



**Resilient development is smart development.** Natural disasters are threatening development gains in most of the developing world. By investing in resilience, we can better manage climate and disaster risk to help end extreme poverty and boost shared prosperity.



## NOTES

1. All monetary values are in US dollars.
2. Munich Re. 2012
3. Commission of the European Communities, EU Strategy for supporting Disaster Risk Reduction in Developing Countries, Brussels: EU, 2009.
4. The Global Commission, The New Climate Economy Report, 2014
5. United Nations Department of Economic and Social Affairs, 2014 Revision: World Urbanization Prospects, New York: UN, 2014
6. Munich Re. 2013
7. Stephane Hallegatte, "A Cost Effective Solution to Reduce Disaster Losses in Developing Countries: Hydrometeorological Services, Early Warning, and Evacuation." Policy Research Working Paper 6058, World Bank, Washington, DC.
8. UN OCHA Policy and Study Series, Saving lives today and tomorrow; 2014 - UN Office for the Coordination of Humanitarian Affairs, Saving Lives Today and Tomorrow, UN, 2014
9. World Bank, 2014: Building Resilience to Disaster and Climate Change through Social Protection Toolkit
10. Hochrainer 2009



# Investing *in* Resilience

2015  
Sendai



WORLD CONFERENCE ON DISASTER RISK REDUCTION

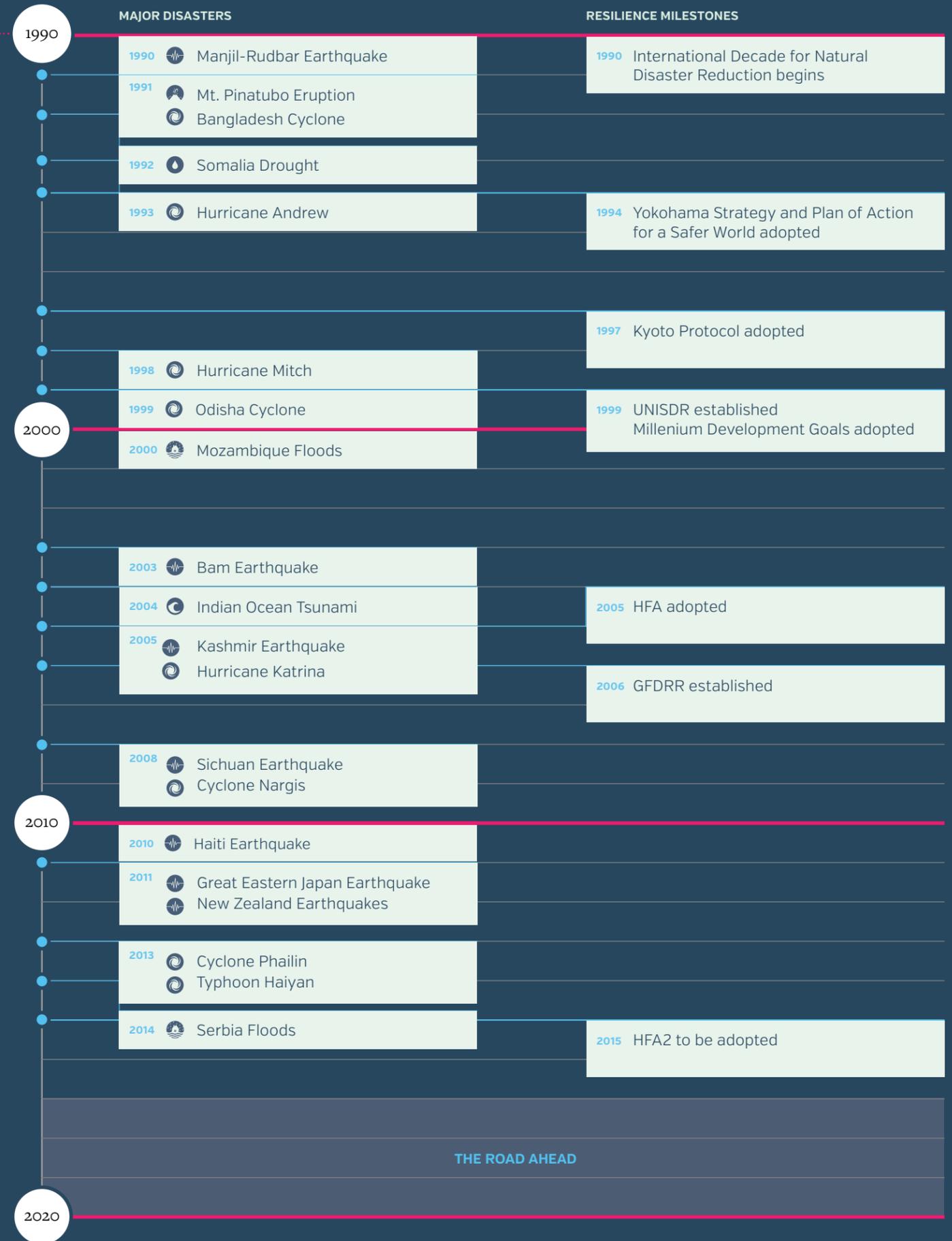
# Investing in resilience

Global losses from natural disasters have averaged almost \$200 billion<sup>1</sup> annually over the past decade—up from just \$50 billion in the 1980's. With drivers like population growth, rapid urbanization, and climate change, this trend is set to continue, threatening development gains in the world's most vulnerable countries.

After the devastation of the Indian Ocean Tsunami of 2004, the international community came together to develop a ten-year plan for reducing disaster risk in what came to be known as the Hyogo Framework for Action (HFA). This framework helped guide development efforts to ensure that communities were more resilient to shocks from natural hazards. In the spirit of the HFA, the World Bank Group increased investments in disaster risk management and moved to systematically incorporate disaster and climate risk into its operations.

While much was accomplished in the last decade, disaster losses and exposure to risk continue to grow. 2015 provides a unique window of opportunity to curb this trend. In Sendai, Japan, the international community will agree upon the successor to the Hyogo Framework for Action that will help to guide and monitor progress towards managing disaster risk. This agreement will inform other important international discussions around the Sustainable Development Goals, a new Climate Treaty, and the World Humanitarian Summit. The 2015 international agreements should envelope policies and actions that build resilience of the poor and boost global shared prosperity.

Together, we can help build lasting resilience for communities around the world.



# Investing in resilience is investing in sustainable development.

- Natural disasters disproportionately impact the poor and roll back development gains.



Since 1980, low-income countries have accounted for only **9% of disaster events** but **48% of the fatalities**.<sup>2</sup>

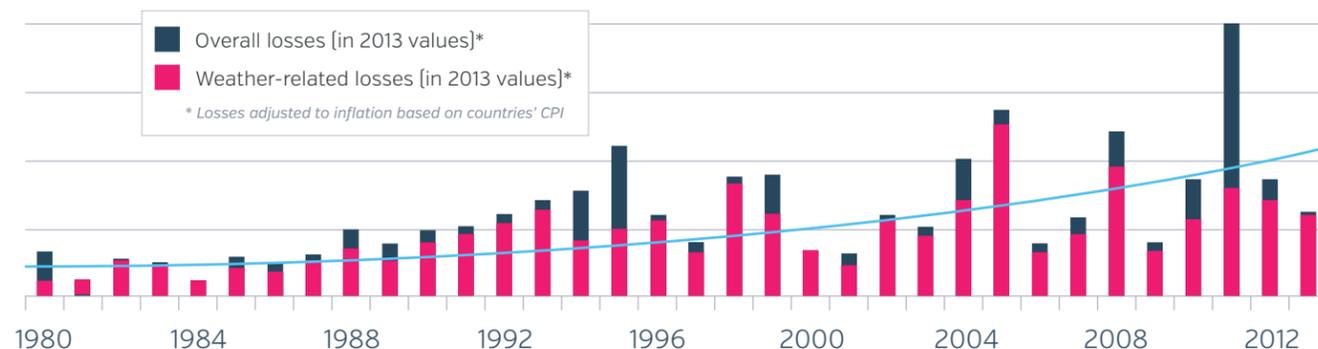


In **Aceh**, after the 2004 Indian Ocean Tsunami, **extreme poverty levels rose from 30% to 50%**.<sup>3</sup>

Without risk-sensitive development, **population growth and rapid urbanization** will lead to increased exposure and risk.



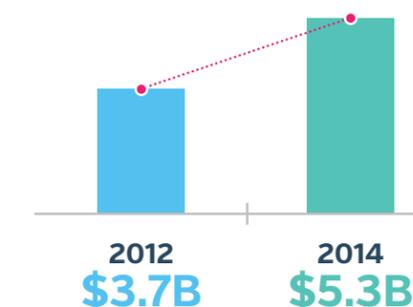
## LOSS EVENTS WORLDWIDE 1980 - 2013<sup>6</sup>



Climate change threatens to increase the frequency and intensity of weather-related disasters.

- Managing disaster and climate risk is core to the World Bank Group's strategy.

- The World Bank Group's disaster-related commitments have **grown 20% a year**, reaching \$5.3 billion in FY14.



Since July 2014, the **International Development Association (IDA)**, the World Bank's fund for the world's poorest, is:

**screening all projects** for climate & disaster risk.

**integrating climate and disaster risk** into all country partnership frameworks.



Nearly **2/3**

of World Bank investments aimed at managing disaster risk also **address climate change adaptation**.

Disaster risk is at the center of the development challenge for small island states. The new **Small Island State Resilience Initiative** will help scale up risk management for these especially vulnerable countries.

Investing in resilience starts with understanding risk.

The World Bank helps countries understand their risk and develop risk-informed policies and investments.

The World Bank is helping pioneer new approaches to actionable risk assessment.



**OPEN DATA FOR RESILIENCE INITIATIVE**

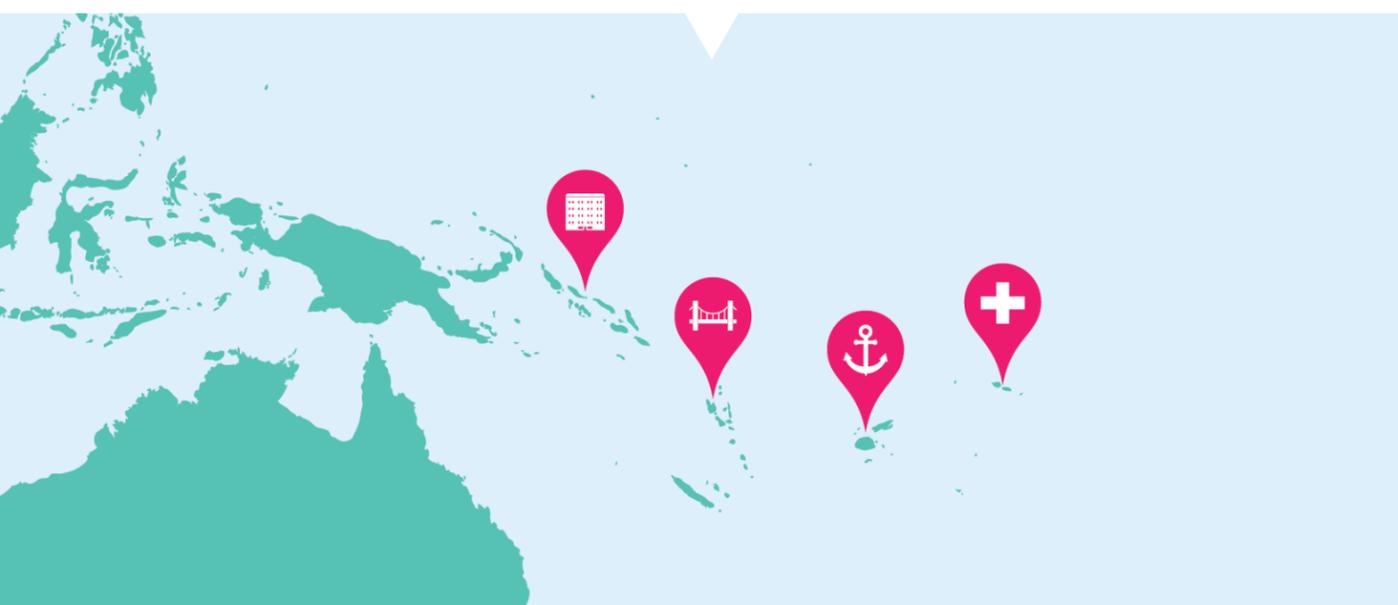
Geospatial data sharing platforms have helped improved access to risk information in more than 50 countries.



**PARTICIPATORY MAPPING**

In Sri Lanka, volunteers with GPS devices helped map exposure risk for more than 30,000 buildings in under 3 months using Open Street Map.

Under the **Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI)**, the World Bank helped collect and visualize exposure data for over **3 million assets in the Pacific**.



Risk information can guide smart development policies.



**RISK ASSESSMENT**

A seismic risk assessment of **1512 public schools** in 48 districts in **Lima and Callao**.



**RISK-INFORMED INVESTMENT**

Structural Retrofitting Program for school infrastructure to ensure the safety of **2 million students** in **50,000 schools**.



More **RESILIENT COMMUNITIES**

Investing in hydromet and early warning systems can save an average of **23,000 lives** annually and provide between **US\$3 billion and US\$30 billion per year** in economic benefits.<sup>7</sup>

**ODISHA**



05B 1999

10,000 LIVES LOST

PHAILIN 2013

50 LIVES LOST

During Cyclone Phailin, early warning systems and preparedness measures helped evacuate **more than 900,000 coastal residents** in Odisha, India.<sup>8,9</sup>

In FY12-14, the World Bank invested **\$US1.4 billion** in preparedness.

# Investing in resilience reduces the social & economic impact of disasters.



## The World Bank works to increase resilience at the household level.

After a disaster, **social safety nets** can rapidly distribute resources to those who need it most.

**Building strong communities** is essential to building lasting resilience.



Following a major drought in Ethiopia in 2011, a **government safety net supported by the World Bank assisted 9.6 million people**, with funds arriving an average of 6 months before other sources of humanitarian funding.



In Indonesia, the World Bank is supporting the **National Community Empowerment program** which is increasing risk awareness for 75,000 rural villages and over 100 million urban inhabitants.

The World Bank provides **advisory services** to strengthen domestic property catastrophe insurance markets.

DISASTER RISK FINANCING TOOLS	RESULTS
Catastrophe Insurance Pools	The Turkish Catastrophe Insurance Pool provides earthquake insurance to more than <b>2.5 million homeowners</b> .
Index-Based Agriculture Insurance	The National Agriculture Insurance Scheme in India protects more than <b>20 million farmers</b> against poor harvest caused by drought or frost.
Agricultural Insurance Pools	An index-based livestock insurance program in Mongolia covers more than <b>600,000 animals</b> and leverages resources from <b>four private insurance companies</b> .
Global Index Insurance Facility (GIIF)	GIIF's implementing partners have issued more than <b>600,000 policies</b> to cover farmers, pastoralists and micro-entrepreneurs with <b>US\$119 million</b> in sums insured

## The World Bank works with governments to design comprehensive financial protection strategies.

- Without financial protection, disasters can have serious economic and fiscal impacts – even in the long term.



- The World Bank is actively working with more than 44 countries to develop financial protection strategies.

DISASTER RISK FINANCING TOOLS	WORLD BANK PARTICIPATION	COVERAGE
Market Derivatives	Uruguay Drought & Oil Hedge, 2013 Malawi Weather Derivative, 2008-2011	<b>\$469 MILLION</b>
Contingent Grants and Loans	10 approved Development Policy Loans with the Catastrophe Deferred Drawdown Option, 2008-2015, Uruguay Contingent Investment Project Financing, 2014	<b>\$1.6 BILLION</b>
Capital Market Instruments	Mexico Catastrophe Bond CCRIF Catastrophe Bond (16 countries)	<b>\$635 MILLION</b>
Risk Insurance Pools	21 countries are actively participating in Catastrophe Insurance Pools	<b>\$US645 MILLION</b>

# Investing in resilience helps communities recover faster.

The World Bank helps countries affected by disasters to **build back better** and **integrate resilience** into reconstruction efforts.



Through post-disaster needs assessments, the World Bank has supported resilient recovery planning in **23 countries** between FY12-14.

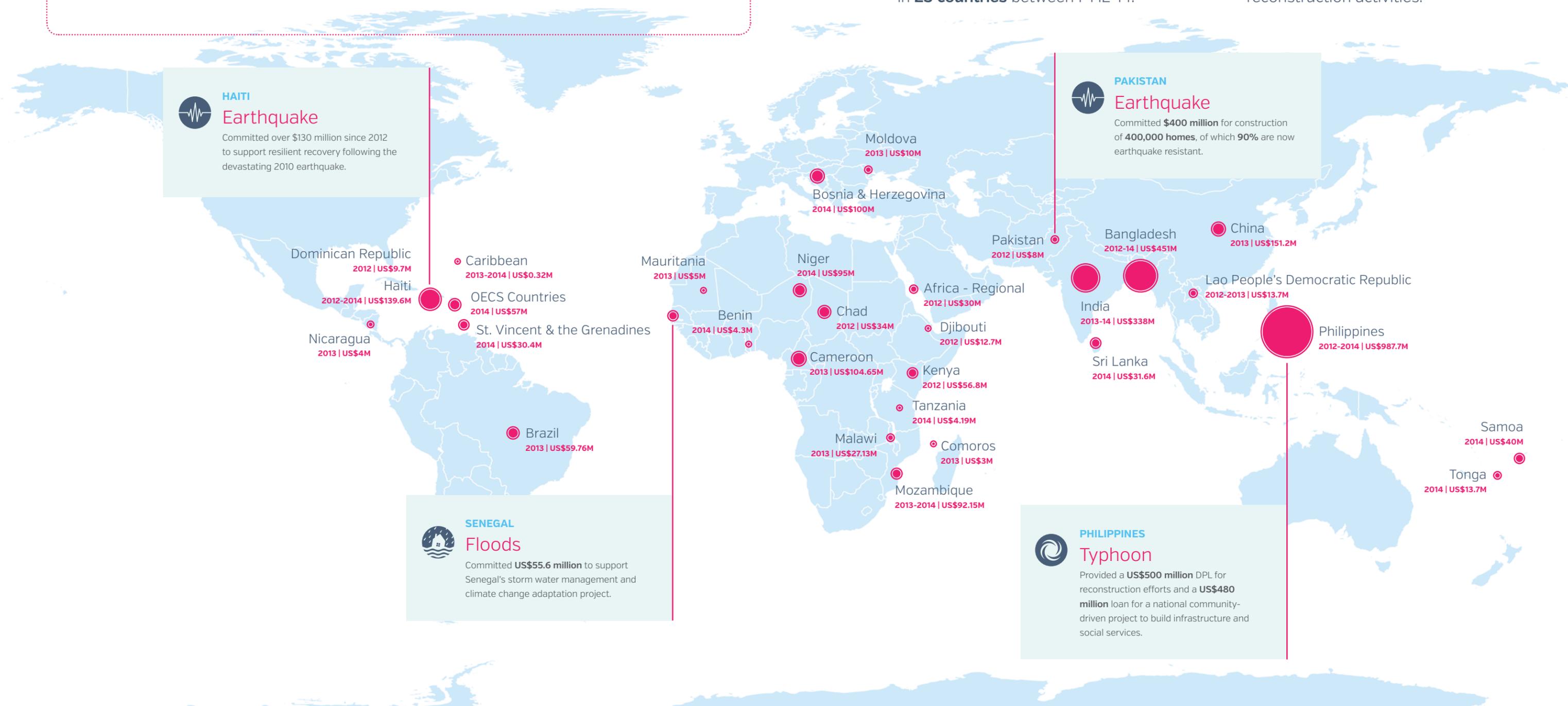
Between FY12-14, the World Bank has committed more than **US\$3 billion** to post-disaster reconstruction activities.

**HAITI**  
**Earthquake**  
 Committed over \$130 million since 2012 to support resilient recovery following the devastating 2010 earthquake.

**PAKISTAN**  
**Earthquake**  
 Committed \$400 million for construction of **400,000 homes**, of which **90%** are now earthquake resistant.

**SENEGAL**  
**Floods**  
 Committed **US\$55.6 million** to support Senegal's storm water management and climate change adaptation project.

**PHILIPPINES**  
**Typhoon**  
 Provided a **US\$500 million DPL** for reconstruction efforts and a **US\$480 million** loan for a national community-driven project to build infrastructure and social services.



# Investing in resilience is everyone's business.

The World Bank works with the **Global Facility for Disaster Reduction and Recovery (GFDRR)** to promote collaboration on the **Hyogo Framework for Action**.

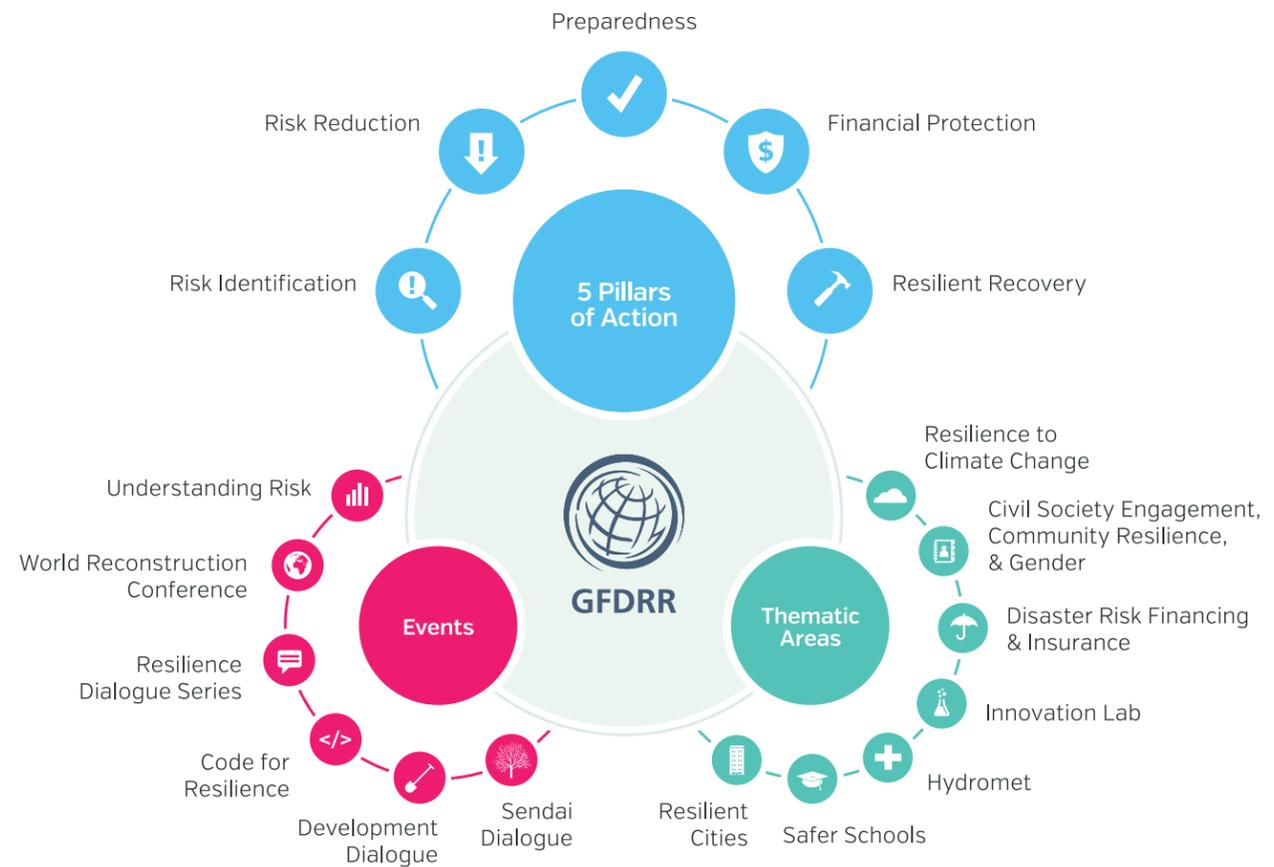
GFDRR works with over **400 partners** from governments, investment agencies, the private sector, and civil society to build a world more resilient to natural hazards.



GFDRR supports disaster-prone countries with technical assistance to **build capacity, identify investment priorities, and mobilize funding** for disaster resilience.



In FY14 alone, GFDRR helped partner countries leverage **\$1.5 billion** in financing from the World Bank Group, in addition to other financing.



## 25 donor countries & international organizations.

Since 2007, donors have pledged more than **\$300 million** in support to GFDRR's projects and programs in more than **60 countries**.



The **Japan-World Bank Program for Mainstreaming Disaster Risk Management in Developing Countries** is a \$100 million Japan-funded program established in 2014 that helps integrate resilience into national development planning.

The **ACP-EU Natural Disaster Risk Reduction (NDRR) Program**, a \$120 million program launched in 2011, is funded by the European Union and helps build disaster and climate resilience for African, Caribbean, and Pacific countries.

# The road ahead

Ongoing post-2015 policy discussions provide a unique opportunity to respond to the resilience needs of developing countries.

## World Conference on Disaster Risk Reduction

SENDAI, JAPAN

The Third UN World Conference on Disaster Risk Reduction will be held from 14 to 18 March 2015 in Sendai City, Miyagi Prefecture, Japan. The main outcome of WCDRR is expected to be the successor to the Hyogo Framework for Action, which has been an effective tool to motivate and track the progress of countries as they build resilience to disasters, and has guided the World Bank's work in disaster risk management.

## Third International Conference on Financing for Development

ADDIS ABABA, ETHIOPIA - JULY 2015

Recognizing the need for significant mobilization of resources to attain the Sustainable Development Goals (SDGs), this conference will focus on the progress made and emerging issues in international development cooperation. Disaster and climate risk are important in this regard given that poverty and under-development increases vulnerability, while at the same time disasters can perpetuate or exacerbate poverty and set back development achievements.

## World Humanitarian Summit

ISTANBUL, TURKEY - MAY 2016

The World Humanitarian Summit is the first global summit on humanitarian action of this size and scope, it will be held in Istanbul in May 2016. The goal of this summit is to bring the global community together to commit to new ways of working together to save lives and reduce hardship around the globe. These discussions provide an opportunity to draw closer links between the humanitarian and development communities to work together to build resilience.

## Sustainable Development Goals

NEW YORK, USA - SEPTEMBER 2015

The Sustainable Development Goals (SDGs), which will build upon the Millennium Development Goals, aim to frame development agendas and policies over the next 15 years, ensuring effectiveness, inclusivity, and sustainability. Integrating resilience to climate and disaster risk will be important for the success of the SDGs, which should be ratified in September 2015 in New York.

## United Nations Climate Change Agreement

PARIS, FRANCE - DECEMBER 2015

Climate risk is a main driver of losses from natural disasters – more than 75 percent of losses, in fact, are related to extreme weather. The IPCC has reported that it is likely that extreme events will have greater impacts in the future on sectors with closer links to climate, such as water, agriculture and food security, forestry, health, and tourism. Curbing climate change and efficiently funding adaptation efforts will be essential to the resilience agenda.