



Proposed New IRDR Project

Disaster Risk Reduction and Loss Mitigation (RILM)

Dr. Tony C. Liu
IRDR-ICoE, Taipei
November 2013



Presentation Outline

- Background and Justification
- Proposed IRDR Project Objectives
- Examples of Needed Research
- The Way Forward



Background & Justification (1/4)

IRDR 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 Strategic Plan, 2013-2017]



Background & Justification (2/4)

- **Main IRDR research objectives**
 - **Objective 1** Characterization of hazards, vulnerability, and risk
 - **Objective 2** Understanding decision-making in complex and changing risk contexts
 - **Objective 3** Reducing risk and curbing losses through knowledge-based actions



Background & Justification (3/4)

- IRDR SC established 4 projects to support **IRDR mission and IRDR research objectives.**
 - Assessment of Integrated Research on Disaster Risk (**AIRDR**)
 - Disaster Loss Data (**DATA**)
 - Forensic Investigations of Disasters (**FORIN**)
 - Risk Interpretation and Action (**RIA**)



Background & Justification (4/4)

- These IRDR projects, except perhaps for **RIA**, address mainly on the **post-disaster events** and they focus primarily on two of the three IRDR research objectives, i.e., Objectives 1 and 2.
- However, a much-needed research on **reducing risk and curbing losses** has not been fully addressed by the existing projects



Objective of the Proposed Project

- This proposed IRDR project aims to undertake **multi-disciplinary and integrated research** to identify and develop practical and effective approaches **to reduce risk and mitigate disaster losses** through engineering and socio-economic sciences.



Examples of Needed Research (1/4)

- Develop new knowledge for reducing vulnerabilities and disaster risk
- Develop guidelines and practical approaches to reduce disaster losses
- Case studies of recent disasters
- Other research activities



Examples of Needed Research (2/4)

- Develop new knowledge for reducing vulnerabilities and disaster risk
 - Identify **vulnerabilities, hazards, and decision-making process** by integrating the outputs of the existing IRDR projects
 - Develop community-based framework for **preparation of hazard maps and land-use policies** to prevent or discourage the occupation of high-hazard areas
 - Develop improved **forecasting and early-warning capabilities** to provide timely and effective information
 - Other research activities



Examples of Needed Research (3/4)

- Develop guidelines and practical approaches to reduce disaster losses
 - Promote the use of best **engineering standards and codes** for infrastructure through international cooperation
 - Develop guidelines for **disaster preparedness, evaluation, and emergency response plans**
 - Study the use of **insurance and other financial mechanisms** to reduce disaster losses
 - Other research activities



Examples of Needed Research (4/4)

- Case studies of recent disasters
 - Describe specific real-life examples of **assessing vulnerability** and the analysis of effective (and ineffective) **approaches to reduce disaster losses**.
- Other research activities



The Way Forward

- Based on this preliminary proposal, IRDR-ICoE-Taipei hopes SC can organize a Task Force to develop a more comprehensive, **multi-disciplinary, and integrated** IRDR project to fulfill the goal of IRDR -- **disaster risk reduction and loss mitigation**
- ICoE-Taipei is committed to conduct an Advanced Institute on **disaster risk reduction** and will collaborate with IRDR-Japan on this important subject in 2014



COMMENTS/
QUESTIONS?

