

R-STAG

Scientific and Technical Advisory Group (STAG)

SENDAI FRAMEWORK

FOR DISASTER RISK REDUCTION 2015-2030

Americas and the Caribbean



R-STAG

Scientific and Technical Advisory Group (STAG)

SENDAI FRAMEWORK

FOR DISASTER RISK REDUCTION 2015-2030

Science and Technology in the Sendai Framework

The Sendai Framework for Disaster Risk Reduction 2015-2030 identifies science and technology essential in strengthening evidence-based policymaking in disaster risk reduction (DRR). The role of the science and technology community, as outlined by the Sendai Framework, is to focus on “the disaster risk factors and scenarios, including emerging disaster risks, in the medium and long term; increase research for regional, national and local application; support action by local communities and authorities; and support the interface between policy and science for decision-making”¹.

Since the adoption of the Sendai Framework, researchers and academics have been integral in highlighting current trends and gaps at the global level recommending the need for more localized research. This called for the establishment of the Regional Scientific and Technical Advisory Group (RSTAG) whose purpose is to foster coherence and linkages between the science and technology networks in the region while mobilizing research and information at all levels. The central goal is to improve whole-of-society resilience to disasters through better scientific and technological understanding and enhance science-based decision-making at the regional and national levels.

The RSTAG members:

1. Provide guidance to UNDRR on trends related to the implementation of the Sendai Framework.
2. Catalyze innovation and partnership to generate new knowledge on disaster and climate risk.
3. Engage in relevant global and regional processes, such as the Global Assessment Report on Disaster Risk Reduction, Regional Assessment Report, as well as science and technology fora.
4. Contribute to capacity building on DRR by promoting the science-policy interface, such as translating knowledge into action.

¹ Sendai Framework for Disaster Risk Reduction 2015-2030, paragraph 36b

RSTAG in the Americas and the Caribbean

Since 2021, the Regional Scientific and Technical Advisory Group (RSTAG) of the Americas and the Caribbean has been strengthened through an enhanced collaboration of scientific, academic, and technical experts and institutions in the region around coherent approaches to regional challenges and priorities. The production of research and continued engagement with other stakeholders illustrate the progress toward the science-policy interface in the Americas and the Caribbean.

Current RSTAG Americas & Caribbean members include the University of West Indies, University Autonomous of Mexico (UNAM), NASA (National Aeronautics and Space Administration), NOAA (National Oceanic Atmospheric Administration), CEMADEN (Centro Nacional de Monitoreo e Alertas de Desastres Naturales), Texas A&M, REDULAC, LA RED, UNESCO/GERM, and other entities and scientific networks from the different subregions: Caribbean, Central America, South America, and North America.

Objectives

The primary objective of the RSTAG is to provide a platform for members to contribute and produce research that will guide policy and decision-making in disaster risk reduction in the Americas and the Caribbean. This can be achieved by:

1. Further understanding the opportunities and challenges related to disaster risk reduction in the Americas and the Caribbean.
2. Better understanding of systemic risk, social constructs, and risk drivers.
3. Displaying technological advancements of the region.
4. Providing a platform for indigenous and traditional knowledge.

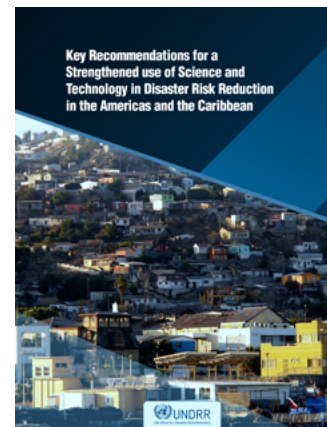
Achievements

In the past year, the RSTAG has collaborated and advanced its vision for the region through:

- The [Report: The coronavirus disease \(COVID-19\) pandemic - an opportunity for a systemic approach to disaster risk for the Caribbean](#), that highlighted the long-term impacts of biological hazards in the Caribbean emphasizing the socio-economic consequences of COVID-19.



- The [Regional Assessment Report 2021](#), a key publication providing a comprehensive analysis of the root causes, risk drivers, and the construction of risk in the Americas and the Caribbean
- The [Key Recommendations for a Strengthened Use of Science and Technology in Disaster Risk Reduction in the Americas and the Caribbean](#), that analyzed gaps in the integration of science and technology with the four priorities of the Sendai Framework, making corresponding recommendations.
- A Series of Online Dialogues, which took place at the end of 2021, which unpacked the key messages of the RAR2021 and further examined the key regional challenges for an enhanced science and policy-making interface. The dialogues also provided a platform for scientists and technical experts to engage with other stakeholders, such as members of the private sector, public sector, and youth of the Americas and the Caribbean, and discuss disaster risk reduction challenges and opportunities in the context of Latin America and the Caribbean.



Activities in 2022

In March of 2022, RSTAG members met in a hybrid retreat (physically hosted by the National Center for High Technology of Costa Rica – CENAT) to define the framework and work plan of the group for 2022/2023. This led to the creation of three subgroups focused on:

- › Developing the 2nd Regional Assessment Report.
- › Strengthening technology for disaster risk reduction.
- › Developing the next generation of DRR experts and building capacity through academic programs and training.

Furthermore, a cross-cutting research agenda is being defined and the group agreed to put a special focus across all activities on issues of risk governance and the local / territorial dimension.

The progress of the RSTAG during 2022 will further enhance engagement and knowledge production while strengthening technology for disaster risk reduction. These are defined through upcoming plans:

- **Regional Science and Technology Research Agenda.** Based on the themes emphasized during the discussion of the Series of Online Dialogues, outcomes from the online survey, and the topics stressed during the RSTAG retreat, the Research Agenda Framework for the Americas and the Caribbean has been developed focusing on five pillars with a cornerstone defined under equitable, sustainable, and informed territorial development.
- **Regional Assessment Report 2.0.** The first version of the Regional Assessment Report provided an overview of the DRR trends, gaps, and opportunities in the region. The second version will also be a contribution and collaboration from the RSTAG that will provide forward-thinking views to support policy and members states with a clear picture of the new trends across the region on disaster risk.
- **In-Person meeting during Understanding Risk Global Forum 2022.** Following the successful in-person meeting in Costa Rica, this meeting (co-hosted by CEMADEN) will solidify the progress of the subgroups striving to breach the gap of DRR science and technology in the region. This will act as a precursor to the Regional Platform in 2023.
- **FORIN (Forensic Investigation) Methodology: Jamaica Case Studies.** The Forensic Investigations of Disasters, also referred to as the FORIN methodology, aims to understand the root causes of disasters through an in-depth investigation by applying multiple research approaches such as meta-analysis, disaster scenario building, retrospective longitudinal analysis, and comparative analysis. Currently, there are two developing case studies in Jamaica that will be presented during the Regional Platform of 2023. This is ongoing and guided by RSTAG members.
- **Series of Online Webinars.** After three successful events, resulting in enriching conversations between stakeholders during three Online Webinars, this initiative looks to increase the interaction between the science and technology community and other stakeholders with the objective of DRR knowledge transference through a transdisciplinary and multi-sectorial lens.
- **VIII Regional Platform for Disaster Risk Reduction in the Americas and the Caribbean (RP23): Technology in Integrated Risk Management.** As the theme of the RP23 will emphasize science & technology for DRR, the RSTAG will have an important role in highlighting the developments and opportunities of integrating science and technology in the region all to fortify disaster risk reduction. The RP23 will especially recognize technology as a fundamental tool for comprehensive risk management, including multi-hazard early warning systems, and edge conversations toward its feasibility, development, financing, and implementation.