

# The Integrated Research on Disaster Risk Programme (IRDR)



# What is integrated research?

*Integrated disaster risk research engages multiple disciplines and researchers, scales (local to global), methodological approaches, and stakeholders in the co-production of problem-focused, and policy relevant research related to disaster risk.*



# What is IRDR?

*A decade-long research program focused on Integrated Research on Disaster Risk*

***Mission: “To develop trans-disciplinary, multi-sectorial alliances for in-depth, practical disaster risk reduction research studies, and the implementation of effective evidence-based disaster risk policies and practices.”***

*IRDR, 2015. Annual Report 2014. Beijing: IRDR, p. 2*

***Vision: to offer “an integrated approach to natural and human-induced environmental hazards through a combination of natural, socio-economic, health and engineering sciences, including socio-economic analysis, understanding the role of communications, and public and political responses to reduce the risk.”***

*--ICSU 2008. A Science Plan for Integrated Research on Disaster Risk: Addressing the challenge of natural and human-induced environmental hazards. Paris: ISCU, p. 18.*



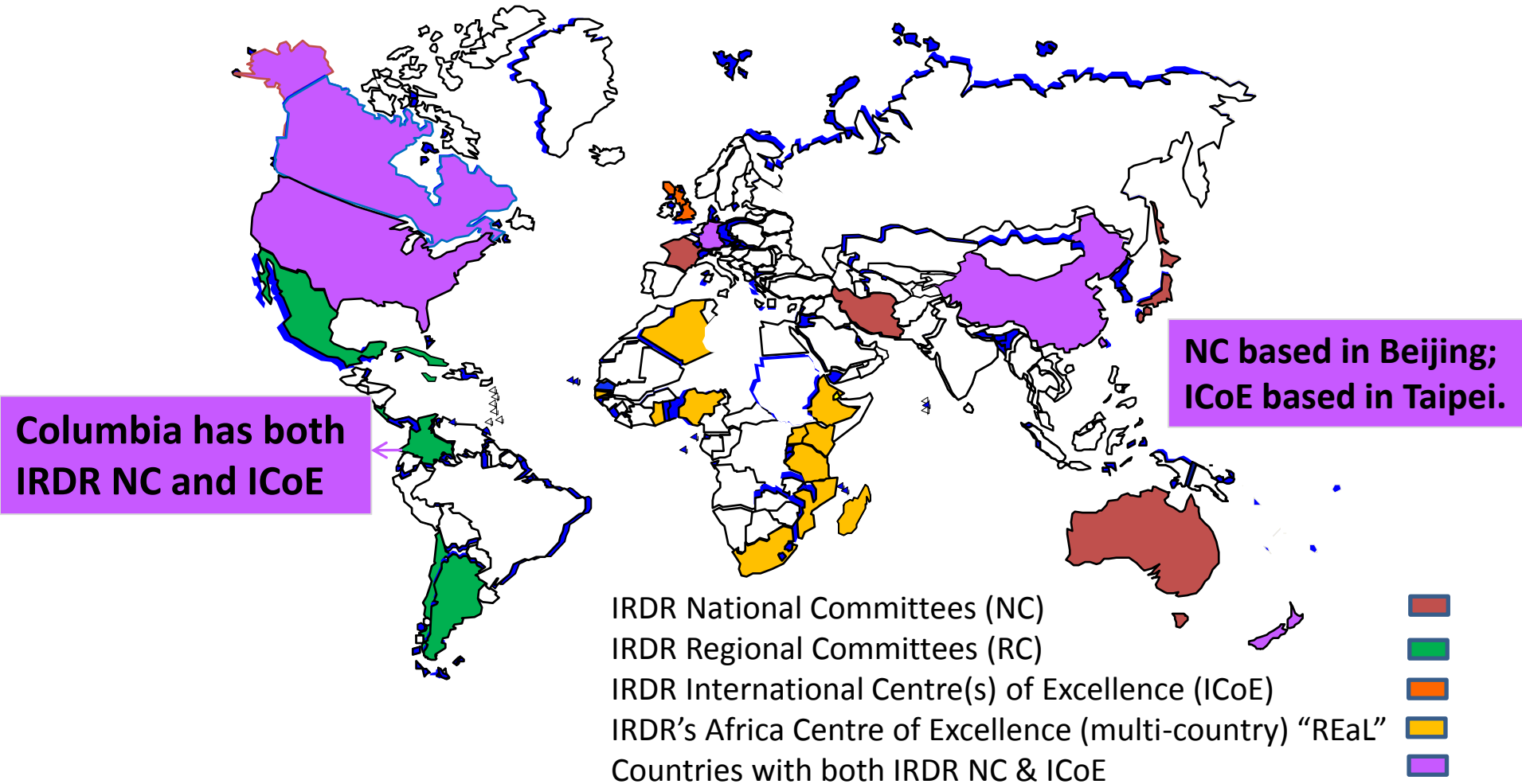
# Who is IRDR?

A community of interested stakeholders from academe, private sector, government, NGOs who are addressing the challenge of managing disaster risk to reduce losses.

<http://www.irdrinternational.org/>



# IRDR Network



# National Committees (NCs)



**IRDR NC**

Integrated Research on Disaster Risk  
National Committee

1. Australia
2. Canada
3. China
4. Colombia
5. France
6. Germany
7. Japan
8. New Zealand
9. USA
10. Iran



# International Centres of Excellence

- \* ICoE in Community-based Resilience, New Zealand (IRDR ICoE-CR)
- \* ICoE for Risk Education and Learning, South Africa (IRDR ICoE-REaL)
- \* ICoE in Risk Interpretation and Action, UK (IRDR ICoE-RIA)
- \* ICoE-Taipei
- \* ICoE in Understanding Risk & Safety, Colombia (IRDR ICoE-UR&S)
- \* ICoE on Vulnerability & Resilience Metrics, USA (IRDR ICoE-VaRM)
- \* ICoE on Critical Infrastructures and Strategic Planning, Germany (IRDR ICoE-CI&SP)
- \* ICoE for Disaster Resilient Homes, Buildings and Public Infrastructure, Canada (IRDR ICoE-DRHBPI)

# Research Objectives

- \* Characterisation of hazard, vulnerability and risk.
- \* Effective decision-making in complex and changing risk context.
- \* Reducing risk and curbing losses through knowledge-based actions.





# Research Projects

IRDR is initially focusing on building partnerships and undertaking scientific analyses to put in place longer-term projects towards meeting its declared research objectives.

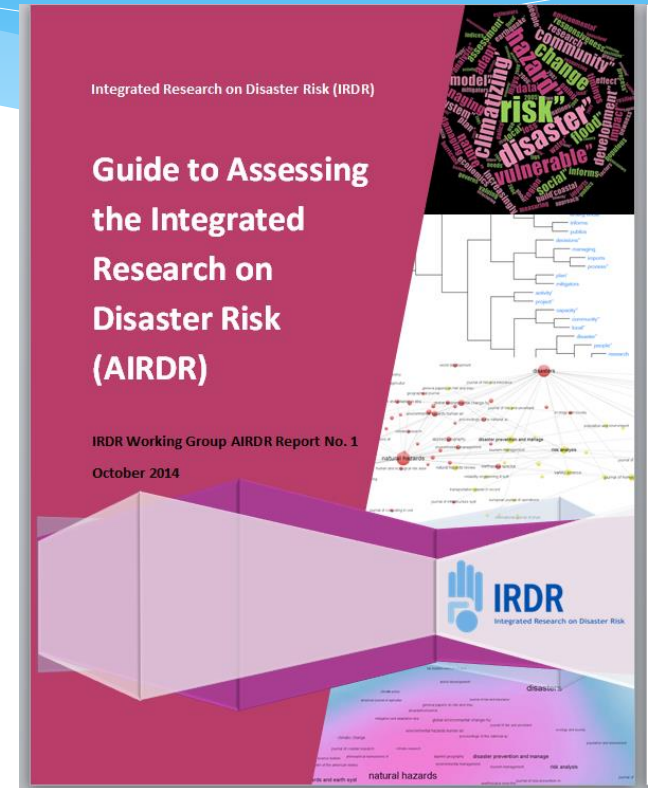
Four core projects have been established to do this:

- \* AIRDR
- \* DATA
- \* FORIN
- \* RIA

# Assessment of Integrated Research on Disaster Risk (AIRDR)

## AIRDR's Goals:

- \* To provide a baseline of the current state of the science on integrated research on disaster risk;
- \* To identify and support a longer-term science agenda for the research community and funding entities
- \* To create a mechanism for substantiating advances in the scientific evidentiary basis for supporting policy and practice.



**Guide to implementing AIRDR  
bibliometric analysis completed**

# Assessment of Integrated Research on Disaster Risk (AIRDR)

Integrated Research on Disaster Risk (IRDR)

## Incentives for Disaster Risk Management

AIRDR Project Report No. 2



Integrated Research on Disaster Risk (IRDR)

## Governance in Disaster Risk Management

AIRDR Project Report No. 3



Integrated Research on Disaster Risk (IRDR)

## Transformative Development and Disaster Risk Management

AIRDR Project Report No. 4



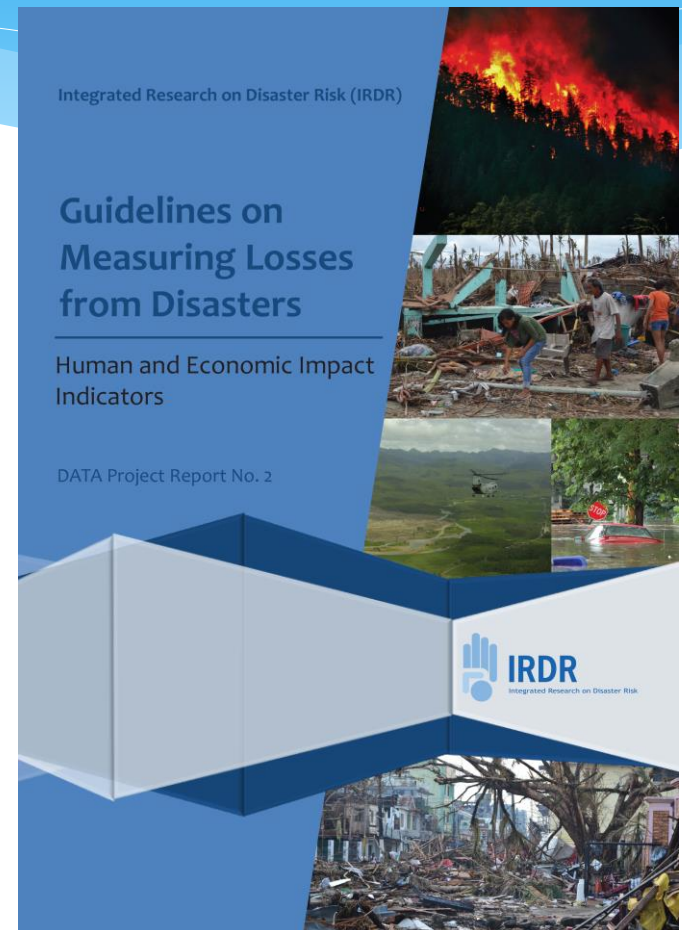
# Disaster Loss Data (DATA)

**DATA is about improving the infrastructure of loss data globally and locally**

- \* Identify quality of existing data and data needs for improving integrated disaster risk management
- \* Bring together loss data stakeholders to identify common issues and develop synergies
- \* Develop standards/protocols to minimize data uncertainty
- \* Define “losses” and create transparent methodologies for assessing them
- \* Advocate for loss data at sub-national geographies
- \* Educate users on database biases and data interpretation

# Disaster Loss Data (DATA)

- \* *Integrated Research on Disaster Risk. (2015). Guidelines on Measuring Losses from Disasters: Human and Economic Impact Indicators (IRDR DATA Publication No. 2). Beijing: Integrated Research on Disaster Risk.*
- \* This document, based on two earlier working papers from the Centre for Research on the Epidemiology of Disasters (CRED) (CRED 2011, 2012) in collaboration with Munich Re and Swiss Re provides guidance on a minimal set of human and economic loss indicators and their definitions that should be part of any operational disaster loss database.



# Forensic Investigations of Disasters (FORIN)

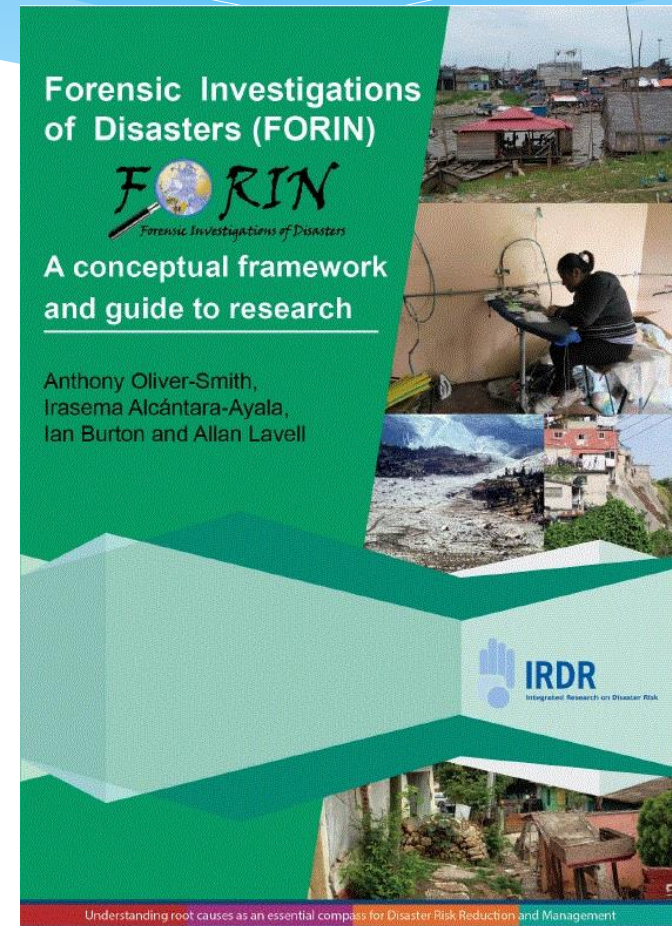
## FORIN's Goals:

- \* Aims to uncover the underlying root causes of disasters through a common set of fundamental questions designed to provide an in-depth investigation of a range of disaster events.
- \* Methodology has been used in the design of five major research projects and discussed at four international workshops.



# Forensic Investigations of Disasters (FORIN)

\* A Conceptual Framework and Guide to Research both articulates a conceptual framework for understanding disaster risk, and codifies and presents a set of methodological principles to identify and analyze processes of risk construction.



# Risk Interpretation & Action (RIA)



- \* IRA's Goal: build a community of practice on risk perception, communication and decision-making that focuses on better understanding how people make decisions in the face of risk, with special emphasis on disaster risk and resilience building.
- \* Four focus areas:
  1. Decision-making for uncertainty
  2. Early warning systems
  3. Adaptive management and resilience
  4. Individual perceptions and risk behavior

# Other Partnerships

- \* WMO's World Weather Research Programme (WWRP)  
Working Group on Societal and Economic Research and Applications (WG SERA)
- \* UNISDR Asia Partnership (IAP)
- \* Committee on Data for Science and Technology (CODATA)
- \* EU Joint Research Centre (JRC)
- \* International START Secretariat (System for Analysis, Research and Training)
- \* World Climate Research Programme (WCRP)

# Thank you

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[www.irdrinternational.org](http://www.irdrinternational.org)



# IRDR

Integrated Research on Disaster Risk