

Science and Technology Declaration

VIII Regional Platform for Disaster Risk Reduction 2023

Punta del Este, Uruguay

"Science lies at the heart of sustainable development.... Science has always been embedded in society, and more than ever it should consciously engage more with current societal and political challenges and debates."

(Independent Group of Scientists appointed by the Secretary-General of the United Nations, Global Sustainable Development Report 2019: The Future is Now [®] Science for Achieving Sustainable Development, (United Nations, New York, 2019))

Preamble

We, the signatories to this Declaration, members of the UNDRR Regional Science and Technical Advisory Group (RSTAG) of the Americas and the Caribbean (AC), greatly appreciate the value of science and technology in Disaster Risk Reduction for the AC region, implemented through a government-led approach and with the support of other stakeholders. Improving funding investments, and continuing to develop the capacity of science, technology, research and innovation actors, is vital to address societal concerns. The UNDRR RSTAG is a regional effort comprising members from academia, government, and other sectors that contributes to developing science capacity for global, regional and local action in disaster risk reduction and climate change.

Context

Disasters are major barriers to countries achieving the Sustainable Development Goals. Science provides a sound basis for increasing resilience to hazards, particularly since climate change exacerbates the frequency and intensity of disasters in vulnerable communities. However, within the Americas and the Caribbean, science and technology are often poorly funded, and the interface between science and practice, including disaster risk reduction and how it



relates to economic development policy, is weak. Further, the transdisciplinary, participatory and co-productive scientific approach required to solve problems and increase resilience is often neglected. Strengthening science and technology for disaster risk reduction from an open science approach requires the concerted actions of governments, communities, the private sector, civil society and academia.

In light of these considerations, the members of the RSTAG commit to practicing and promoting, amongst the scientific and technological development communities in the region, the following actions and principles:

- Make research and technological development more collaborative, co-productive and inclusive. Keys to achieving this goal include incorporating the knowledge of indigenous peoples and local communities, with their prior and informed consent, and seeking knowledge that is relevant to policy and transdisciplinary practice by engaging with other scientific and practitioner networks.
- 2. Further develop and adoptevidence-based approaches relevant to resilient development and humanitarian practice.
- 3. Promote research and education within high-risk regions and communities by recognizing, establishing and promoting cross-institutional, interdisciplinary and transdisciplinary collaborations.
- 4. Enfranchise affected communities by enhancing capacity development in disaster risk reduction and making them the center of our concern and work, to achieve a comprehensive understanding of disaster risk by all relevant stakeholders.
- 5. Promote dialogue with decision makers that leads to more consistent and permanent application and use of recommendations derived from disaster risk analysis and potential risk scenarios.
- 6. Stress the importance of employing current knowledge developed through scientific and technological advance more effectively thus avoiding "preventable" impacts. This approach is promoted in the light of the recent impacts of the earthquakes in Türkiye and the Syrian Arab Republic, along with the consequences of floods and landslides in Brazil's southeastern state of São Paulo, and drought in East Africa, which have caused high impacts on persons and infrastructure.



- 7. Promote research to gain a better understanding of the process of the social construction of risk, particularly as this relates to understanding underlying root causes and risk drivers and the accountability of different social actors.
- 8. Promote and facilitate academic freedom, strengthening existing knowledge on practice and effectiveness, uphold scientific ethics, and be accountable for the research we do, how it is undertaken and how we use it.
- 9. Seek to make results and data as open and public as possible, ensuring that our ethical obligations to the populations we research come first.
- 10. Stress the importance of the inputs and capacities for diverse corrective and prospective disaster risk reduction processes, including those based on natural and ecosystemic solutions, while actively promoting ongoing research and technological capabilities for anticipatory and early action disaster preparedness and response-related actions.
- 11. Research both the positive and the negative impacts of the recommendations for improving policy and practice that emanate from the present Regional Platform (RP23) as well as those from previous regional platforms.

The present Ministerial Meeting is an excellent venue to support an endeavor where success depends on improving human development, well-being, social coherence and sustainability. Therefore, the RSTAG urges governments and other relevant development and disaster risk management stakeholders to:

- 1. Support the achievement of the prior mentioned commitments by making research and education a political, financial, and operational priority.
- 2. Remove political, regulatory, and financial barriers that impede research and the work of Higher Education Institutions.
- 3. Create and maintain permanent investment policies for capacity development and for the science-policy interface, focusing on early-career scientists and civil servants while encouraging diversity, equity and inclusion.
- 4. Increase sustained linkages between science, technology development and education at the ministerial levels.



- 5. Increase funding in support of science that promotes a multi-actor multi-stakeholder understanding of disaster risk and provides a firm basis for actionable disaster reduction policy and actions. This should focus on efforts at local and subnational levels.
- 6. Promote informed governance processes that are responsive to social, economic and environmental interactions and interdependencies to support decision-making for disaster risk reduction.
- 7 Ensure that relevant government-collected data are freely findable, accessible, interoperable and usable for researchers, the public and other sectors.
- 8. Improve protocols that govern access to "big data" and remote sensing data to ensure improved application to understanding and reducing disaster risk and supporting recovery and relief efforts.
- 9. Support the development of communication protocols that facilitate early warning and other applications.
- 10. Promote the application of instruments and techniques of risk analysis and risk reduction that now exist (e,g land use planning, building codes and norms, environmental management requirements) and offer a sectorial and geographical basis for promoting risk-controlled development.
- 11. Increase resources for corrective and prospective disaster risk reduction efforts that are socially and geographically sensitive, while increasing funding for relevant response capacity development, such as early warning system communication.

We trust that the interest of governments and actors from the various sectors moves towards improving the integration of science and technology into disaster risk reduction policy. We call for continuous development of governance that includes members of the scientific and academic community, and seeks permanent collaboration. This is how we will be able to jointly achieve more risk-informed and sustainable policy-making.