Presentation of IRDR International Centre of Excellence (ICoE)-Taipei

Chia-Hsing Jeffery LEE, Ph.D.
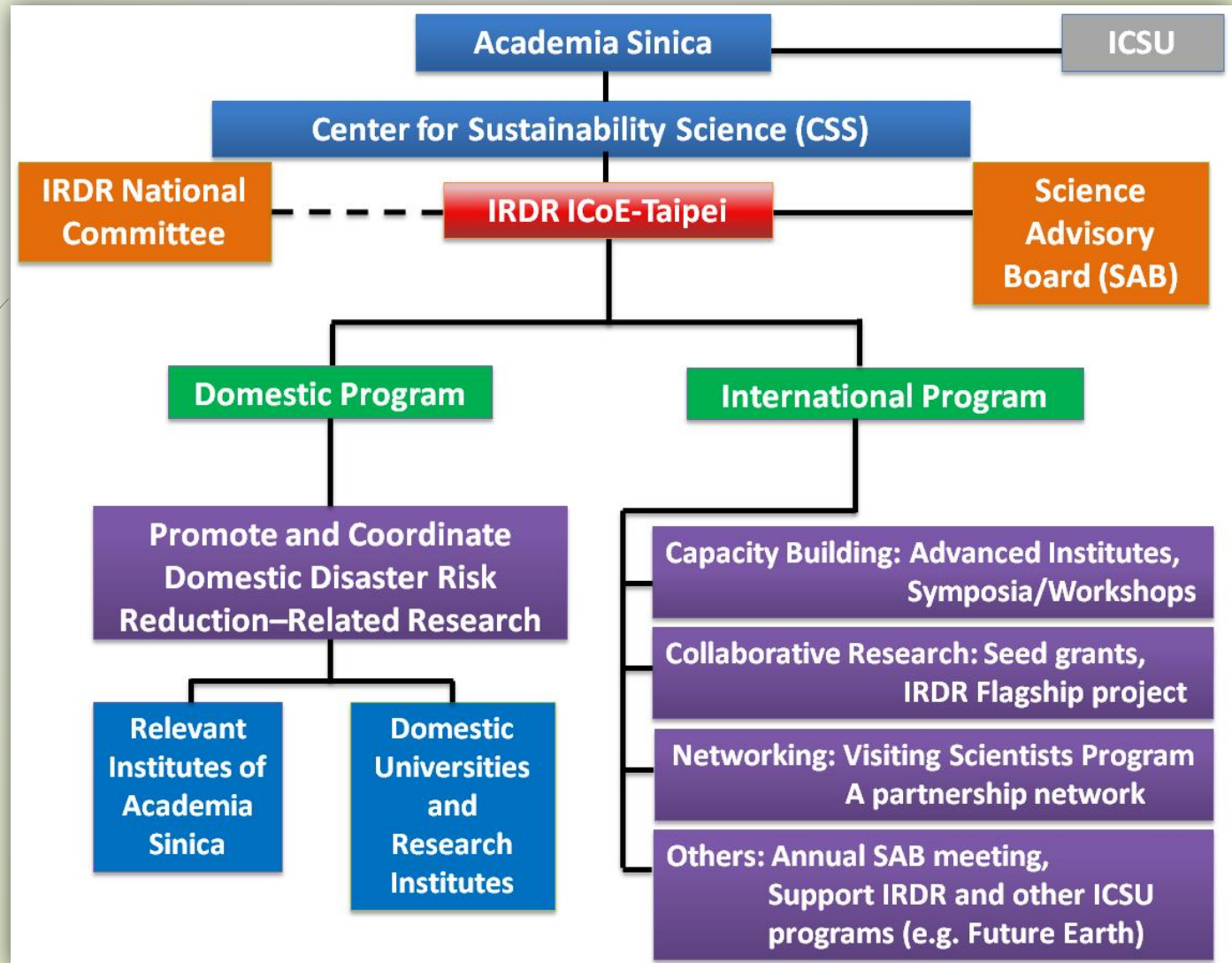
Science Officer, IRDR ICoE-Taipei

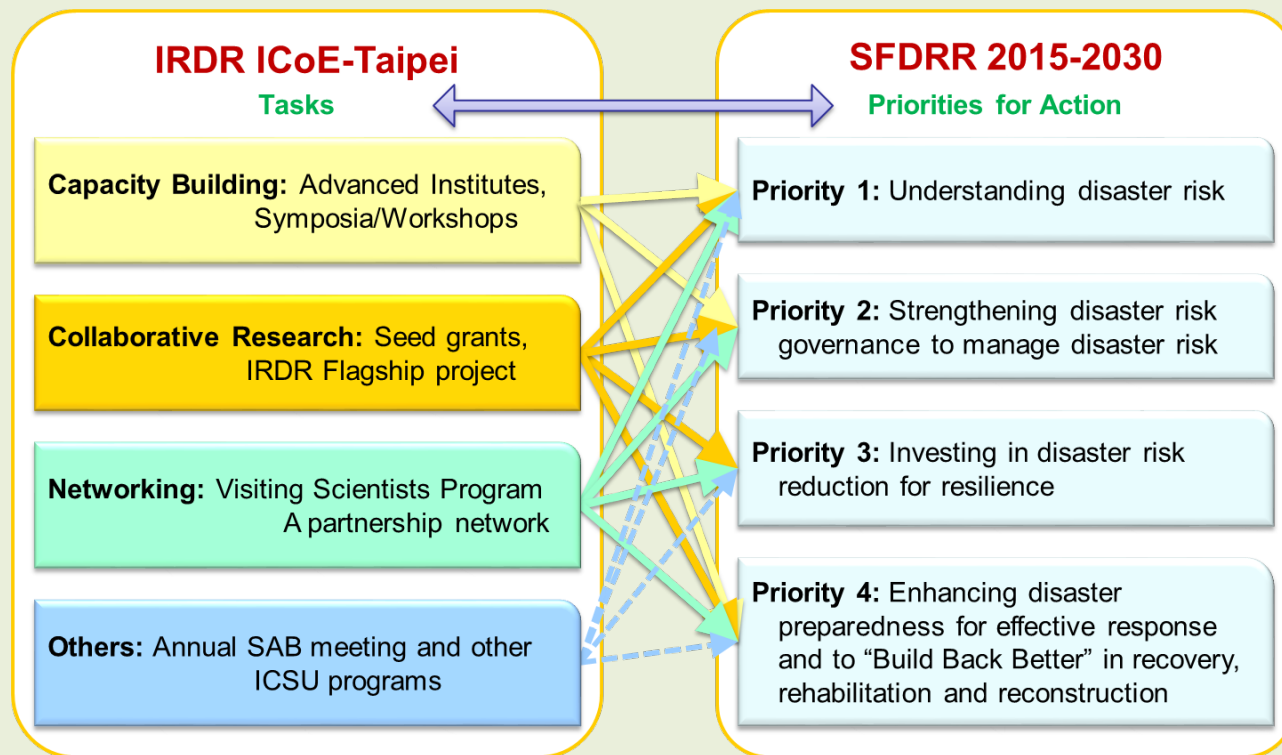Center for Sustainability Sciences, Chinese Academy of Science Located in Taipei

**Cancun, Mexico
May 23, 2017**

IRDR ICoE-Taipei

- Serves as an international platform for conducting **integrated research** on disaster risk from both the **natural and social science** perspectives.
- Builds a **partnership network** of disaster reduction research.

Expertise, training, and professional or policy ties

IRDR ICoE-Taipei
Tasks

Capacity Building: Advanced Institutes, Symposia/Workshops

Collaborative Research: Seed grants, IRDR Flagship project

Networking: Visiting Scientists Program A partnership network

Others: Annual SAB meeting and other ICSU programs

SFDRR 2015-2030
Priorities for Action

Priority 1: Understanding disaster risk

Priority 2: Strengthening disaster risk governance to manage disaster risk

Priority 3: Investing in disaster risk reduction for resilience

Priority 4: Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction

2012-2016

- Workshop : 21
- Network activity: 16
- Research project: 13
- Visiting Scientist: 4
  - ➢ Dr. Michelle Yung-Feng Huang
  - ➢ Prof. Shen-En Chen
  - ➢ Prof. Sloboden P. Simonovic
  - ➢ Dr. Kuan-Hui Elaine Lin

Topics (DRR) covered by capacity building activities (2015-2017)	• Climate service for health • Risk modeling and applications • Systems approach • Knowledge-based Actions	• Air pollution • Psychological intervention • Remote sensing technology • Science and policy dialogue
Bridging Science and Practice (2015-2017)	• Pan Asia Risk Reduction Fellowship Program (PARR) • Flagship Project (led by NCDR)	

Connections to IRDR research projects

- **ICoE-Taipei-NCDR Flagship Project:** Disaster Risk and Loss Reduction – Integrated Research, Policy, and Practice (led by NCDR)
  - Based on outcomes of all scientific research achievements and four IRDR groups.
  - Collaborate with 12 local governments.
  - Identify gaps and demands on science-based disaster management.
  - Transfer international experiences (Pan-Asia Risk Reduction (PARR) fellowship and Advanced Institute (AI) on Knowledge-based Actions for Disaster Risk Reduction.

- **Advanced Institute – Forensic Investigation of Disasters (FORIN)**
  - Held in Taiwan on 12-19 March, 2012.
  - 24 participants from research, education and practitioner communities in nine countries across South and Southeast Asia.
  - ICoE/NCDR published a 37-page FORIN report on "Forensic Investigation of Typhoon Morakot Disaster: Nansalu and Daniao Village Case Study" on May 2014.

- **2012 Advanced Institute on Data for Coastal Cities at Risk**
  - Held in Taiwan on 22-27 October, 2012.
  - 29 participants from research, education and practitioner communities in ten countries across Asia and Africa.

Highlights of past activities (2016-2017)

- The 23rd Pacific Science Congress (Jun 13-17, 2016) (organized by Chinese Academy of Science Located in Taipei). Two sessions:
  - Plenary Speech by Dr. Gordon McBean: "Integrated research for reducing disaster impacts for a sustainable future earth"
  - "Regional and local efforts on implementation of the Sendai Framework for disaster risk reduction".
- The 1st and 2nd Workshops to Strengthen Scientific Advisory Capacities for Disaster Risk (Aug 25-26,2016; Jan 16-17, 2017) (with IRDR IPO, NRCT, & ICSU ROAP)
- 2016 PARR Fellowship Program Inception Meeting (Sep 7, 2016) (with START, etc.)
- The International Training Workshop on Natural Disaster Reduction – Natural Disaster Risk Modeling and Applications (Sep 26-30, 2016) (with NCDR)
- CWB-APCC Workshop on Climate Service for Health (Oct 11-14, 2016) (with CWB & APCC)
- The 5th and 6th Workshop on Psychological Intervention after Disasters (PIAD) (Nov 14-17, 2016) (with IUPsyS, CPS, Jacobs Foundation, ICSU ROAP, UNU/IIGH, & CADS, FSU)
- Training Workshop on "Monitoring and Forecasting Severe Weather with Remote Sensing Technology (Nov 28 – Dec 1, 2016) (with NCDR & RCEC)
- AI on Knowledge-based Actions for Disaster Risk Reduction (AI-KBA): Central governments (Apr 17-21, 2017) (with NCDR & ICSU ROAP)

Collaborative research (2016-2017)

- Follow-up Seed Grants for AI-DRRLM, AI-KBA, and AI-SOCD
- ICoE-Taipei-NCDR Flagship Project

Ongoing

- Advanced Institute on Systems Approach for Slow Onset Climate Disasters (AI-SOCD): Air Pollution, Sensors, and Big Data (Jul 10-14, 2017) (with ICSU ROAP, Future Earth, Future Earth in Asia, IGAC, IGAC MANGO, & LESTARI UKM)
- The 6th Workshop on Psychological Intervention after Disasters (PIAD) (with IUPsyS, CPS, Jacobs Foundation, ICSU ROAP, UNU/IIGH, & CADS, FSU)
- Advanced Institute on DRR with Remote Sensing Technology (AI-DRR-RST): Severe weather (with NCDR, RCEC, & ICSU ROAP)

Gain from being an active part of the ICoE family

Share Taiwan's Integrated DRR knowledge, technologies, and experiences with countries mainly in Asian region.

- Taiwan has multi-disaster risks.
  - Typhoon, earthquake, land slide, flooding, drought, etc.
- Taiwan has professional human resources, science knowledge and technologies for DRR.
- Taiwan has strong government supports and good interfaces between academy, governments, and front-line organizations to convert knowledge to actions.

Next steps

- Criteria of activities:

  - Following the agreement between Chinese Academy of Science Located in Taipei and ICSU.

  - Enhancing capacity in integrated DRR research and practice in Asia, with a global perspective and with in particular expertise of Taiwanese scientists.

  - Facilitating integrated DRR knowledge transfer and collaboration among scientists from different disciplines, practitioners, and policy-makers.

  - Providing solutions for problems encountered in one of the four phases of disaster management.

2018 Plan

- AI-RST - Forest fire and peat fire

- AI-SOCD - Heat stress sensors, early warning, and information technology

- AI on Knowledge-based Actions for Local authorities

- AI-Governance

- Seed grants for AI-RST, AI-SOCD, and AI-KBA

- Visiting scholar

THANK YOU

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