.youtube.com/watch?v=cYBhZcuOahA>



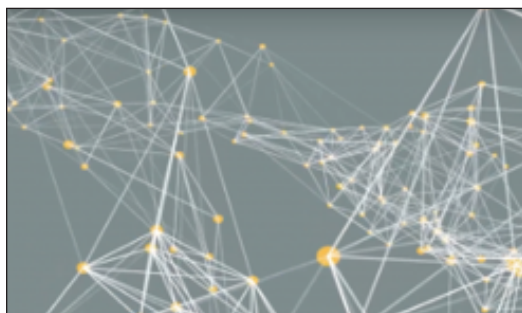
**Understanding Disaster Risk (2016)**

<https://www.youtube.com/watch?v=O-SWl3J1aQc>



**Supporting Multi-Purpose Cyclone Shelters (2016)**

<https://www.youtube.com/watch?v=lhHSG0f8Ty4>



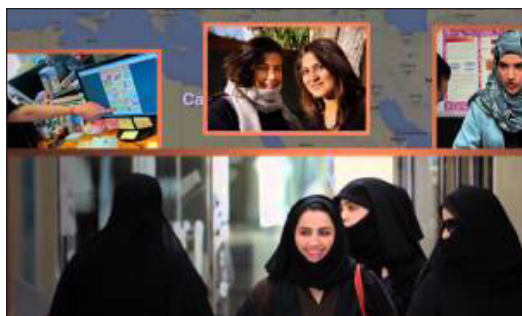
**Open Data for Resilience Initiative (OpenDRI) (2016)**

<https://www.youtube.com/watch?v=-lmINBEiils>



**Learning From Japan- How to Prepare for Natural Disasters (2015)**

<https://www.youtube.com/watch?v=bBaoLuu2FVo>



**Women Entrepreneurship Program (2015)**  
<https://www.youtube.com/watch?v=joeq-95AMg8>



**New Life in Safe Homes (2015)**  
<https://www.youtube.com/watch?v=7McZWAz11g>



**Managing the Impacts of Climate Change on Poverty (2015)**  
<https://www.youtube.com/watch?v=qgi1kemlm9g>



**CBDRM - Disaster Response (2015)**  
[https://www.youtube.com/watch?v=SFNpLGgY\\_DI](https://www.youtube.com/watch?v=SFNpLGgY_DI)



**CREWS - Climate Risk Early Warning Systems (2015)**  
<https://www.youtube.com/watch?v=ndiUTknBA94>



**Keeping Indonesia's Capital Safer from Floods (2015)**  
<https://www.youtube.com/watch?v=Z0qrU4anH8c>



**Disaster Risk Finance Across the Globe (2015)**  
<https://www.youtube.com/watch?v=zFresyXJj5g>



**Supporting Multi-Purpose Cyclone Shelters (2015)**  
<https://www.youtube.com/watch?v=IhHSG0f8Ty4>



**Resilient Recovery at GFDRR: The Way Forward for Sustainable Development (2015)**  
[https://www.youtube.com/watch?v=E\\_aGiw9f6R0](https://www.youtube.com/watch?v=E_aGiw9f6R0)



**ACP EU Natural Disaster Risk Reduction Program - English (2015)**  
<https://www.youtube.com/watch?v=-rcNq4U8eIQ>



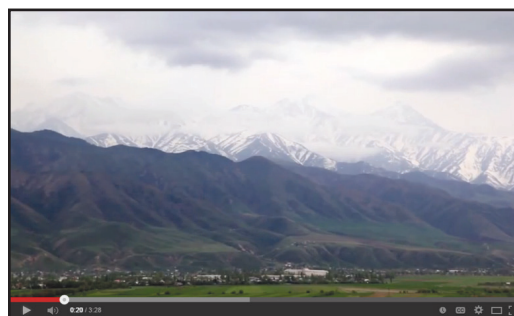
**ACP EU Natural Disaster Risk Reduction Program – French (2015)**  
<https://www.youtube.com/watch?v=Q326NX7PhIs>



**Philippines: Lessons on Disaster Recovery (2014)**  
<https://www.youtube.com/watch?v=o4OnAZScMnY>



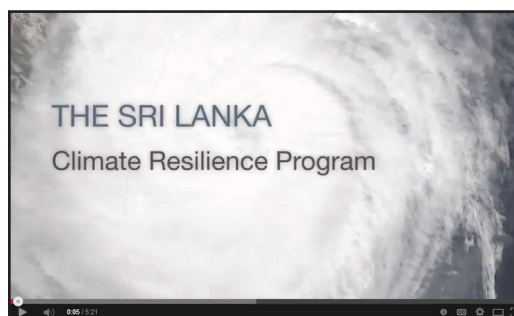
**Bolstering Resilience to Floods and Storms in Vietnam (2014)**  
[http://www.youtube.com/watch?v=poySupAFG\\_c&list=UUZWLxv2a7iWuz59JshmAdbg](http://www.youtube.com/watch?v=poySupAFG_c&list=UUZWLxv2a7iWuz59JshmAdbg)



**Disaster Risk Reduction in the Kyrgyz Republic (2014)**  
<http://www.youtube.com/watch?v=U95bDUXalRc&list=UUZWLxv2a7iWuz59JshmAdbg>



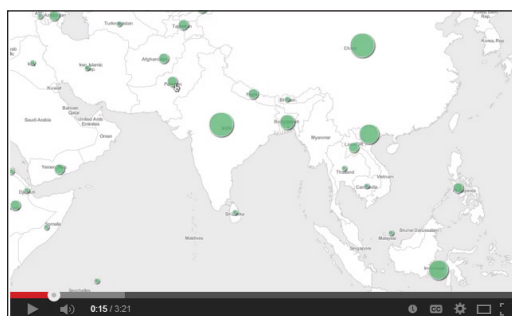
**Tracking Urban Risk by Sharing Knowledge (2014)**  
<http://www.youtube.com/watch?v=dRakDSzakzk&list=UUZWLxv2a7iWuz59JshmAdbg>



**Sri Lanka Climate Resilience Improvement Project (2014)**  
[http://www.youtube.com/watch?v=qC-\\_pVJTNfw&list=UUZWLxv2a7iWuz59JshmAdbg](http://www.youtube.com/watch?v=qC-_pVJTNfw&list=UUZWLxv2a7iWuz59JshmAdbg)



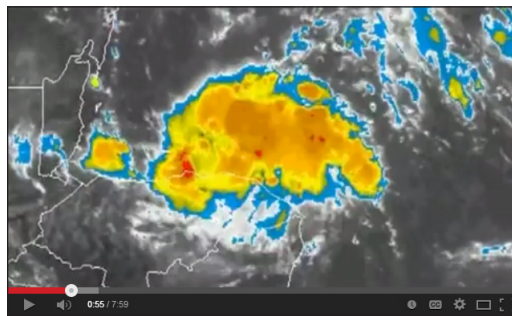
**Belize's National Climate Investment Plan (NCRIP) (2013)**  
<http://www.youtube.com/watch?v=ZnFINRcnmms&list=UUZWLxv2a7iWuz59JshmAdbg>



**Disaster Risk Management in South Asia: Country Profiles (2013)**  
<http://www.youtube.com/watch?v=nRCoeiprgSM>



**Disaster Risk Management in South Asia (2013)**  
[http://www.youtube.com/watch?v=pBYc-4Lh4\\_g](http://www.youtube.com/watch?v=pBYc-4Lh4_g)



**Belize Plans for a More Resilient Future (2013)**  
[http://www.youtube.com/watch?v=GKf\\_uYbMIQM](http://www.youtube.com/watch?v=GKf_uYbMIQM)



**About the GFDRR-funded DRM Program in Djibouti (2013)**  
<http://www.youtube.com/watch?v=zwOaxTVfI80>



**Mozambique Fly Over (2013)**  
<http://www.youtube.com/watch?v=EoOnYldeBQ>



**Djibouti Chronicle (2013)**  
<http://www.youtube.com/watch?v=MTAz5XOkKKk>



**Country Program: Togo and Integrated Disaster and Land Management (IDLM) Project (2013)**  
<http://www.youtube.com/watch?v=PQxEK5xJUY4>



**Building Climate Resilience: A Case for Caribbean Collaboration (2013)**

<http://www.youtube.com/watch?v=U07rxTijzoo>



**Indonesia Mapping Project (2012)**

<http://www.youtube.com/watch?v=wAY6Xky4GGs>



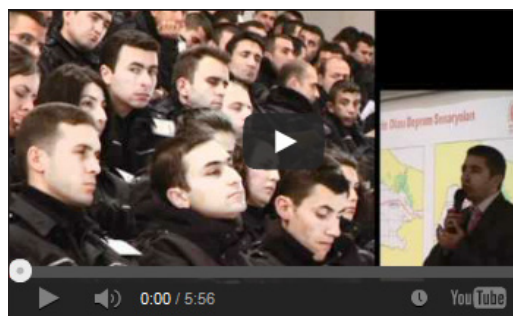
**A Home of One's Own: India Owner Driven Housing Reconstruction (2012)**

<http://www.youtube.com/watch?v=WvDMLubtdlY>



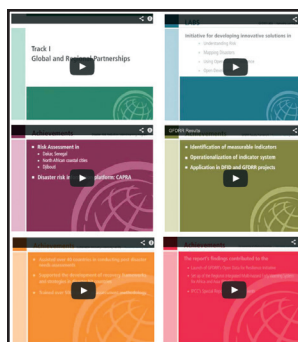
**GFDRR Somalia Drought Management and Livelihood Protection (DMLP) Project (2011)**

<http://www.youtube.com/watch?v=SCbRauQSaSI>



**ISMEP - Istanbul Seismic Risk Mitigation and Emergency Preparedness Project (2011)**

<http://www.youtube.com/watch?v=XYV-Nj-HSIO>



**Partnership Learning Series (PLS) 101 on GFDRR - Multimedia Products (2011)**

GFDRR produced a series of short videos to introduce the main GFDRR activities: business lines and global programs.

<http://www.gfdr.org/PLS101>

## Events



**City Resilience Program: Comprehensive Financial Solutions for City Resilience Conference (2018)**

[https://www.youtube.com/watch?v=F\\_mDViL\\_0Go](https://www.youtube.com/watch?v=F_mDViL_0Go)



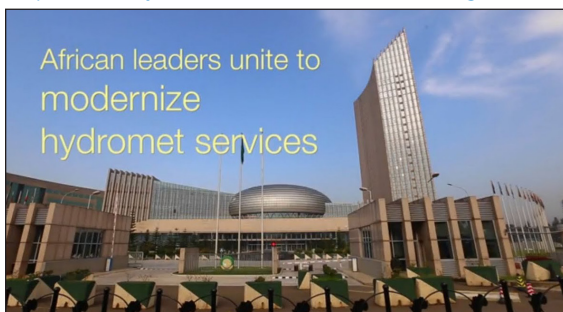
**City Resilience Program: Shark Tank (2018)**

<https://www.youtube.com/watch?v=R--SnDtP9-Q>



**Resilience Dialogue – The Disaster That Never Happened: Can Resilient Infrastructure Save the World? (2017)**

[https://www.youtube.com/watch?v=uC\\_PrgVHcek&t=690s](https://www.youtube.com/watch?v=uC_PrgVHcek&t=690s)



**AMCOMET Africa Hydromet Forum (2017)**

<https://youtu.be/Tbqfqlt-LLQ>



**World Reconstruction Conference 3 (2017)**

<https://www.youtube.com/watch?v=Srcbep13Mal>



**Understanding Risk 2016 Highlights**

<https://www.youtube.com/watch?v=5D11YKA8bZY>



**Sheryl Sandberg's opening address for the Resilience Dialogue (UR 2016)**

<https://www.youtube.com/watch?v=Y814s4oKDxg>



**Resilience Dialogue: Technology, Disaster Risk, and the Gender Divide**

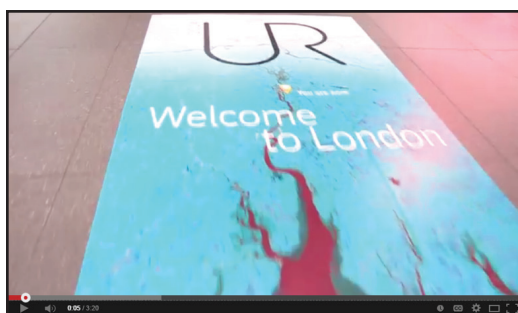
<https://www.youtube.com/watch?v=D8GUKIhHVz8>



**World Reconstruction Conference 2 (2014)**  
<https://www.youtube.com/watch?v=ESkQSjISk1s>



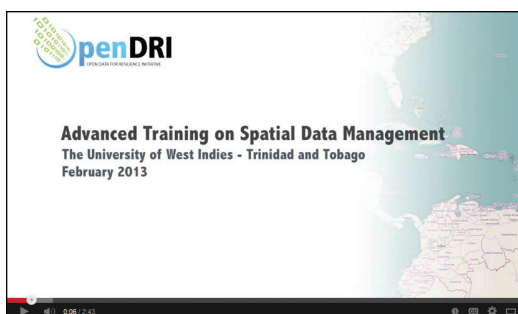
**Sendai Dialogue Day 1- Rising to the Challenge of Disaster Risk (2012)**  
<http://www.youtube.com/watch?v=OaPq-rpViDg>



**Understanding Risk 2014 Highlights**  
<http://www.youtube.com/watch?v=qXqITRcXZuA&list=UUZWxv2a7iWuz59JshADBq>



**The 4th Resilience Dialogue - Disaster and Climate Resilience in the Post-2015 Development Framework (2013)**  
[http://www.youtube.com/watch?v=zb8W\\_o2u-84](http://www.youtube.com/watch?v=zb8W_o2u-84)



**Overview: Advanced Training on Spatial Data Management (2013)**  
<http://www.youtube.com/watch?v=La728FFI3W4>



**Resilience Dialogue: Bringing Resilience to Scale for Post-2015 Goals**  
[https://www.youtube.com/watch?v=1wln4bBe\\_s](https://www.youtube.com/watch?v=1wln4bBe_s)



**Financing Disaster Risk Reduction Financing Disaster Risk Reduction: International Aid over 20 Years (2013)**  
<http://www.youtube.com/watch?v=jAXYSAdghAE>



**Resilience Dialogue Sendai**  
<https://www.youtube.com/watch?v=98KP9rXWAr4>



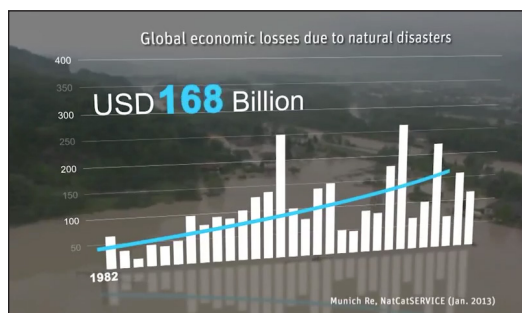
FCV Forum 2016 Resilience Dialogue: Disaster Risk and Conflict

<https://www.youtube.com/watch?v=ipl4S0dBs-8>



Understanding 2012 - Closing Ceremony

<http://www.youtube.com/watch?v=Ze9G8xuzN74>



Resilience Dialogue FF16 intro

<https://www.youtube.com/watch?v=ndNzkOQjsZw>



IMF/World Bank Annual Meeting 2012: The Resilience Dialogue

<http://www.youtube.com/watch?v=YBq6DjfVrTU>



International Conference on Crisis Mapping Event (2012)

<http://www.youtube.com/watch?v=8JMYafa2X9A>



World Reconstruction Conference (WRC) 2011: High Level Policy Panel

<http://www.youtube.com/watch?v=LoKFL2HzijE>



Understanding Risk 2012 - Overview

<http://www.youtube.com/watch?v=cqO7eSew-Zc>



World Reconstruction Conference (WRC) 2011: Prevention Pays

<http://www.youtube.com/watch?v=GsE22HpB9WI>



**World Reconstruction Conference (WRC)  
2011: Have We Learned?**

<http://www.youtube.com/watch?v=z8JvzvffqII>



**World Reconstruction Conference (WRC) 2011:  
What You're Promised**

<http://www.youtube.com/watch?v=vwvtSpLk05M>

## Interviews



**Translating words into action: We must build  
resilience into development**

<https://www.youtube.com/watch?v=FtMOMGPImc4>



**Enhancing Resilience through Quality Infrastructure  
and Operations (roundtable)**

<https://www.youtube.com/watch?v=LCY5GSr5bpE>



**Roundtable on Dam Safety and Management Related  
to Seismic Hazards**

<https://www.youtube.com/watch?v=Eot1KKS3j-I>



**GEM Interview with Alanna Simpson, Head of  
Innovation Lab of GFDRR (2015)**

<https://www.youtube.com/watch?v=BFdaimzIPJI>



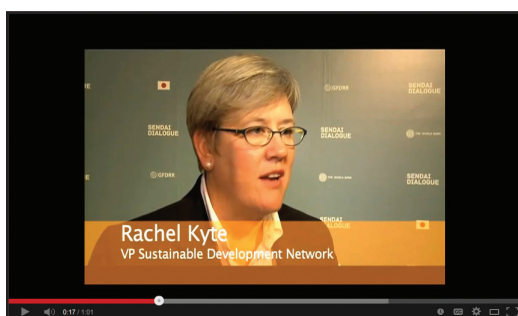
### The Role of Insurance in Post-Disaster Management (2014)

<http://www.youtube.com/watch?v=zo47rIVXDL4&list=UUZWLxv2a7iWuz59JshmADBg>



### Insurance in Disaster Risk Reduction (2014)

<https://www.youtube.com/watch?v=UqkLVMQTLh0>



### Interview with Rachel Kyte (2012)

[http://www.youtube.com/watch?v=bHooJr\\_kh\\_4](http://www.youtube.com/watch?v=bHooJr_kh_4)



### Interview with Kristalina Georgieva (2012)

[http://www.youtube.com/watch?v=\\_B3FT6Nim5Y](http://www.youtube.com/watch?v=_B3FT6Nim5Y)



### Francis Ghesquiere, GFDRR, at AusAID (2012)

[http://www.youtube.com/watch?v=xKqPq\\_uHs88](http://www.youtube.com/watch?v=xKqPq_uHs88)



### Sobre CAPRA con Francis Ghesquiere, GFDRR (en español) (2012)

<http://www.youtube.com/watch?v=Nu7rDH3claw>



### Interview with Tim Sebastian: World Reconstruction Conference (WRC) 2011

<http://www.youtube.com/watch?v=cl3e7o0yoNs>

## PDNA Learning Videos



### Elders Leading Resilience for WCDRR

This video shows how community elders were empowered to help the community recover after the great earthquake in Ofunato, Japan in 2011. It assesses the experience of the Ibasho approach on post-disaster recovery and strengthening social capital.

<https://www.youtube.com/watch?v=XTRGPHNbT0g>



### Bangkok: Urban Expansion 1990-2010

This animation showcases two decades of urban expansion in Bangkok.

<https://www.youtube.com/watch?v=OPqTIPdozTw>



### Kampala: Urban Expansion 1990-2010

This animation showcases two decades of urban expansion in Kampala.

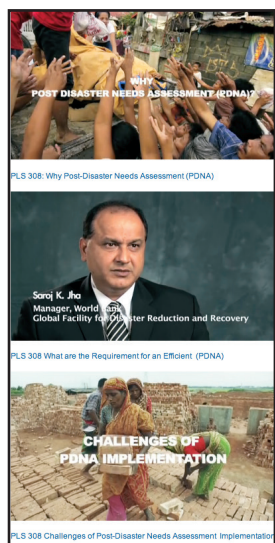
<https://www.youtube.com/watch?v=Ppgf7usrbkA>



### Shanghai: Urban Expansion 1990-2010

This animation showcases two decades of urban expansion in Shanghai.

<https://www.youtube.com/watch?v=3MzysmHccXE>



### Post-Disaster Needs Assessment (PDNA) Videos (2012)

GFDRR produced three videos on Post-Disaster Needs Assessment:

1) Why PDNA?; 2) What are the requirements for an efficient PDNA?; and 3) What are the challenges of PDNA Implementation?

<http://www.gfdr.org/pdnvideos>

# Capacity Building Online Learning Program

*This program, offered with partner organizations such as the Arab Academy, Earthquake Megacities Initiative (EMI), Middle East Technical University (METU), National Institute of Disaster Management of India (NIDM), has the following 10 courses below. **To register for the course and for more information, please contact Berna Yekeler at [byekeler@worldbank.org](mailto:byekeler@worldbank.org).***

## Comprehensive Disaster Risk Management Framework

An introductory course for development practitioners, gives an overview of the major disaster risk management issues.

## Financial Strategies for Managing the Economic Impacts of Natural Disasters

A course for policy makers addressing the financial, economic and development impact of disasters and the trade-offs involved in disaster risk financing.

## Safe Cities

A course for urban managers and planners reviews the processes, regulations, enforcement issues and methods of reducing exposure to hazards and limiting the physical vulnerability of high-density settlements.

## Community-based Disaster Risk Management

A course for community leaders and NGOs focusing on prevention, mitigation and the need for the participation of local actors in designing, developing, implementing and monitoring activities related to disaster risk reduction.

## Damage and Reconstruction Needs Assessment

Enhancing the participants' understanding of social, economic and environmental effects of natural disasters, the course introduces instruments for quantifying direct damages, indirect losses and the overall macroeconomic effects of catastrophic events to accurately estimate the resources needed for recovery and reconstruction.

## Climate and Disaster Risk Management

An introduction to the science of climate change, this course explores the linkage between disaster risk management and climate change adaptation, and outlines strategies, methods and tools for integrated climate risk management.

## Earthquake Risk Reduction

Linking the science and engineering of earthquakes to structural and nonstructural risk reduction practices, this course introduces the basic approaches to earthquake risk reduction by discussing their effectiveness in various regions.

## Gender Aspects of Disaster Risk Reduction

This course illustrates how the inclusion of women in disaster management results in more equitable and efficient outcomes during disaster recovery and reconstruction. It reviews those aspects of disaster management in which gender concerns arise, and introduces policies and tools for gender mainstreaming.

## Risk Sensitive Land Use Planning

The course demonstrates the benefits of incorporating disaster risk reduction objectives in land use planning.

## Risk Analysis

An analytical process for identifying disaster risk and for generating the information and data required to design risk reduction measures is presented in the course.





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