*Draft Conference Booklet as of 26 May*

**2021 IRDR International Conference**

*Main conference on 8-10 June 2021 and pre-sessions during April - May 2021*

[*http://conference.irdrinternational.org/*](http://conference.irdrinternational.org/)

# **Title of the Conference**

**Advancing Risk Science for Development Safety: 10 Years of IRDR**

 Building a new risk research agenda for 2030 and beyond

# **Background and rationale**

Disaster frequencies and impacts have started to increase accelerated in the last 2 decades. Since 2019 the world community has witnessed many disasters, such as extensive wildfires, extreme weather events, outbreaks of desert locusts crossing continents and, worst of all, the Covid-19 pandemic, the impacts of which are still unfolding. The underlying vulnerabilities ingrained in our social, economic and financial systems are documented and becoming increasingly recognized, thereby supporting the call of the Sendai Framework for Disaster Risk Reduction (SFDRR) for a more comprehensive, forward looking, multi-hazard and systemic approach to disaster risk reduction and resilience. The need for a new and innovative approach for DRR has become very clear and urgent.

2015 is an important year for sustainability due to the adoption of the SDGs, SFDRR and Paris Agreement. 2021 is the first year of UN Decade of Action for the Global Goals which was agreed in 2020 to accelerate the process of 2030 Agenda of Sustainable Development. As we only have less than a decade to achieve these goals, it is paramount for scientific communities to review the progress made, to assess the effectiveness in generating the expected changes, and to re-position themselves under new development context and deliver, more effectively and coherently, toward the established global goals and targets.

The completion of 10-year phase of IRDR (2010-2020) thus comes in a good juncture of time. It is important to look back and examine the original IRDR science mission, the progress made, and lessons learnt over last ten years, and, at the same time, to look forward to 2030 and beyond on how science, or STEI (Science, Technology, Engineering and Innovations) as a whole, should respond to the changing and uncertain landscape of risk and development. For a safer, and more inclusive and sustainable world, science must act more effectively, coherently, strategically, and timely in generating policy changes and providing practical and tangible solutions.

# **Overall purpose of the Conference**

The overall purpose of the 2021 Conference is to reach a renewed consensus on the mission of STEI and put forward a novel proposal on the Global Research Agenda for disaster risk reduction and risk-informed development toward 2030 and beyond.

# **Main results expected**

* The Conference will officially launch the IRDR Compilation 2010-2020, which is the summary of work of IRDR community in the last decade.
* The Conference will adopt the new Global Research Agenda on Disaster Risk Reduction, led by the IRDR Co-sponsors and IRDR Scientific Committee, for submission to ISC Board for consideration.
* Further, the Conference will deliberate on strategies to support the implementation of the Global Research Agenda on DRR, including the possible arrangements for a new phase of IRDR.

# **Conference Organisation**

* Sponsors: International Science Council (ISC), United Nations Office for Disaster Risk Reduction (UNDRR), China Association for Science and Technology (CAST)
* Supporters: Chinese Academy of Sciences, Chinese Academy of Social Sciences, The World Academy of Sciences (tbc)
* Organising Committee: IRDR Scientific Committee, and representatives of ISC, UNDRR and CAST

*The Organising Committee is responsible for the overall design of the Agenda, identification of the speakers and moderators and provides operational guidance to the Conference Secretariat.*

* Hosts: IRDR International Programme Office, Aerospace Information Research Institute of Chinese Academy of Science, China Centre for International Science and Technology Exchange, IRDR National Committee of China
* Partners: IRDR National Committees and International Centres of Excellence, partners in ISC and UN families, private sectors and civil society organisations, the Horizon Global Youth Development Program
* Coordination Team: Riyanti DJALANTE (Chair of the Conference), Virginia JIMENEZ, Mahefasoa RANDRIANALIJAONA, Anne-Sophie STEVANCE, Jenty KIRSCH-WOOD, Tsuguki Ishio, YIN Lin, John HANDMER, CHEN Mingmei, CHEN Fang, HAN Qunli (Head of Secretariat)

*This Coordination Team is set up to deal with the routine preparation decisions of the Conference.*

* Secretariat: SUN Yue, YANG Shuang, LU Yisha, LANG Lang, LIAN Fang, Michael BOYLAND

*HAN Qunli will lead the Secretariat in liaison with the above bodies.*

# **Participation**

All participants need to register for the Conference.

The Conference Website: [**http://conference.irdrinternational.org/**](http://conference.irdrinternational.org/)

Contact of Conference Secretariat: conference@irdrinternational.org

# **Structure and conduction of the Conference**

Given the travel restrictions, the Conference will be organized virtually through online meeting platforms and will be broadcasted by live streams. All the conference documents including the summaries and reports by rapporteurs will be available in the Conference Website during the Conference.

The Conference will have a general structure of:

* Main Conference during 8-10 June 2021 (three hours each day)
* Six Pre-sessions during April-May 2021

# **Agenda and time table of Main Conference**

## **Day 1, UTC 11:00-14:00, 8 June 2021**

|  |  |
| --- | --- |
| UTC 11:00-11:40 | **Opening Session****Master of the session:** GUO Huadong, President of China National Commission for ISC**1. Opening remarks (25min)*** ISC: Peter GLUCKMAN, President-elect of ISC
* UNDRR: Mami MIZUTORI, Special Representative of UN Secretary-General on Disaster Risk Reduction
* CAST: HUAI Jinpeng, Chief Executive Officer of CAST
* IRDR: Riyanti DJALANTE, Chair of IRDR Scientific Committee

**2. Launch of *IRDR Compilation 2010-2020* (15min)*** IRDR Compilation: A ten-year science quest for Disaster Risk Reduction: HAN Qunli, Executive Director of IRDR-IPO
* Launch of the Compilation: Riyanti DJALANTE and HAN Qunli
 |
| UTC 11:40-11:45 | **Break with music** |
| UTC 11:45-13:05 | **Keynote Session 1: The changing landscape of DRR and risk dynamics**Climate change has been considered one of the top risk concerns in recent years, given its global and systemic nature, and the growing frequencies and intensities of climate extremes. The sudden outbreak of the Covid-19 pandemic in early 2020, which has been causing great losses of human lives and lasting damage to many dimensions of human societies, has made DRR a much more challenging mission. At the same time, countries are increasingly united under the visions and missions set by the UN 2030 Agreements, especially the Sendai Framework on Disaster Risk Reduction, the Paris Agreement, and the Sustainable Development Agenda, providing new paths for science communities to act together to address the concerns on the complexities of risks as mainstream development challenges. The three keynotes of the session on SDGs and Sendai Framework, Climate change and system risk and post Covid-19 pandemic provide for all the participants an overview on the characteristics of the changing risk landscape in the contemporary global development contexts, thus be better prepared the introduction and discussions on the new Global Research Agenda for DRR. **Moderator:** * Shuaib LWASA, Former Chair of IRDR Scientific Committee (2016-2019)
* Virgina JIMÉNEZ DÍAZ, Vice Chair of IRDR Scientific Committee

**Rapporteurs:** * Michael BOYLAND, Research Fellow of IRDR ICoE TDDR
* LIAN Fang, Science Officer of IRDR IPO

**1. Keynotes (50min)*** Climate change and systemic risk for development: Jana SILLMANN, IRDR SC member, Lead Author of IPCC AR6 WGI
* UNDRR/ISC Hazard Definition and Classification Review: Virginia MURRAY, Member of IRDR Scientific Committee, Chair of UNDRR/ISC Technical Working Group Hazard Definition and Classification Review
* STI in Supporting SDGs and Sendai Framework: GUO Huadong, UN 10-Member Group to support the Technology Facilitation Mechanism for SDGs

**2. Comments and Discussions (30min)*** 2 Respondents: (tbc)
* Discussion
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| UTC 13:05-13:10 | **Break** |
| UTC 13:10-14:00This session is for the WGs, NCs and ICoEs which did not organise the Pre-sessions. | **Main Session 1: IRDR achievements and lessons learnt**Much of the achievements and effort of IRDR community as well as the lessons learnt during 2010-2020 have been summarized in the IRDR 10-year Compilation. However, it is important for the members of the IRDR community to highlight their DRR research experience and lessons learnt. The session will provide better basis for the further discussions regarding the Global Research Agenda on DRR. **Moderator:** * Rajib SHAW, Chair of UNDRR STAG, Member of IRDR Scientific Committee
* Irasema ALCÁNTARA-AYALA, former Member of IRDR Scientific Committee (tbc)

**Rapporteurs:** * Kripa Shrestha, IRDR Young Scientist, ICIMOD (tbc)
* SONG Wanjuan, Research Associate of AIRCAS

**1.Presentations: Representatives of IRDR community** (list with names and specific titles tbc)* IRDR Working Group on DATA: SHM FAKHRUDDIN (confirmed)
* IRDR NC China: CHEN Fang (confirmed)
* IRDR NC France: Myriam Merad (confirmed, oral or report)
* IRDR NC Germany: Benni THIEBES
* IRDR NC Iran: Mohsen GHAFORY-ASHTIANY (confirmed)
* IRDR ICoE RIA: Mark Pelling (confirmed, oral or report)
* IRDR ICoE VaRM: Susan L. CUTTER
* IRDR ICoE UR&S: Omar-Dario CARDONA
* IRDR ICoE NSET: Ramesh GURAGAIN
* IRDR Young Scientist: Mizan Bustanul Fuady Bisri

**2.Discussion** |

## **Day 2, UTC 11:00-14:00, 9 June 2021**

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| --- | --- |
| UTC 11:00-12:10 | **Main Session 2: *Global Research Agenda on DRR***This session is to present officially the last version of the Global Research Agenda on DRR led by ISC, UNDRR and IRDR Scientific Committee through a broad-based drafting and consultation process in 2020 and 2021. **Moderator:** * Coleen VOGEL, Co-Chair of the Expert Review Group of the Global Research Agenda on DRR

**Rapporteur:** * Michael BOYLAND, Research Fellow of IRDR ICoE TDDR

**1. Introduction of the *Global Research Agenda on DRR**** Risk Research Agenda Development Group:
* John HANDMER, Co-Chair of the Expert Review Group of the Global Research Agenda on DRR
* Benjamin Alexander PAYNE, Lead Scientific Officer of Global Research Agenda Development Group

**2. Comments on the *Global Research Agenda on DRR**** 2-3 ERG and Core Group members (tbc):
 |
| UTC 12:10-12:15 | **Break with music** |
| UTC 12:15-14:00Please note that order of reports is following the sequence of consultation process, perspectives from regions, NCs and ICoEs, and IRDR partners. | **Main Session 3: Insights and reflections on *Global Research Agenda on DRR* and the implementation**This session is to bring on board the main recommendations and suggestions obtained from the Pre-sessions of the Conference and the multi-lateral consultation meetings for the Global Research Agenda. **Moderators:** * Riyanti DJALANTE, Chair of IRDR Scientific Committee
* Weisen LI, Member of IRDR Scientific Committee, Executive Director of APEC Emergency Preparedness Capacity Building Center (tbc)

**Rapporteurs: IRDR Young Scientists*** LIAN Fang, Science Officer of IRDR IPO
* Michael Boyland, Research Fellow of IRDR ICoE TDDR
* LEI Yu, Associate Professor of IMHR, CAS

**1. Reports from Pre-sessions and IRDR partners (10min each)*** IRDR ICoE REaL-Perspectives from Africa Region: Nico ELEMA, Director
* IRDR NC Japan - Promoting Coherence among DRR, CCA, and SDGs: Haruo HAYASHI, Member of IRDR Scientific Committee
* IRDR ICoE SEADPRI-UKM - Risk science for resilient cities-from concept to action: Fasha MUHAMAD, Research Fellow
* IRDR ICoE CCOUC - Latest frontier and application of Health-EDRM within the scope of COVID-19: Emily CHAN, Director
* IRDR ICoE RIG-WECEIPHE - Climate change and one health: TANG Xu, Executive Director
* ANSO DRR: Gretchen KALONJI and Cui Peng, Co-Chairs

**2. Comments and Discussion (25min)*** 2 Respondents: (tbc)
* Discussion
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## **Day 3, UTC 11:00-14:00, 10 June 2021**

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| --- | --- |
| UTC 11:00-12:10 | **Keynote Session 2: Knowledge in action**In the Global Research Agenda, “harness technologies, innovations, data and knowledge for risk reduction” is emphasized as the Theme 6 of Research Priorities. In the context of cascading, systemic, compound and complex risk, the technological advances in big data and Artificial Intelligence and the related analytical capacities have the significant potentials to contribute to all the aspects of disaster risk management and risk reduction. To understand the changing DRR landscape and managing uncertainties, it is important to explore DRR solutions through transferring the relevant knowledge and capacities to broader range of actors. DRR education and communication are essential in knowledge transfer and for building knowledge capacities. Young professionals play important roles as the DRR practitioners through their innovations and actions. The three keynotes and the discussions of this session are provided to illustrate how to enable actionable knowledges benefiting from the digital revolution in DRR, the engagement of young professionals and the efforts in DRR education and communication.**Moderator:** * Ailsa Holloway, Undergraduate Prog. Leader, Public and Environmental Health, Auckland University of Technology
* Alonso Brenes Torres, Project Coordinator, Program on Social Studies on Disaster Risk Reduction and Climate Change of the Latin American Faculty of Social Sciences (FLACSO) (tbc)

**Rapporteurs: IRDR Young Scientists (tbc)*** Sarah LINBERG, Research Assistant, University of California Berkeley (tbc)

**1. Keynotes (45min)*** Young professionals: Glenn Fernandez, IRDR Young Scientist (title of keynote tbc)
* Education and communication: Rajib SHAW, Professor of Keio University (title of keynote tbc)
* Two sides of the innovation coin: Capability Pull and Technology Push: Claudia Berchtold, Senior Researcher of Fraunhofer Institute for Technological Trend Analysis

**2. Comments and Discussions (25min)*** Respondents
* Nuraini Rahma HANIFA, Secretary General, U-INSPIRE Alliance
* SHM FAKHRUDDIN, Co-Chair, Linked Open Data for Global Disaster Risk Research (LODGD), CODATA
* Discussion
 |
| UTC 12:10-13:15 | **Keynote Session 3: Challenges and Opportunities for Cooperation** The new Global Research Agenda on DRR is part of the current global effort to accelerate science impact for 2030 Agenda. The Second Global Forum of Funders convened by ISC during 26-28 April 2021 deliberated the strategies and mechanisms for science funders to support mission-oriented science globally, which is highly relevant for the implementation of the new Global Research Agenda on DRR. In parallel, private sectors, including insurance enterprises, have been increasingly engaged in global DRR research and disaster impact mitigation actions by using financial facilities; and are important stakeholders for DRR research and policy communities. The two keynotes from above and the discussions of this session are provided to deepen the understanding the common challenges and to explore new opportunities for cooperation.**Moderator:** * Tiana Mahefasoa RANDRIANALIJAONA, Vice Chair of IRDR Scientgific Committee, Professor of University of Antananarivo (tbc)
* Nesreen Alhmoud, Member of IRDR Scientific Committee, Director of the Biosafety and Biosecurity Centre (tbc)

**Rapporteurs:** * Chandra Laxmi HADA, PRAGATI – Urban Disaster Risk Reduction Project (tbc)

**1. Keynotes (30min)*** A Framework to Unleash Mission-Oriented Science: Albert van Jaarsveld, CEO and Director General of IIASA, Co-lead of the Global Forum of Funders
* Adding Resilience (R) to ESG: Jeffrey R. Bohn, Chief Research Officer, Swiss Re Institute (tbc)

**2. Comments and Discussions (30min)*** 2-3 respondents (tbc)
* Angelika WIRTZ, former member of IRDR Scientific Committee, Head, NatCatSERVICE Geo Risks Research/Corporate Climate Centre, Munich Re (tbc)
* YE Qian, Executive Director of Integrated Risk Governance Project of Future Earth (tbc)
* Discussions
 |
| UTC 13:15-13:20 | **Break with music** |
| UTC 13:20-14:00 | **Closing Session**Master of the session: HAN Qunli**1. Adoptions (30min)*** Conclusion and adoption of the draft *Global Research Agenda on DRR*: ISC and UNDRR (tbc)
* Conference Summary with suggestions of the implementation for the Global Research Agenda: Riyanti DJALANTE

**2. Closing remarks (10min)*** ISC: Anne-Sophie STEVANCE
* UNDRR: Jenty KIRSCH-WOOD
* CAST: WANG Qinglin
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# **List of Pre-sessions as of 29 April**

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| --- | --- |
| Date: 19 AprilTime: 19:00-20:00 (UTC+8) | **Latest frontier and application of Health-EDRM within the scope of COVID-19****Organizer:** Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response (CCOUC), The Chinese University of Hong Kong; IRDR ICoE-CCOUC**Co-organizers:** Integrated Research on Disaster Risk (IRDR); CUHK Centre for Global Health (CGH); CUHK JC School of Public Health and Primary Care (SPHPC); GX Foundation |
| Date: 26 AprilTime: 14:00-17:00 (UTC+8) | **Climate change and One health****Organizer:** IRDR ICoE on Risk Interconnectivity and Governance on WEather/Climate Extremes Impact and Public HEalth (RIG-WECEIPHE), Fudan University**Co-organizers:** Integrated Research on Disaster Risk (IRDR), IRDR CHINA, WMO/IGAC MAPAQ Asian Office Shanghai, WHO Collaborating Centre for Health Technology Assessment and Management |
| Date: 6 MayTime: 16:00-18:00 (UTC+8) | **ANSO-DRR consultation (close door)****Organizer:** Alliance of International Science Organizations on Disaster Risk Reduction (ANSO-DRR)**Co-organizers:** Integrated Research on Disaster Risk (IRDR); Institute for Disaster Management and Reconstruction, Sichuan University - The Hong Kong Polytechnic University |
| Date: 7 MayTime: 17:00-19:00 (UTC+8) | **Risk Science for Resilient Cities - From Concept to Action****Convened by:** IRDR ICoE-SEADPRI-UKM, UNDRR Asia Pacific Science Technology Academia Advisory Group (AP-STAAG) and Asian Network on Climate Science and Technology (ANCST) **Supported by:** UNESCO Youth and Young Professionals Group on Disasters, International Science Council – Regional Office for the Asia Pacific (ISC-ROAP) and the Academy of Sciences Malaysia |
| Date: 20 MayTime: 20:00-22:00 (UTC+9) | **Promoting Coherence among Disaster Risk Reduction, Climate Change Adaptation, and Sustainable Development by Establishing an “Online Synthesis System (OSS)” and Fostering “Facilitators” using OSS****Organizers:** IRDR NC Japan; Science Council of Japan |
| Date: 21 MayTime: 12:00 – 15:00 CAT | **Global Research Agenda on DRR - Perspectives from Africa****Organizers:** IRDR ICoE for Risk Education and Learning (IRDR ICoE-REaL), PERIPERI U Secretariat, Stellenbosch University, South Africa |

<end>

# Appendix 1

# **The overview of Pre-sessions**

## Rationale and Objectives

IRDR Scientific Committee is working with International Science Council (ISC) and United Nations Office for Disaster Risk Reduction (UNDRR) on a new Global Research Agenda on DRR, which will be adopted during the 2021 IRDR Conference in June 2021.

The main purposes of the Pre-sessions are to give timely input to Global Research Agenda and as part of the consultation process from different stakeholders. Inputs are particularly sought from the perspectives of regional and national needs and dynamics, and interest from special fields of research or groups, such as young professionals and industries in DRR, and make suggestions and recommendations on how to implement the new research agenda.

## Organisation

* The Pre-sessions are expected to be initiated and organised by IRDR SC members, NCs, ICoEs and IRDR Young Scientists. Cooperation with IRDR partners are very much encouraged. IRDR SC and IPO will provide support if it is needed.
* The organisers of each Pre-session will prepare a specific concept note and agenda in consultation with IRDR SC Chair and IRDR IPO.
* The calendar of the pre-sessions will be continuedly updated and put on IRDR portal and social media.

## Expected outcomes and Reporting

The outcomes of Pre-sessions will be summarized as the feedback of the Global Research Agenda. The report of each Pre-session should follow the template attached below and be submitted to SC Chair and IRDR IPO **one week after the session.** All reports will be presented in the Main Conference on DAY 2, 9 June 2021.

## ***Template of reporting in the pre-sessions***

TOPIC:

Organisers:

|  |  |  |
| --- | --- | --- |
| Questions | Answers/ Responses | Stakeholders  |
| 1. Changing global/regional/national risk landscape |  |  |
| 2. Identify three major research priorities (refer to the Global Research Agenda) |  |  |
| 3.Implementing the Agenda/Science in actions |  |  |
| 4.Other suggestions and comments on the Global Research Agenda |  |  |