ADVANCING RISK SCIENCE FOR DEVELOPMENT SAFETY: 10 YEARS OF IRDR BUILDING A NEW RISK RESEARCH AGENDA FOR 2030 AND BEYOND

8-10 June 2021

Program



nternational Science Council







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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

- 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.





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The Conference will officially launch the IRDR Compilation 2010-2020, which is the summary of work of

AGENDA AND TIME TABLE FOR THE MAIN CONFERENCE

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

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UTC 11:00-11:40	Opening Session
	Master of the session:
	GUO Huadong, President of China National Commission for ISC
	1. Opening remarks (25min)
	Peter GLUCKMAN, President-elect of ISC
	Mami MIZUTORI, Special Representative of UN Secretary-General on Disaster Risk Reduction
	• HUAI Jinpeng, Executive Vice President and Chief Executive Secretary of CAST
	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

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UTC 11:45-12:55

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 all the participants with an overview on the characteristics of the changing risk landscape in the contemporary global development contexts, thus be better prepared for the introduction and discussions on the new Global Research Agenda for DRR.

Moderators:

Rapporteurs:

- Michael BOYLAND, Research Fellow of IRDR ICoE TDDR
- LIAN Fang, Science Officer of IRDR IPO





- **Shuaib LWASA**, Former Chair of IRDR Scientific Committee (2016-2019)

- Virgina JIMÉNEZ DÍAZ, Vice Chair of IRDR Scientific Committee





	1. Keynotes (50min)		1. Presentations: Representative
	 Climate Change and Systemic Risk for Development: Jana SILLMANN, IRDR SC member, Lead Author of IPCC AR6 WGI 		IRDR Working Group on DATA
			IRDR NC China: CHEN Fang
	UNDRR/ISC Hazard Definition and Classification Review: Virginia MURRAY, Member of IRDR Scientific Committee, Chair of UNDRR/ISC Technical Working		IRDR NC France: Myriam ME
	Group Hazard Definition and Classification Review		IRDR NC Iran: Mohsen GHAB
	• STI in Supporting SDGs and Sendai Framework: GUO Huadong, UN 10-Member		IRDR ICoE RIA: Mark PELLING
	Group to support the Technology Facilitation Mechanism for SDGs (2018-2021)		IRDR ICoE CR: David JOHNS
	2. Discussions (20min)		IRDR Young Scientist: Mizan
UTC 12:55-13:00	Break		2.Discussion
UTC 13:00-14:00	Main Session 1: IRDR Achievements and Lessons Learnt		
	Much of the achievements and effort of IRDR community as well as the lessons learnt		
This session is for			
the WGs, NCs			
and ICoEs which did not organise			
the Pre-sessions.	Moderators:		
	- Rajib SHAW, Chair of UNDRR STAG, Member of IRDR Scientific Committee		
	- Irasema ALCÁNTARA-AYALA, Former Member of IRDR Scientific Committee		
	Rapporteurs:	sk	
		m *	
	- ZHANG Haiying, Assistant Professor of AIRCAS		





atives of IRDR community

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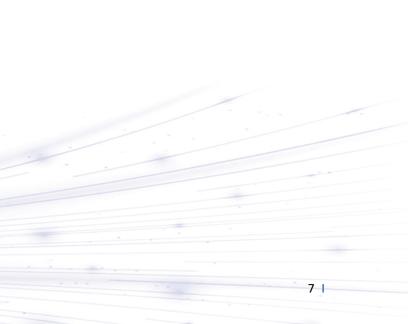
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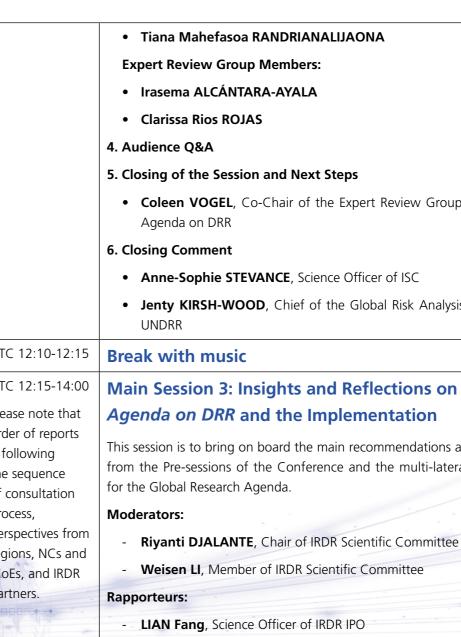
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Day 2, UTC 11:00-14:00, 9 June 2021

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:	
	- Anne-Sophie STEVANCE, Science Officer of ISC	
	Rapporteur:	
	- Michael BOYLAND, Core Group Member of the Global Research Agenda on DRR; Research Fellow of IRDR ICoE TDDR	
	1. Welcome to the Session	
	Anne-Sophie STEVANCE, on behalf of ISC and UNDRR	
	Coleen VOGEL, Co-Chair of the Expert Review Group of the Global Research Agenda on DRR, on behalf of the Global Research Agenda Development Group	UTC 12:10
	2. Presentation of the Global Research Agenda on DRR	UTC 12:15
	Global Research Agenda Development Group:	Please note order of re
	John HANDMER, Co-Chair of the Expert Review Group of the Global Research Agenda on DRR	is following
	Benjamin Alexander PAYNE, Lead Scientific Officer of Global Research Agenda Development Group	of consulta process,
	3. Reflections on the Global Research Agenda on DRR	perspective regions, NC
	Core Group Members:	ICoEs, and
	GUO Huadong	partners.
	Chloe DEMROVSKY	2
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NDRR

• Coleen VOGEL, Co-Chair of the Expert Review Group of the Global Research

• Jenty KIRSH-WOOD, Chief of the Global Risk Analysis and Reporting Section,

Main Session 3: Insights and Reflections on Global Research

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

2. Discussions

| 10

-	LEI Yu, Associate Professor of IMHR, CAS
1. R	eports 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, Co-Chair of ANSO DRR

Michael BOYLAND, Research Fellow of IRDR ICoE TDDR





Day 3, UTC 11:00-14:00, 10 June 2021			
UTC 11:00-12:10	Keynote Session 2: Knowled		
	In the Global Research Agenda, "ha knowledge for risk reduction" is emph In the context of cascading, systemic, of advances in big data and Artificial Inte have the significant potentials to co management and risk reduction. To u managing uncertainties, it is important the relevant knowledge and capacities and communication are essential in kn capacities. Young professionals play imp		
	their innovations and actions. The three are provided to illustrate how to enab		
	digital revolution in DPP the ongagon		

Moderators:

- Health, Auckland University of Technology
- Studies on Disaster Risk (LA RED)

Rapporteurs:

- LIAN Fang, Science Officer of IRDR IPO





dge in Action

arness technologies, innovations, data and hasized as the Theme 6 of Research Priorities. compound and complex risk, the technological elligence and the related analytical capacities ontribute to all the aspects of disaster risk understand the changing DRR landscape and t to explore DRR solutions through transferring es to broader range of actors. DRR education nowledge transfer and for building knowledge portant roles as the DRR practitioners through ee keynotes and the discussions of this session le actionable knowledges benefiting from the digital revolution in DRR, the engagement of young professionals and the efforts in DRR education and communication.

- Ailsa HOLLOWAY, Undergraduate Prog. Leader, Public and Environmental

- Alonso Brenes TORRES, Coordinator of the Latin American Network of Social

Sarah LINBERG, Research Assistant, University of California Berkeley

1. Keynotes (45min)

- Unleashing the Potentials of Young DRR Professionals through Bigger Roles and Better Support: Glenn FERNANDEZ, IRDR Young Scientist
- Education and Communication: Rajib SHAW, Professor of Keio University
- 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 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.

Moderators:

- Committee, Professor of University of Antananarivo

Rapporteurs:

- LIAN Fang, Science Officer of IRDR IPO

1. Keynotes (30min)





Keynote Session 3: Challenges and Opportunities for

- Tiana Mahefasoa RANDRIANALIJAONA, Vice Chair of IRDR Scientific

- Nisreen DaifAllah AL-HMOUD, Member of IRDR Scientific Committee, Director of the Biosafety and Biosecurity Centre, the Royal Scientific Society of Jordan

- OUYANG Huiling, Postdoc Researcher of IRDR ICoE-RIG-WECEIPHE

 A Framework to Unleash Mission-Oriented Science: Albert van JAARSVELD, CEO and Director General of IIASA, Co-lead of the Global Forum of Funders

Insurance mechanisms in the changing risk landscape: HUANG Hairong, Head SRI Centre China, Swiss Reinsurance Company Ltd. Beijing Branch

	2. Comments and Discussions (30min)				
	Respondents				
	• Spyros SCHISMENOS , IRDR Young Scientist, Co-founder and CEO of My Safety Approved LLC				
	• YE Qian , Executive Director of Integrated Risk Governance Project of Future Earth				
	Discussions				
ITC 13:15-13:20	Break with music				
TC 13:20-14:00	Closing Session				
	Master of the Session: HAN Qunli				
	1. Conference Summary (25min)				
	Summary of Keynote Sessions and Main Sessions: Rapporteurs of all sessions				
	Conference Summary with suggestions of the implementation for the Global Research Agenda: Riyanti DJALANTE				
	2. Closing Remarks (15min)				
	The closing will mark on the soft launching of the Global Research Agenda on DRR				
	Anne-Sophie STEVANCE, Science Officer of ISC				
	 Jenty KIRSCH-WOOD, Chief of the Global Risk Analysis and Reporting Section, UNDRR 				
	WANG Qinglin, Deputy Director General, Department of International Affairs, CAST				





List of Pre-sessions during April-May 2021 Date: 19 April Latest Frontier and Application of Health-EDRM within the Time: 19:00-20:00 Scope of COVID-19 (UTC+8) 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 April **Climate Change and One health** Time: 14:00-17:00 Organizer: IRDR ICoE on Risk Interconnectivity and Governance on WEather/Climate (UTC+8) 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 May **ANSO-DRR Consultation (close door)** Time: 16:00-18:00 **Organizer:** Alliance of International Science Organizations on Disaster Risk (UTC+8) 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 May	Risk Science for Resilient Cities - From Concept to Action		
Time: 17:00-19:00 (UTC+8)	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 May	Promoting Coherence among Disaster Risk Reduction,		
Time: 20:00-22:00 (UTC+9)	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 May	Global Research Agenda on DRR - Perspectives from Africa		
Time: 12:00-15:00 CAT	Organizers: IRDR ICoE for Risk Education and Learning (IRDR ICoE-REaL), PERIPERI U Secretariat, Stellenbosch University, South Africa		





ORGANIZATION

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

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 IRDR National Committee of China Aerospace Information Research Institute, Chinese Academy of Sciences China Centre for International Science and Technology Exchange





PARTNERS

IRDR National Committees and International Centres of Excellence ISC and UN Partners Horizon Global Youth Development Program Private sectors and civil society organisations

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.

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PARTICIPATION

All participants need to register for the Conference. The Conference Website: 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

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 continually 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.





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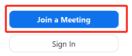
I. PC or MAC Users

1. Download "ZOOM"

2. Two Ways of "Join the Meeting"

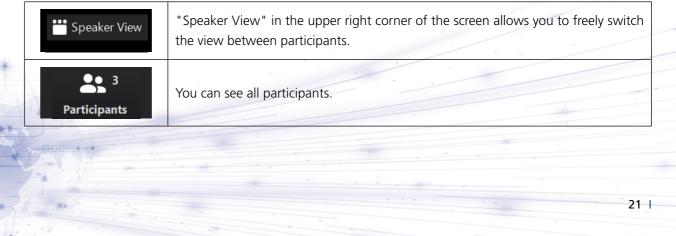
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(2). Open "ZOOM" app and click "Join a Meeting"; Enter the meeting ID and your Full Name (in English)
Meeting ID: 983 8490 4607 Password: 123456

zoom



3. Settings:

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↑ Share Screen	"Share Screen" allows you to share your PPT or other documents, which can be seen by all participants.
Interpretation	Click to switch between "English" and "Chinese" languages.
Leave Meeting	Click to leave the meeting.





II. Mobile Users

1. IOS: search for "ZOOM" app in the APP Store and download; 2. Two Ways of "Join the Meeting"

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(2) Tap "Join a Meeting", type in the meeting ID and your real name (in English), and then tap "Join Meeting"; fill in the meeting password and press "OK".

Meeting ID: 983 8490 4607

Password: 123456

Start a Meeting Start or join a video meeting on the go

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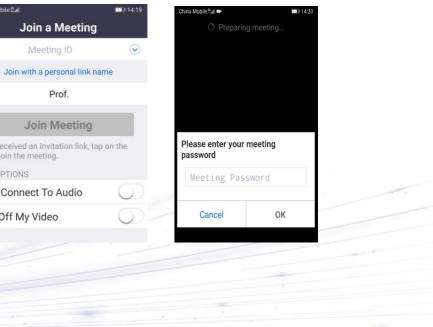
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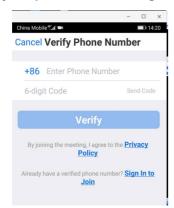








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4. Settings:

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Speaker View	"Speaker View" in the upper right corner of the screen allows you to freely swite view between participants.	
Participants	You can see all participants.	
↑ Share Screen	Tap "Share Screen", select the PPT or other documents to be shared from your phone, and tap "Share" to share it to all participants.	
Interpretation	Tap to switch between "English" and "Chinese" languages.	
Leave Meeting	Tap to leave the meeting.	





LIVE BROADCAST

The conference will be live broadcast via PC terminal of CCTV. Click the link to enter the live broadcast: Live link for The Integrated Research on Disaster Risk 2021 International Conference (Start from UTC 11:00, 8 June, 2021)

https://gongyi.cctv.com/special/irdr2021/

Or scan the QR code below:









