



IRDR

Integrated Research on Disaster Risk

Declaration

Science for an Inclusive, Safe and Sustainable World: Actions of IRDR Global Community

IRDR 2024 International Conference

2024 World Science and Technology Development Forum Thematic Session VI

Beijing, China during 22-24 October 2024

We, the members of the Scientific Committee of the Integrated Research on Disaster Risk Programme (IRDR), the representatives of IRDR International Centres of Excellence, IRDR National Committees and the Young Scientists Programme, together with international participants attending the IRDR 2024 International Conference and 2024 World Science and Technology Development Forum Thematic Session VI, proclaims this declaration entitled *Science for an Inclusive, Safe and Sustainable World: Actions of IRDR Global Community*.

Acknowledging the long-standing and ongoing contributions of the International Science Council (ISC); the United Nations Office for Disaster Risk Reduction (UNDRR); other United Nations (UN), intergovernmental, international and national organizations to the reduction of disaster risks for sustainable development;

Recognizing that the Conference is held at a critical juncture of time, Sendai Framework for Disaster Risk Reduction has passed its mid-term for the implementation but major challenges remain in reaching its main targets for 2030, while the global landscape of disaster risk has witnessed increasingly rapid and profound changes, bringing in new uncertainties for development and investment.

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Considering that

- there are growing calls in recent years for science and technology to engage with bolder actions to accelerate the implementation of all UN 2030 Agreements, and
- the UN General Assembly has proclaimed International Decade of Sciences for Sustainable Development 2024-2033 as one of the most recent engagement opportunities for changes;

Expressing the full commitment of IRDR to the Sendai Framework for Disaster Risk Reduction 2015-2030 and its leading role and responsibility in the implementation and facilitation of ***A Framework for Global Science in Support of Risk-informed Sustainable Development and Planetary Health*** (the Framework) launched in 2021 by IRDR, ISC and UNDRR,

Recalling that the **nine global research priorities** established in the Framework are each paramount and long-term in nature, and are interconnected one to another, providing the sound foundation for the design of IRDR research plans, and partnership in its new phase,

Emphasizing the necessity to further spearhead the actions of IRDR for impact, taking into account the scientific capital achieved during the first phase of IRDR, the results of the Mid-term Review of Sendai Framework for Disaster Risk Reduction and key recommendations, the main output of IRDR workshops and meetings in 2023-2024 as pre-events of this Conference, and the IRDR survey regarding priority actions, as well as thorough exchanges during the Conference and the Session,

Recognizing the importance of working together with broader DRR partnerships across sectors and drawing on expertise at global, regional and national levels, including stakeholders and sectors from, but not limited to, governments, public sectors, private sectors, academia, civil society, media, and UN agencies,

Agree that IRDR global community takes the following actions in accordance with the following global research priorities, namely:

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- **Harness technologies, data and knowledge for risk reduction**, with a view to maximizing the benefits of data sciences, new technologies and methodologies for DRR, and reducing digital divides between countries and regions in terms of technical capacities and services as well as tackling the emerging risk and compounding disaster -related risk.

A) Initiate programmes to collect and study successful and representative cases of DRR, with details on their underlying technology and knowledge base behind the story.

B) Transform into a knowledge tank and disseminate to people in need.

C) Continue the IRDR Young Scientist Programme and mobilize resources for higher education opportunities, including master's, PhD, post-doctoral, and visiting researcher programs, while encouraging grassroots or on-the-ground researchers to bridge the gap between science and policy.

D) Set-up strategic guidelines and programs on the development and implementation of end-to-end Early Warning System and Response System to support the global target of Early Warning for All.

- **Support regional and national science and knowledge for policy and action**, ensuring that scientific achievements in DRR are relevant and applicable within diverse social and cultural contexts of the countries and regions, bridging the policy-practice gap in DRR by promoting an understanding of the different roles of science in society, including citizen science.

A) Co-design tailored training/workshops disseminating the latest DRR knowledge to different levels of government sectors, decision makers and practitioners, young scientists, women, persons with disability (PWD) and indigenous people.

B) Co-develop pilot programmes demonstrating the application of scientific findings to local contexts, which can serve as case studies for scaling up successful approaches to the national or regional levels.

C) Co-implement high-impact programs that utilized a transdisciplinary approach for building societal resilience across vulnerable regions.

D) Setup an advisory board and provide technical assistance to newly growing institutions/research centre working on multidisciplinary DRR researches. Continuous support and develop sustainability of existing and or new regional networks on DRR.

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- **Address inequalities, injustice and marginalization**, to make sure IRDR is fully committed to countries and regions and communities that are more vulnerable and in need of applied science interventions, support and capacity development. This involves addressing the epistemic inequalities of disadvantaged communities regarding disaster risk; fostering situated knowledge that integrates local needs; and adapting science and technology solutions regarding prevention, management and recovery to vulnerable populations that usually have limited access to the benefits of science.

A) Promote the use of risk assessments to prioritize regions and communities that are most vulnerable to disasters and climate change, ensuring resources are allocated where they are needed most.

B) Design and share training and capacity-building programs to address the unique needs of the marginalized communities and strengthen local skills and knowledge of disaster risk reduction and resilience culture.

C) Provide opportunities, mentorship and leadership programs to foster innovations initiated by the vulnerable and marginalized communities at risk.

Decide that

- IRDR actions in accordance with the above priorities will be prepared, coordinated, evaluated and promoted by the IRDR Scientific Committee (IRDR-SC) and IRDR International Programme Office (IRDR-IPO), with coherent and bold effort to mobilize the needed resources and partnership to facilitate collaboration among various DRR stakeholders. **Establish DRR awards and IRDR fellowship** to attract and reward science and knowledge providers and practitioners, and to support a more sustainable resilience program;

- IRDR International Centres of Excellence, National Committees and their host institutions will work with IRDR SC and IRDR IPO and the main partners within the networks of International Science Council and UNDRR to a) formulate and participate in **IRDR Work Streams**, collaboratively effortsto define and advance in specific areas of focus for research and action on disaster risk reduction; b) to develop **IRDR Pilot Studies and Continent-to-Continent initiatives** and to contribute impactful capacity building programs for regions, countries and communities, especially in the global south,

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to effectively manage disaster risk and resilience culture through professional training, workshops resource, sharing and technological transfer, branding IRDR as a leading and go-to solution provider when DRR in need to facilitate bridging gaps between sciences-policy-action;

– A first set of IRDR Work Streams, Benchmarking Studies and Pilot Projects with resources mobilized from the multi-sectoral partners will be established for the implementation of the identified priorities above focusing on:

- **Risk-informed development:** This initiative will leverage advanced technologies for accurate multi-hazard and systemic risk assessments, integrating these tools into national development strategies. The goal is to mainstream DRR into urban resilience planning, particularly in rapidly urbanizing areas.

- **Climate change and public health:** This initiative will focus on understanding the impacts of climate change on public health and developing enhanced early warning systems. An integrated approach will be designed to address vulnerabilities, especially gender vulnerabilities, and health inequities exacerbated by extreme climate events.

- **DRR financing:** This initiative will explore diverse financing mechanisms and innovative financial tools for investing in resilient infrastructure and supporting post-disaster recovery from a human rights perspective.

- **DRR education:** This initiative aims to empower young professionals and local practitioners from multi-stakeholder and multi-sector through capacity-building programmes, especially in Africa and Asia-Pacific.

- **Citizen Science Research:** This initiative will engage local communities in assessing their vulnerabilities through citizen science. It targets to build resilience by providing tools and technologies and promoting anticipatory actions.

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Prepare for effective interventions and DRR investment at global, regional, national and thematic platforms to ensure the leading roles of IRDR as an international interdisciplinary programme for policy change in the field of disaster risk reduction, equitable resilience, and development safety. In this regard, IRDR is committed to contribute to the Global Platform for Disaster Risk Reduction (GP2025), delivering specific science policy briefs and other relevant outputs to the Post-2030 agenda, as well as organizing meetings and discussion forums at the events.

We express our sincere appreciation to the China Association of Science and Technology (CAST) and the Aerospace Information Research Institute of the Chinese Academy of Sciences (AIRCAS) for the effective arrangements and support the success of the Conference and the Session.

<End of Declaration>

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