

**19th Integrated Research on Disaster Risk (IRDR)
Science Committee Meeting**

**Beijing, China
16 APR, 2018**

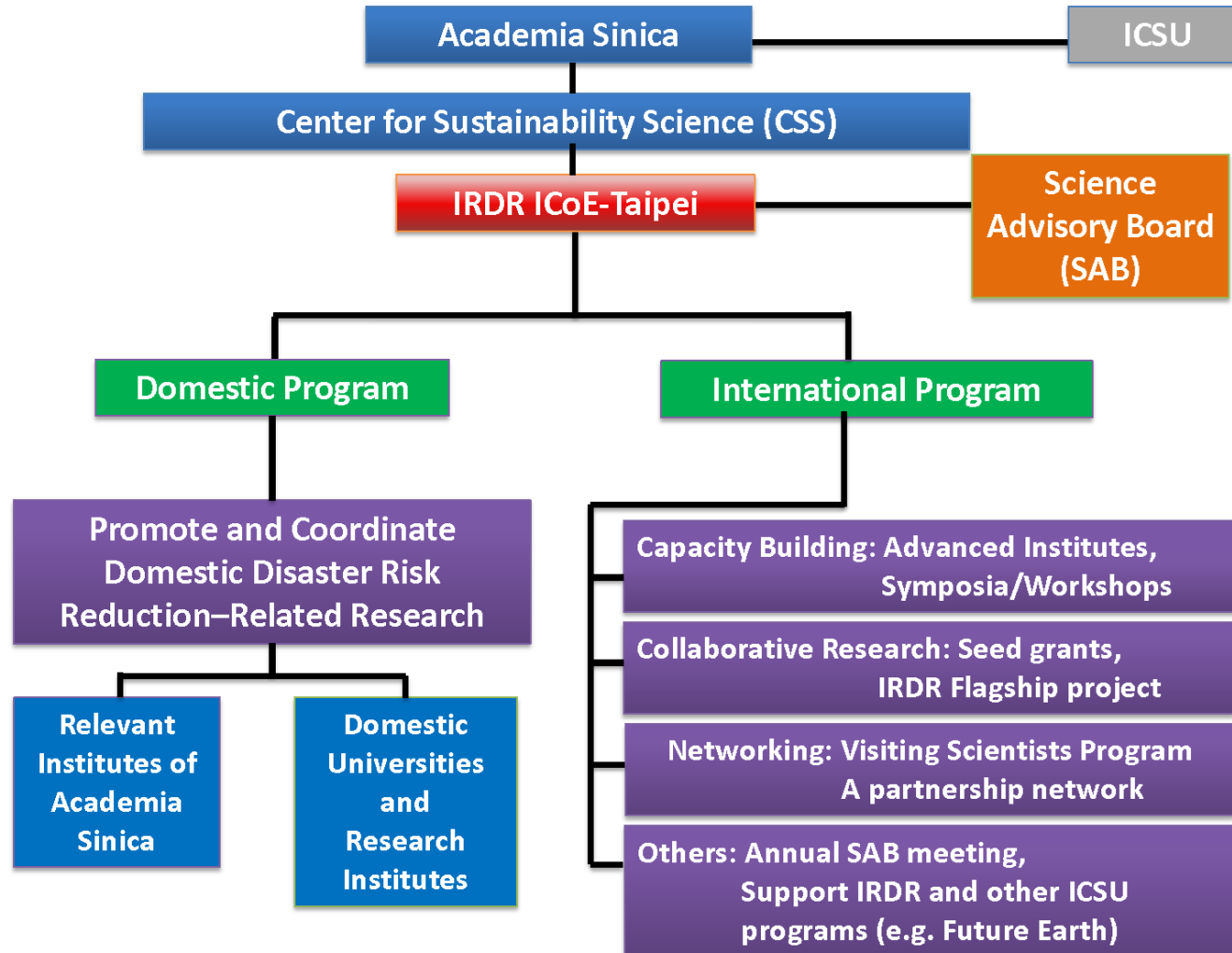
**Report from
Integrated Research on Disaster Risk (IRDR)
International Centre of Excellence (ICoE)- Taipei**

Jian-Cheng LEE

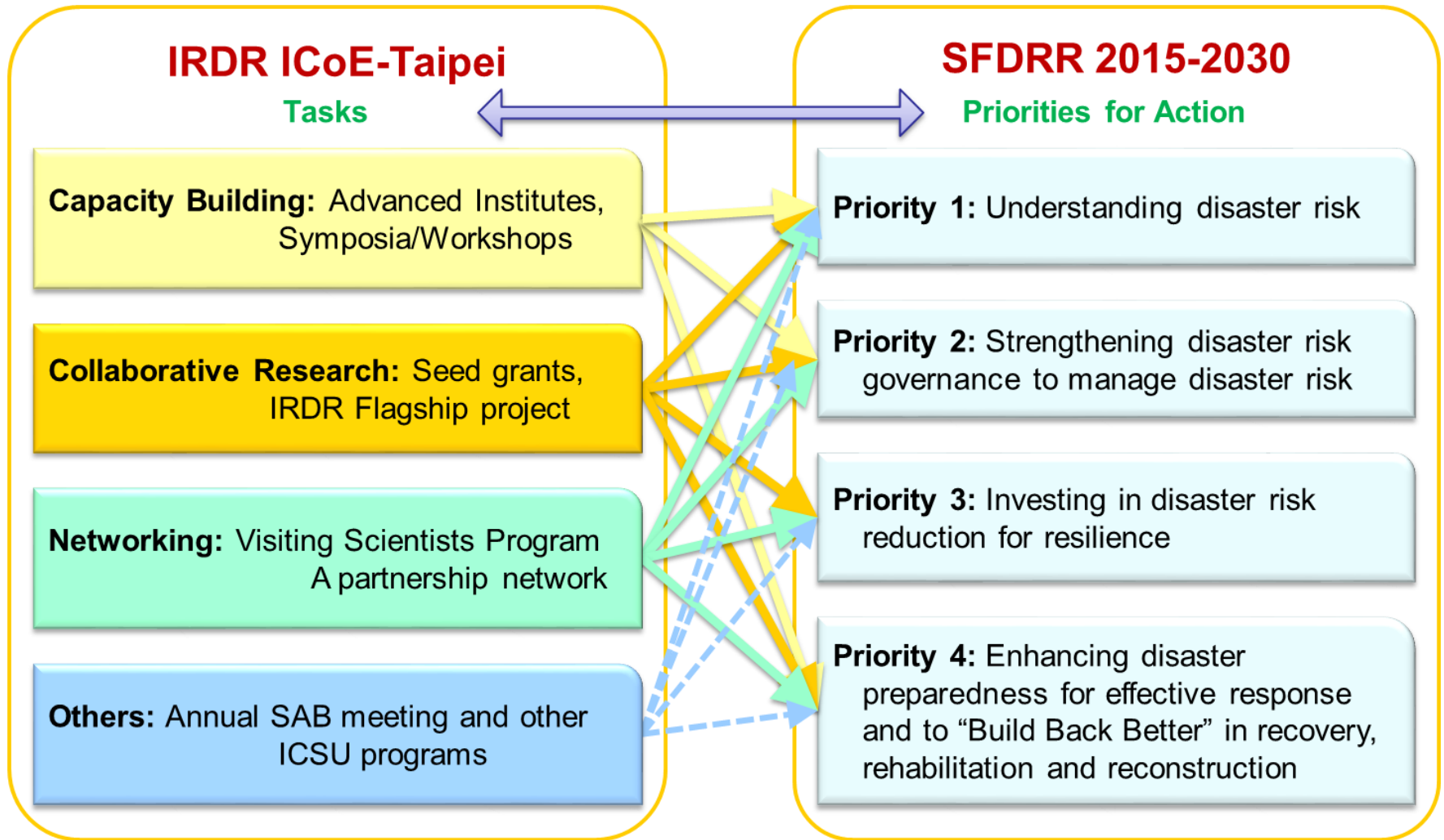
Executive Director, IRDR ICoE-Taipei

Research Fellow, Institute of Earth Sciences, Academia Sinica

- IRDR ICoE - Taipei has been established since **November 2010** at Academia Sinica and become *the first ICoE*.



Mission Statement of ICoE-Taipei



Capacity Building and Activities

International Activities conducted/ co-organized by IRDR ICoE - Taipei	
APR, 2011	Cities at Risk: Building Adaptive Capacities for Managing Climate Change Risks in Asian Coastal Cities (CAR II)
MAR, 2012	Advanced Institute on Forensic Investigations of Disasters – Southeast Asia (AI-FORIN)
OCT, 2012	Advanced Institute on Data for Coastal Cities at Risk (AI-DATA) IRDR Working Group - Disaster Loss Data & Impact Assessment (DATA) 1st Expert Meeting
APR, 2013	Brainstorming Session on “Future Asia”
OCT, 2013	Young Scientists' Conference on Integrated Research on Disaster Risk, Future Earth, and Sustainability
MAY, 2014	Forum on Future Earth in Taiwan
OCT, 2014	Future Earth in Asia: Regional Networking
NOV, 2014	World Social Science Fellows Seminar Sustainable Urbanization - Transformations to Sustainability in Urban Contexts (WSS-ISSC Seminar)
DEC, 2014	Pan-Asia Risk Reduction (PARR) Fellow Program seminar International Workshop on Post-Disaster Psychological Aid in the Asia-Pacific Region
APR, 2015	Advanced Institute on Disaster Risk Reduction and Loss Mitigation (AI-DRR & LM) - with seed grant projects
FEB-MAR, 2016	Future Earth Asian Perspective Symposium on Air Pollution Transdisciplinary Collaboration
JUN, 2016	The 23rd Pacific Science Congress - "Science, Technology, and Innovation: Building a Sustainable Future on Asia and the Pacific"
AUG, 2016	The 1st Workshop to Strengthen Scientific Advisory Capacities for Disaster Risk
SEP, 2016	The International Training Workshop on Natural Disaster Reduction - Natural Disaster Risk Modeling and Applications Pan-Asia Risk Reduction (PARR) Fellow Program seminar
NOV, 2016	The 5th Workshop on Psychological Intervention after Disaster (PIAD)
APR, 2017	Advanced Institute on Knowledge-based Actions for Disaster Risk Reduction (AI-KBA) - with seed grant projects*
JUL, 2017	Advanced Institute on Disaster Risk Reduction with Systems Approach for Slow-Onset Climate Disasters (AI-SOCD) Air Pollution, Sensors, and Big Data - with seed grants projects*



Young Scientists' Conference on Integrated Research on Disaster Risk, Future Earth, and Sustainability



World Social Science Fellows Seminar Sustainable Urbanization - Transformations to Sustainability in Urban Contexts (WSS-ISSC Seminar)



Advanced Institute on Disaster Risk Reduction with Systems Approach for Slow-Onset Climate Disasters (AI-SOCD) Air Pollution, Sensors, and Big Data - with seed grants projects



Advanced Institute on Forensic Investigations of Disasters – Southeast Asia (AI-FORIN)



Advanced Institute on Data for Coastal Cities at Risk (AI-DATA)



Advanced Institute on Disaster Risk Reduction and Loss Mitigation (AI-DRR & LM) - with seed grant projects



Advanced Institute on Knowledge-based Actions for Disaster Risk Reduction (AI-KBA) - with seed grant projects

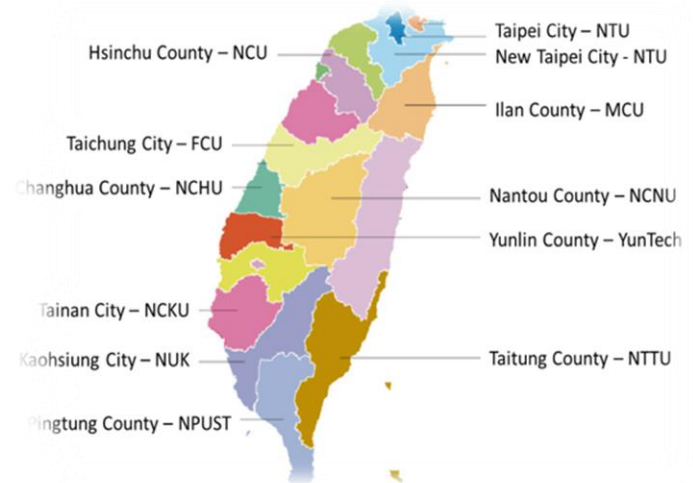
Collaborative Research

Flagship Project: Disaster Risk and Loss Reduction

– Integrated Research, Policy, and Practice

- The Flagship Project is led by the National Science and Technology Center for Disaster Reduction (NCDR) with the collaboration of IRDR ICoE-Taipei
- Focus on the Implementation of integrated science and technology to empower local governments on disaster risk reduction and emergency preparedness

- Expected outcomes:
 - To build up an **information sharing mechanism** to understand disaster risks better;
 - To **enhance DRR planning** focusing on local characteristics;
 - To **strengthen efficiency of emergency response**
- **International experience transfer** through PARR fellowship program



The flagship project engages one university as a partner of each local government for the science-policy collaboration. 12 pairs of partners between the university and local government have been built up.

Collaboration Research: Awards and Seed Grants

- Awards for **2013** “Young Scientists’ Conference on Integrated Research on Disaster Risk, Future Earth, and Sustainability”
10 awards were granted for the most outstanding presentation in both paper and poster categories at the end of the event.
- Seed Grants for **2015** “AI on Disaster Risk Reduction & Loss Mitigation, AI-DRR & LM”
4 regional interdisciplinary projects were selected
(2015-2016, 15K USD max for each project)
- Seed Grants for **2017** “AI on Knowledge-based Actions for Disaster Risk Reduction, AI-KBA)”
4 regional interdisciplinary projects were selected
(2017-2018, 15K USD max for each project)
- Seed Grants for **2017** “AI-DRR-Systems Approach for Slow Onset Climate Disasters, AI-SOCD”
Not yet sent out the call for proposals, plan to select 4 regional interdisciplinary projects (2017-2019, 15K USD max for each project)

Scientific Advisory Board (SAB) of IRDR ICoE-Taipei

- Last SAB Annual Meeting was held on **January 26, 2018**.
- Strategic directions and future plans
 - Capacity building programs and follow-up activities
 - Collaborative IRDR research and flagship project
 - Visiting scientist program and networking with international research organizations



Future Plan: 2018 ~ 2020 Activities

Organizing Activities in 2018-2020

- 1 PIAD Conference
- 2 AI SOCD at **Heat Stress** + Seed grants
- 3 AI **Seismic hazards I** + Seed grants
- 4 AI **Seismic hazards II** + Seed grants
- 5 AI **Volcanic hazards** + Seed grants
- 6 AI **Landslide hazards**+ Seed grants
- 7 AI **Knowledge-based Actions II** + Seed grants
- 8 Short course in Southeast Asia
- 9 IRDR Joint inter ICoEs Workshop
- 10 Bi-lateral conference between EOS and Taiwan
- 11 Visiting Scholars Program
- 12 Annual SAB meeting

2018 Advanced Institute on Disaster Risk Reduction with Systems Approach for Slow-Onset Climate Disasters (AI-SOCD) -- Heat Stress Sensors, Early Warning, and Information Technology

- Time : **June 4-8, 2018**
- Venue : Academia Sinica, Taipei, Taiwan
- 15-20 young to mid-career candidates from academia, practitioner, and policy communities from the Asia and the Pacific region are expected.
- 4 seed grants projects (USD 15 K each project)
- Call for participation: 16 MAR ~ 16 APR, 2018

2018 Advanced Institute - Landslide Risk Reduction (AI-LRRTS): From Site Specific to Regional Assessment

- Time: **July 2 – 7, 2018** (tentative)
- Venue: National Central University, Taoyuan, Taiwan
- 15~20 young to mid-career candidates from academia, practitioner, and policy communities from the Southeast Asian countries are mostly expected.
- 4 seed grants projects (USD 15 K each project)
- Call for participation: TBC



INTERNATIONAL
COUNCIL FOR SCIENCE
REGIONAL OFFICE FOR
ASIA AND THE PACIFIC



2018 Advanced Institute - Seismic hazards from Taiwan Earthquake Model

- Time: **SEP~ OCT, 2018** (tentative)
- Venue : Academia Sinica, Taipei, Taiwan
- 15~20 young to mid-career candidates from academia, practitioner, and policy communities from the Southeast Asian countries are mostly expected.
- 4 seed grants projects (USD 15 K each project)
- Call for participation: TBC

1st IRDR Joint inter ICoEs Workshop



- Time: 2018 or 2019
- Venue : Taipei, Taiwan
- Participants: 13 ICoEs and IPO
- Expectation:
 - Exchange insights and ideas among ICoEs
 - Learn experiences from each other
 - Establish new collaboration among ICoEs
 - Better overview the outcomes of ICoEs

Thank you
for your attention

Highlights of past activities connected to IRDR

- 2012 Advanced Institute – Forensic Investigation of Disasters (FORIN)
 - 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
- 2013 Young Scientists’ Conference on Integrated Research on Disaster Risk, Future Earth, and Sustainability
- 2015 Advanced Institute on Disaster Risk Reduction & Loss Mitigation
- 2016 The 23rd Pacific Science Congress. 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”.

Highlights of past activities connected to IRDR

- 2016, 2017 The 1st and 2nd Workshops to Strengthen Scientific Advisory Capacities for Disaster Risk
- 2016 The International Training Workshop on Natural Disaster Reduction – Natural Disaster Risk Modeling and Applications
- 2016 The 5th and 6th Workshop on Psychological Intervention after Disasters (PIAD)
- 2017 Advanced Institute on Knowledge-based Actions for Disaster Risk Reduction
- 2017 Advanced Institute on Systems Approach for Slow Onset Climate Disasters :Air Pollution, Sensors, and Big Data

Future Plan: being an active part of the ICoE family

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

- Following the agreement between **Academia Sinica and ICSU**.
- **Enhancing capacity** in integrated DRR research and practice in Asia, with a global perspective
- 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.

Future Plan: being an active part of the ICoE family

- Work closely with governmental agencies and institutes (Academia Sinica, NCDR, CWB, NCREE etc.) and **strengthens the capability in engagement as collaboration partners in regional site studies**
- Concentrate on **younger/ early career scientists'** training and providing them with seed grants for initiating regional DRR theme projects especially within the Global South
- IRDR ICoE – Taipei will build close partnerships with ICoEs, ICSU ROAP, START, and other international organizations **for implementation as “action network”** rather than simply research-based collaborations