



7th Global Summit of GADRI

Global Alliance of Disaster Research Institutes

21-23 July 2025

Converging Disaster Research and Stakeholder-Engagement for Resilience

Venue
Center for Risk-based Community Resilience Planning
Colorado State University Fort Collins, USA

GADRI ACTIONS

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Dear Members of GADRI,

Compliments of the Season!

We would like to thank you for your continued engagement in GADRI activities and contributions to our collective efforts. The Sendai Framework Agenda has another four years to see its completion; and your contributions to its goals and targets directly and through GADRI are very much appreciated.

As we come to the end of another productive year, we are happy to share with you through this newsletter about the 7th Global Summit of GADRI.

The Global Summit series was truly made global by the Colorado State University, Fort Collins, Colorado, USA which hosted the 7th Global Summit of GADRI at their facilities last summer. Our heartfelt thanks go out to the efforts made by Prof. John van de Lindt and his wonderful team. The 7th Global Summit of GADRI under the theme of Converging Disaster Research and Stakeholder-Engagement for Resilience was held at the Lori Student Center, Colorado State University, Fort Collins from 21 to 23 July 2025. There were nearly 100 participants. We thank all of you for your participation and continued support. We could not have made it a success without your contributions. You may find further details of the summit deliberations on the GADRI home page and the GADRI Actions.

We are also proud to inform you that we celebrated 10 years of active collaboration with all of you this year. The 10th Anniversary Celebration was also held at the Lori Student Center, Colorado State University, Fort Collins on Sunday, 20 July 2025. Under the theme “A Decade of Collaboration” the event explored what it has been like to network; achievements and progress of the broad five objectives of GADRI which are currently initiated through the respective GADRI committees; what are the gaps and what needs to be changed; and where we would go from here. The event was attended by nearly 60 participants, and our appreciation goes to them for participating and making it such a memorable event. For further information, please visit the GADRI Actions on GADRI home page.

Taking advantage of the presence of the members of the Board at the above-mentioned events, we also conducted a face-to-face meeting of the Board of Directors of GADRI during the morning of 20 July 2025. The Board has, thus far, met four times during the year 2025.

Check out the following links for GADRI publications: GADRI home page - <https://gadri.net/>

GADRI work is a collective effort, and we are grateful for your constant input and sharing of information without which we cannot function as a community. We will keep you updated through GADRI home page, e-mails and newsletters.

Let us continue to work together to bring disaster risk reduction and management, and disaster resilience to our homes and communities.

Hirokazu Tatano; and

Everyone at the GADRI Secretariat

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GADRI Actions is designed, formatted and edited by Hirokazu Tatano, Ayuna Matthews, and Wilma James.



Group photograph of the 7th Global Summit of GADRI, Colorado State University Fort Collins, Colorado, USA on 21 July 2025

7th Global Summit of GADRI
Converging Disaster Research and Stakeholder-Engagement
for Resilience
Colorado State University, Fort Collins, Colorado, USA
21 to 23 July 2025



Prof. Marion Underwood, Provost, Colorado State University Fort Collins Opened the 7th Global Summit of GADRI at the Lory Student Center on 21 July 2025

(L) Prof. John van de Lindt; Prof. Paul Kovacs, Prof. Marion Underwood, Prof. Hirokazu Tatano ; and Prof. Tomoharu Hori, Director, DPRI, Kyoto University, Japan



The 7th Global Summit of GADRI was hosted and sponsored by the Center for Risk-Based Community Resilience Planning, Colorado State University, Fort Collins, Colorado, USA. It was held at the Lory Student Center, Colorado State University Fort Collins from 21 to 23 July 2025. The 7th Global Summit of GADRI

focused on “Converging Disaster Research and Stakeholder-Engagement for Resilience” emphasizing the importance of progress and effective implementation of disaster risk reduction strategies in communities.

Day 1: 21 July 2025

Convergence Approaches in Research and Implementation

MC: Prof. John van de Lindt, Colorado State University Fort Collins, USA

The 7th Global Summit of GADRI was hosted and held at the Colorado State University (CSU), Fort Collins, Colorado, USA from 21 to 23 July 2025. It focused on disaster risk reduction, climate change adaptation, and community resilience, bringing together international experts to discuss strategies for enhancing society's resilience to disasters. The summit covered various aspects of disaster research, including technical preparations, stakeholder engagement, and discussed the progress of implementation of frameworks such as the Sendai Framework for Disaster Risk Reduction.

The eleven-panel keynote speakers highlighted the importance of data collection and sharing, interdisciplinary approaches, capacity building of institutions and personnel, funding for DRR; and further enhancement of collaborative research activities.

Presentations and discussions emphasized the need for improved infrastructure resilience, socially equitable decision-making, and the integration of research findings into practical applications, particularly in post-disaster recovery and reconstruction efforts.

Opening Session

The opening session of the 7th Global Summit of GADRI was chaired by Prof. John van de Lindt of the Center for Risk-Based community Resilience Planning. The Center is Co-Directed by Prof. John van de Lindt and Prof. Jamie Kruse. Prof. John van de Lindt introduced the focus of the Summit under the theme of "Converging Disaster Research and Stakeholder-Engagement for Resilience". Prof. van de Lindt noted that GADRI's focus on the Sendai Framework for Disaster Risk Reduction, and the Paris Climate Agreement are two areas that can help save the world from itself.

He further stated that these foci are even more timely than they were a decade ago. The Center for Risk-Based Community Resilience planning shares these values, goals and objectives linking the Center with the mission of GADRI.

The Opening Session included greetings from various distinguished guests, including Profs. Marion Underwood, Tomoharu Hori, Hirokazu Tatano, and Paul Kovacs who emphasized the importance of international collaboration in addressing global hazards and the integration of disaster preparedness into daily life.

In her welcome address, Provost Prof. Marion Underwood welcomed attendees, highlighting Colorado State University's commitment to sustainability and resilience research. She stated that the Colorado State University is so proud to be the first US Institution of higher education to host

the Global Summit of GADRI. She expressed her gratitude to Prof. John van de Lindt for his leadership at CSU, and for bringing the important international summit, and all participants to Colorado.

Prof. Tatano provided an overview of the Global Alliance for Disaster Research Institutes (GADRI) and its activities since its establishment in March 2015. Special emphasize was placed on how GADRI's objectives are further taken forward by establishing committees for the implementation of the five key objectives. The purpose of the presentation was to share GADRI's progress since its inception, and acceptance of GADRI by the science and technology community. The institutions that have joined GADRI since March 2015 stands at 218 from 57 economies.

Associate Professor Genta Nakano presented the results of the pre-summit questionnaire survey conducted among GADRI member institutes on their perspectives on convergence approaches and the implementation of the Sendai Framework for Disaster Risk Reduction (SFDR). The survey results revealed that most institutes view convergence approaches as important, and highlighted challenges such as funding and infrastructure limitations. The survey also identified a few key areas for future focus such as enhancing understanding of vulnerability and exposure, promoting interdisciplinary approaches, and sharing of information and data of reconnaissance work.



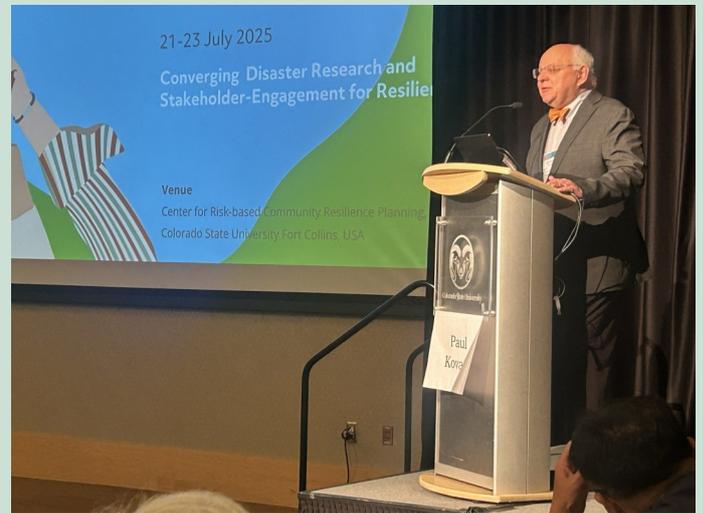
Prof. John van de Lindt, Colorado State University , Fort Collins, Colorado, USA served as the Master of Ceremonies throughout the 7th Global Summit



Opening Ceremony greetings by Prof. Marion Underwood, Provost and Executive Vice President, Colorado State University Fort Collins, Colorado, USA



Opening Ceremony greetings by Prof. Hirokazu Tatano, Secretary-General, GADRI; and Professor, DPRI, Kyoto University, Japan



Opening Ceremony greetings by Prof. Paul Kovacs, Chair of the Board of Directors of GADRI; and Executive Director, Institute for Catastrophic Loss Reduction, Western University, Canada



Opening Ceremony greetings by Prof. Tomoharu Hori, Director, Disaster Prevention Research Institute (DPRI), Kyoto University, Japan



Video Message Greeting at the Opening Ceremony by Mr. Kamal Kishore, UN Special Representative of the Secretary-General for Disaster Risk Reduction, United Nations Office for Disaster Risk Reduction (UNDRR)

Plenary Session I: Convergence Approaches in Research and Implementation

Chaired by: Prof. Kaoru Takara, President, NIED, Japan; and Prof. Hirokazu Tatano



The first Plenary Session featured three keynote speakers: Prof. Therese McAllister, Deputy Chief, Materials and Structural Systems Division, National Institute of Standards and Technology (NIST) discussed Advancing Community and Regional Resilience: Addressing Infrastructure Impacts on

Societal Recovery and Stability; Prof. John van de Lindt focused on The Facets of Community Resilience Modeling: What Gaps Remain?; and Dr. H. Kit Miyamoto, CEO and Lead Structural Engineer, Miyamoto International covered Global Earthquake Disaster Assessments and Reconstruction.

Keynote speakers highlighted the progress made in community resilience to disasters, investment needed for reducing disasters and recovery; but noted the increasing number of affected people and the rising costs of disasters. They stressed the need for improved data collection, technology use, integrated risk governance, increased funding for prevention, risk-informed development, scaling up early warning systems, whole-of-society engagement, and building back better to achieve resilient recovery by 2030.

Advancing Community and Regional Resilience: Addressing Infrastructure Impacts on Societal Recovery and Stability

Prof. Therese McAllister, Deputy Chief, Materials and Structural Systems Division, National Institute of Standards and Technology (NIST), USA

Prof. Therese McAllister highlighted the importance of data collection, modeling, and prioritization of investments for infrastructure resilience. She stated that “resilience is an umbrella concept to prepare for anticipated hazards. It includes adaptation to changing conditions as well as withstanding and recovering from disruptions. There are resilience activities before and after. It is important to have a governance structure; a body that would raise funds, adopt codes and standards, that will ensure actions are taken to identify resilience goals; need a repeatable basis for prioritizing investments and helping communities or regions or nations. It is necessary to prioritize things against the goals that they have established. First, it is important to understand and define the problem and the goals. For example, existing infrastructure is one of the biggest problems in the United States - need better

ways to retrofit and understand the performance. She emphasized the need for better ways to integrate systems and data; implementing research findings in the field; when and how soon to advance practices and how quickly something needs to be recovered; linkages between infrastructure and social function; and addressed the challenges of integrating different systems and scales.



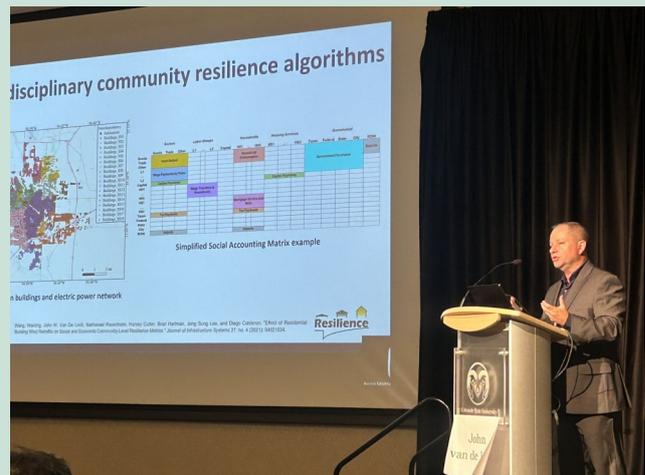
The Facets of Community Resilience Modeling: What Gaps Remain?

Prof. John van de Lindt, Co-Director, Center for Risk-Based Community Resilience Planning, Colorado State University, Fort Collins, Colorado, USA

The night before the opening of the 7th Global Summit of GADRI, Prof. John van de Lindt kindly volunteered to step in to fill the gap left by postponement of the speech by the intended keynote speaker due to unavoidable health circumstances. Prof. van de Lindt presented on a comprehensive community resilience modeling framework called IN-CORE that predicts damage probabilities by using physics-based modeling. Prof. van de Lindt demonstrated how the system can model multiple areas of community resilience including population stability, economic stability, social services, and physical infrastructure. He shared examples of full-scale tests done through the largest shaking table in San Diego for resilient buildings and a wind-resistant building test in Joplin. The IN-CORE framework incorporates computable general equilibrium models and spatial data analysis. He discussed about challenges and

gaps including challenges with disparate data sources, dependency modeling, recovery modeling, and the critical role of interdisciplinary work.

Both speakers, Prof. van de Lindt and Prof. Therese McAllister stressed the importance of governance structures, collaborative planning, and the need to link pre- and post-disaster activities to advance resilience practices.



Earthquake Disaster Assessments and Reconstruction

Dr. H. Kit Miyamoto, CEO and Lead Structural Engineer, Miyamoto International Co., USA

Dr. Kit Miyamoto discussed the analysis of building damage following the earthquakes in Türkiye, Afghanistan and Thailand. In Türkiye, he explained that the structural characteristics of concrete buildings; how the earthquake resistance building

codes are in place but not widespread; and implementation of it is not strictly observed especially ignored by the building contractors of commercial and residential building complexes due to lack of inspection. They have advanced in earthquake resistance buildings. Dr. Miyamoto explained the structural characteristics of clay constructions in remote areas in Afghanistan, and the need to learn from traditional building methods; and train local master masons, rather than imposing foreign materials or designs on them. He addressed the challenges of implementing earthquake-resistant measures in high-rise buildings sitting on soft-soil in Bangkok as most of the buildings are owned by the private sector; and the idea of introducing a risk-reduction program and an economically viable approach for private sector involvement in build back better. He concluded by stating that with the current technology, it is definitely possible to construct infrastructure which are completely resilient with an acceptable technical proposal and a viable economic plan.



Day 1: Podcast Summary

Prof. Andrew Collins, Professor Emeritus, Northumbria University summed up the first day deliberations in his podcast interview with Dr. Mark Ashley Parry, Northumbria University, UK

Day 1 of the GADRI 2025 Summit highlights - global leaders, researchers, and policymakers gathered to explore innovative pathways toward disaster resilience. The conversation opened with a look at the vision driving this year's summit, focusing on how GADRI continues to evolve as a platform for scientific collaboration, policy dialogue, and actionable strategies. This year's theme, "Convergence for Disaster Resilience," was unpacked in depth. The idea centers on breaking

silos between disciplines, sectors, and borders to build more holistic and inclusive resilience strategies. We also explored how global participation has grown since both the first and the most recent summit. Finally, the summit's broader impact was discussed, not just as a forum for discussion, but as a catalyst for real-world action, influencing both international frameworks and grassroots resilience initiatives.

GADRI Website - <https://gadri.net/events/2025/07/7th-global-summit-of-gadri---day-1-summary.html>

Spotify - <https://open.spotify.com/episode/61uAuslQqvrplUcPx3pm8M>



Chairs of the Plenary Session I: Prof. Kaoru Takara, President NIED, Tsukuba, Japan; and Prof. Hirokazu Tatano, Secretary-General GADRI; and Professor, DPRI, Kyoto University



Panel Discussion Session I: Progress and challenges for the final years of implementation of the Sendai Framework

Chaired by: Prof. Yuki Matsushi, DPRI, Kyoto University, Japan; and Prof. Gretchen Kalonji, Special Advisor, International Research Center of Big Data for Sustainable Development Goals (CBAS), China



The session focused on the outcomes and recommendations from the discussion sessions on the four Priority Areas of the Sendai Framework Agenda. The session was Chaired by Prof. Yuki Matsushi and Prof. Gretchen Kalonji.

Chairpersons emphasized the importance of

keeping presentations concise and requested that panelists share their reporting items and summaries with the GADRI secretariat via email. The session covered progress and challenges in implementing the Sendai Framework in various countries, with each panelist given 5-8 minutes to present their findings.

Discussion Session I-Sendai Framework Priority Area 1: Understanding Risk: Marginalized Voices in Risk Assessment and Response

Chaired by: Dr. Roger Baars, Graduate School of Global Environmental Studies, Kyoto University, Japan

This panel session was organized and chaired by Dr. Roger Baars. The panelists shared their research findings on how various factors such as governance, immigration, trust, indigenous traditional knowledge and finance affect the understanding and response of disaster risk reduction in regions in Kashmir, Chile, and Africa.

It also emphasized the importance of integrating indigenous traditional knowledge into disaster risk reduction strategies. The panelists agreed that there is no inherent conflict between traditional and

scientific knowledge and emphasized the importance of building trust and empowering communities in disaster preparedness efforts.

Dr. Baars summarized each presentation by the panelists:

Prof. Peter Sammonds, University College London, UK on Indigenous people's risk perception: Using participatory rural appraisal methods to evaluate hazard risks.

Prof. Sammonds shared the idea that temporary aspects, and even historical aspects of disasters are of crucial importance. Focusing on marginalized communities and silenced voices, he talked about risk assessments and needs of the local community, and their capabilities; how they could offer useful frameworks to look at developments and current disasters. He particularly focused on his own research projects in the Kashmir region; and the use of early warning systems targeting hazards of landslides in the region.



Dr. Marcelo González Galvez, Pontificia Universidad Católica de Chile on Community participation in post-wildfire recovery: Insights from a couple of Chilean cases.

Dr. Marcelo shared two case studies shared his work in South America, particularly in Central Chile:

- community participation in post-wildfire recovery: the 2017 Santa Olga fire and
- the 2024 Quilpué fire.

He discussed about wildfire risks and illustrated how recent land use has changed and informal settlements and urbanization in general have accelerated or increased risks for wildfire. He illustrated how disasters unveil and uncover much deeper-rooted problems in society. Dr. Marcelo and the next presenter, Ms. Julia Munsaka, both identified trust, and the lack of it as an essential barrier towards the involvement of indigenous communities, historical events and the lack of response planning.

Ms. Julia Munsaka, Ph.D. Student, Colorado State University Fort Collins, USA on Institutionalizing Traditional Knowledge (ITK) in Disaster Risk Reduction: The Role of Traditional Leaders in Africa

In her presentation, Ms. Julia Munsaka discussed her own work in Africa and more systemic risks and problems on the African continent illustrating specifically the food sector and food security as a major threat in the future. Her project focusses mainly about how to integrate indigenous traditional knowledge (ITK) into disaster risk reduction strategies; and how traditional leadership could be a facilitating role players. Interestingly, she found out that the traditional leaders have high levels of trust and influence within their communities; they were seen as the holders of traditional knowledge as well as the interpreters of information and knowledge gathered on a daily basis or as nature observers; and how they were able to translate everyday observations into potential warnings for the community. For example of upcoming torrential rain or droughts. In general, ITK is not integrated into DRR strategies. Yet she concluded on a positive note by highlighting her findings in her case study of Zimbabwe how they integrated indigenous traditional knowledge elements and observed higher levels of resilience in the country.



Discussion Session I-Sendai Framework Priority Area 2: Strengthening disaster risk governance to manage disaster risk: Evidence-based Policymaking in Disaster Risk Reduction

Chair: Prof. Yuichi Ono, IRIDeS, Tohoku University, Japan

The Session on Sendai Framework Priority Area 2 was organized and Chaired by Prof. Yuichi Ono.

This session focused on fostering deeper understanding of the critical role that effective disaster risk governance plays in reducing vulnerabilities, managing hazards, and enhancing resilience across all sectors of society. As the frequency and intensity of disasters increase due to climate change, urbanization, and environmental degradation, there is an urgent need to ensure that governance systems are robust, inclusive, and adaptive.

The session concentrated on key issues in evidence-based policymaking in disaster risk reduction; good practices and challenges; providing a way forward for further progress in implementation, particularly in terms of integrating scientific and technical findings into disaster risk reduction and evidence-based policymaking .

Panelists:

- Considering the basis to evidence in risk governance, Prof. Andrew Collins, Professor Emeritus, Disaster and Development Network, Northumbria University Newcastle, United Kingdom
- Governance for Recovery Pre-Planning, Prof. Norio Maki, DPRI, Kyoto University, Japan
- Governance and Emergency Management for the Public Good, Prof. Lori Peek, Director, Natural Hazards Center, University of Colorado Boulder, USA
- Advanced Observation and Experiment Technology for Evidence-Based Policymaking in Megacities, Prof. Kaoru Takara, President, National Research Institute for Earth Science and Disaster Resilience (NIED), Japan
- Informing Planning through Community Engagement and Modeling, Prof. John van de Lindt, Colorado State University Fort Collins USA





Prof. Lori Peek presented session outcomes.

As the title suggested, the session noted that there are far too few effective governance in the space of disaster risk reduction. It was calling for governance systems that are robust, inclusive, community driven and adaptive. To fulfill that vision of effective governance systems, three key topics were addressed: data gaps and inconsistency - data is a guide that helps to illuminate or should help to illuminate policymaking; limited integration of science into policymaking and political as well as institutional constraints. This has been a recurring theme over the decades. Although more knowledge is produced, yet disaster risks continue to rise. Where can that gap be closed?

Summaries of the presentations:

Prof. John van de Lindt, who gave a follow up on his morning keynote where he really conveyed a story of the IN-CORE project that has been evolving over the past decade. The idea of how to start with a problem, a complicated academic problem of trying out to figure out, how to measure community resilience, long-term disaster recovery and then feed that back into communities. In his presentation, Prof. van de Lindt told the story that came at the end of this decade of deep interdisciplinary collaboration, where communities have indeed begun to pick up the IN-CORE project and to use it for the purpose of planning in their communities to become more disaster resilient over time.

Prof. Kaoru Takara showed how an incredible amount of data that has been generated over the decades in Japan, is helping to foster not only a deeper understanding of the present and evolving future hazard risk in Japan, but also to tell that story of how that data, and especially data visualizations, are being used to advance policymaking in that particular context. He continued to show how that data is used to close gaps in knowledge and how it can be fed into policymaking systems.

Prof. Lori Peek made a case for how to use data and information, but also stories and communication activities to illuminate and to make

visible what are oftentimes invisible activities in science as well as in the emergency management infrastructure. Although there is funding, but the public attention is focused on the emergency response phase. Whereas

what can be done that could make a measurable difference in people's lives occurs before the disaster is ever actualized. She also stated that there is limited attention on hazard mitigation and even more broadly, disaster risk reduction activities. There is also a limited focus in the policymaking sphere, as many policymakers are focused on immediate needs and what constituent demands. There is no voice. It is needed to create a public call for hazard mitigation or disaster risk reduction that is concomitant with calls for other needs.

Presentation by Prof. Norio Maki relayed the story of what is happening in Japan around pre-disaster recovery planning, and how hard it is to get people to think about recovery planning in the same ways that they think about emergency response planning, evacuation or moving people to safety. Prof. Maki used two maps as examples: one showing the map that is used to try to evoke people to evacuate in the course of a disaster, and the other map, showing what a recovery plan might look like. It showed how different policymaking is around safety causes and the importance of thinking about long term planning well into the future.

The final presenter Prof. Andrew Collins, discussed disaster risk governance both - why it has not been working in many spheres, and, why it has been backtracking in many places. He also provided critical insight into what might be able to help thrust this forward into the future. Prof. Collins stated that by raising our voices, it is possible to build coalitions. People are situated in historical, cultural, social, political and economic contexts that constrain us. By recognizing those systems that are constraining and, in many cases, actively working against disaster risk governance and disaster risk reduction, it is possible to have a chance to change them and to envision a more just and resilient disaster resistant future.

The presentations reminded us of the importance of theory, which allows us to see the world but also of the critical importance of robust data to help inform more effective and more evidence-informed systems.

Discussion Session I-Sendai Framework Priority Area 3: Investing in disaster risk reduction for resilience: Exploring strategies for strengthening global DRR efforts through enhanced networking and collaboration

Chair: Prof. Hirokazu Tatano, GADRI; DPRI, Kyoto University, Japan

Co-Chair: Prof. Katarina Holla, University of Zilina, Slovakia



The Session on Sendai Framework Priority Area 3 under the theme of "Investing in Disaster Risk Reduction for Resilience," was organized and chaired by Prof. Hirokazu Tatano and Prof. Katarina Holla. The session explored strategies for strengthening global DRR efforts through enhanced networking and collaboration. With GADRI member institutions worldwide, GADRI has the potential to significantly improve communication both within the DRR community and with external stakeholders such as governments, media, NGOs, MDBs, and local communities.

The discussions focused on how to foster meaningful connections among researchers and institutions, expand GADRI's influence and messaging, and leverage innovative engagement approaches to promote resilient societies. By investing in strategic partnerships, knowledge exchange, and stakeholder engagement, GADRI can help address these obstacles and accelerate progress toward more effective, inclusive, and sustainable disaster risk reduction worldwide.

Session outcomes and summary were presented by Prof. Hirokazu Tatano. The session explored:

- how to access financial tools and how government support affect recovery speed after disasters,
- need for quantitative evidence of disaster risk finance roles in accelerating recovery
- importance of expanding cost-benefit analyses

to include broader benefits and consider behavioral economics in disaster planning; and

- the necessity of including aspects of resilience and financing in future discussions to enhance investment in disaster risk reduction.

Following are the presenters at the session:

- **Strengthening Resilience with Risk Financing: Analyzing the Impact on Disaster Recovery and Mitigation, Prof. Kakuya Matsushima, DPRI, Kyoto University, Japan**

Prof. Matsushima presented the utilization of survey data collected by their team for several disasters occurred in Japan through a project funded by SOMPO Japan group on disaster risk financing.

He illustrated how they measure recovery speed after a disaster and availability of disaster risk financing tools such as prior investments on infrastructure, access to insurance, economic/expenditure by households/enterprises, and access to government support. Post-disaster recovery speed depends on the financial tools used to speed-up the process either by means of insurance, cash on hand, subsidy from government or bank loans. He shared evidence of prior investment in DRR efforts to be more cost-effective than post-disaster response and recovery. He shared three case studies from Japan: 2024 Noto Peninsula earthquake; 2020 Flood disaster in Hotoyoshi City, and a heavy rain event in July 2018.

- **DCNA Science Plan 2030+: Shaping the Future of Disaster Risk Reduction in Austria, Dr. Christian Resch, Disaster Competence Network Austria (DCNA)**

Dr. Christian Resch's presentation on DCNA Science Plan 2030+ - "The DCNA Science Plan 2030+ outlines a forward-looking research agenda for disaster risk reduction in Austria. It fosters collaboration between science, policy, and practice, promotes evidence-based decision-making, and defines strategic priorities to strengthen resilience, enhance preparedness, and guide long-term investment in disaster and civil protection research."

In concluded by emphasizing that "investment in research equals investment in resilience. The DCNA science plan enables long-term research planning; knowledge transfer to practice; strategic public-private partnerships, regional and international cooperation; and portfolio-based funding approaches".

- **Translating DRM knowledge and partnerships into action - Introducing the Japan – World Bank program for mainstreaming DRM in developing countries (Tokyo DRM Hub), Dr. Keiko Saito, The World Bank, Global Facility for Disaster Reduction and Recovery, Tokyo, Japan - (ONLINE)**

Dr. Keiko Saito delivered an online presentation about Translating DRM knowledge and partnerships into action at the World Bank -

Introducing the Japan – World Bank program for mainstreaming DRM in developing countries (Tokyo DRM Hub). The presentation focused on "how the Japan-World Bank program for mainstreaming Disaster Risk Management in developing countries is working with World Bank task teams and knowledge partners in Japan in translating DRM knowledge generated especially in Japan into actionable items to inform World Bank investment operations."

- **Expanding the Range of Benefits of Disaster Risk Reduction, Prof. Adam Rose, University of Southern California, Director Emeritus and Senior Research Fellow of USC's Center for Risk and Economic Analysis of Threats and Emergencies (CREATE) (ONLINE)**

Topics covered in the presentation:

- Expanding the Range of Benefits of Disaster Risk Reduction
- Traditional Cost-Benefit analysis: Benefit of DRR is limited.
- Wider economic benefit should be included, e.g., GDP impact of fear
- (How to reflect behavioral economic consequences of disasters?)
- Triple-dividend of DRR:
- Explicit DRR, Joint-Product, Spill-over effects



Discussion Session I-Sendai Framework Priority Area 4: Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction: From “Everyday Counts” to Lasting Resilience

Chair: Prof. Kaushal Keraminiyage, University of Salford, UK

Co-Chair: Prof. Paul Kovacs, GADRI; and ICLR, Canada

The session on Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction: From “Everyday Counts” to Lasting Resilience was organized and chaired by Prof. Kaushal Keraminiyage and Prof. Paul Kovacs and focused on enhancing disaster preparedness and building back better. Key themes such as insurance, financing, technology, community resilience, and innovation, emphasized the need for collaboration and policy support to effectively implement build back better concepts.

Outcomes of the sessions were presented by the chair, Prof. Keraminiyage:

Following provides key discussion points:

The session discussed how insurance, disaster safety and economic policies can be used to resilient and effective build back better with examples shared by presenters from two different perspectives: two presenters from developing countries – Bangladesh and Zimbabwe; and two presenters from developed countries – Canada and Japan.

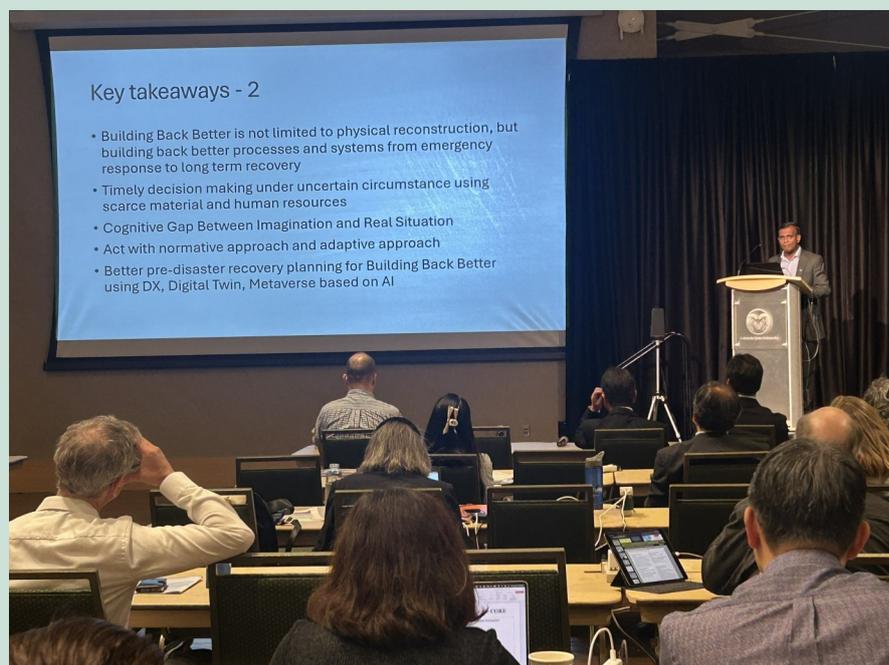
- addressing polycrisis and systemic risk through build back better.

- financing and economic resilience
- innovation, data usage, governance and technical capacity.
- infrastructure resilience and built environment.
- Inclusivity and community engagement; specifically
- governance and coordination.

Panelists of the Session on SFDRR PA4:

- **Prof. Paul Kovacs**

Prof. Paul Kovacs presented how insurance, disaster safety and economic policies can be used for better build back better. The private sector is a key role player in build back better depending on how they are convinced to invest in build back better and how they coordinate with the requirements of the government and local authorities and the end user. With examples, he discussed using value-based approach to justify and encourage investments for build back better. One approach would be to convince end users to invest more in build back better and to invest more upfront to make their product better which will also increase in value. That concept is one of the vehicles to promote build back better.



- **Prof. Michinori Hatayama, DPRI, Kyoto University, Japan**

Prof. Michinori Hatayama focused on how technology is utilized and its influence on building back better. Physical reconstruction of buildings is always associated with build back better. Whereas build back better also encompasses processes and systems from emergency response to long-term recovery. The key is timely decision making. It is necessary to make timely decisions under uncertain circumstances, especially when using scarce materials and human resources. He specifically mentioned cognitive gap between imagination and real situation, because quite often we can plan based on imaginary situations. But when it comes to real ground level implementation, there is a gap. Prof. Hatayama concluded by stating that by observing better pre-disaster recovery planning for build back better which could be enhanced using DX, digital twin, metaverse based on AI, and other current developments.

- **Disaster Recovery to Resilience, Prof. Md Mansur Rahman, Institute of Water and Flood Management (IWFM), Bangladesh University of Engineering and Technology (BUET), Bangladesh**

Prof. Mansur Rahman talked about enhancing community resilience through build back better. Prof. Rahman led this theme on understanding, resilience risk-capital, especially community capital, as a concept in enhancing build back better. He stated that often times build back better is linked with a post-disaster event. Instead of build back better, Prof. Mansur stated to think about how to build forward better - a concept linked with the community resilience enhancement. Prof. Mansur discussed particularly using predictive models to bridge the gap between the imaginary situation and the real-world situation. In addressing build back better requirements and the needs, he referenced to a special research methodological approaches that can be used such as living labs in implementing and understanding build back better concepts within real life situations.

- **Integrating Climate Science into Building Back Better: Lessons from Southern Africa, Prof. Desmond Manatsa, Executive Dean, Faculty of Science & Engineering; Bindura University of Science, Zimbabwe**

Prof. Desmond Manatsa stated build back better is not something that can be achieved by itself. If a single community is taken for example, they need to collaborate; they need to have innovations. He discussed how to promote innovation and collaboration as a key driver for build back better. The key point was the gap between science and practice. As scientists come up with theories, and frameworks, the theoretical underpinnings of how to build back better are not implemented in practice. The scientific theories are built at ground level, and it is far from being successful. The discussion also focused on how to transform the scientific knowledge that is generated through practice to practice. It can be achieved with stronger links between foundational scientific research, evidence-based implementation and decision making and smart policy development. Build back better concept will not survive without the policy backing. Translating theoretical scientific knowledge to policy was the key highlight of this discussion.

Finally, GADRI could be a vehicle to facilitate collaboration between different organizations and to promote build back better through collaborative innovations.



Plenary Session II: Engagement, Partnerships, Communication and Resulting Policy

Second Plenary Session on Engagement, Partnerships, Communication, and Resulting Policy took place in the afternoon which was chaired by Dr. Yuki Matsuoka, Head, UNDRR Kobe Office, and Prof. Michinori Hatayama, DPRI, Kyoto University. There were four keynote speakers who shared their thoughts and experiences on disaster risk reduction research and collaboration, challenges faced with imp

Prof. Saini Yang, Executive Director, Integrated Research on Disaster Risk (IRDR), China on Catalyzing Resilience: Strengthening Global DRR Education & Action through Synergy; Prof. Lori Peek,

Director, Natural Hazards Center (NHC), Institute of Behavioral Science, University of Colorado Boulder, USA discussed Participatory Convergence: Advancing Science and Reducing Risk Through Community Participation; Prof. Virginia Murray, Head, Global Disaster Risk Reduction, UK Health Security Agency, United Kingdom on UNDRR/ISC Hazard Information Profiles update 2025; and Prof. Kishor Mehta, Emeritus P. W. Horn Professor, Department of Civil, Environmental and Construction Engineering, Texas Tech, USA discussed about Applied Academic Research to Prevent Wind Hazard from Becoming Disasters.

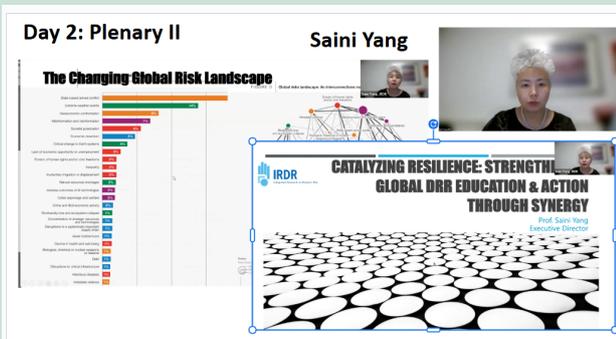


Enjoying lunch with Keynote Speakers: Dr. Yuki Matsuoka, Prof. Kishor Mehta, Prof. Lori Peek; Dr. Enrique Guevara, Prof. Virginia Murray, and Prof. Peter Sammonds



Catalyzing Resilience: Strengthening Global DRR Education and Action through Synergy

Prof. Saini Yang, Executive Director, Integrated Research on Disaster Risk (IRDR), China. Unfortunately could not join the 7th Global Summit of GADRI in Fort Collins. She delivered her presentation online at 2am in China time.



She discussed in detail how best to strengthen the global DRR education and action in a changing global risk landscape. She highlighted how failure on climate action, exacerbated extreme weather conditions, biodiversity loss, social cohesion erosion, and livelihood crises interlinked and reported in the Global Risk Report of 2022 of the World Economic Forum.

In the current Global Risk Report released by the World Economic Forum, it is no longer climate action while extreme weather events have increased. Focus has shifted to state-based armed conflicts, geopolitical confrontation, misinformation, and disinformation and social polarization dramatically and quickly changing the global risk landscape.

Discussing about the Integrate Research on Disaster Risk (IRDR), she stated that it is an international science program co-sponsored by International Science Council as well as UNDRR. She discussed in detail the young scientists program to encourage young professionals engage in community level practice and training. She discussed about better alignment of implementation needs with decision-makers; improving communication between scientists and practitioners; contextualization; and economic benefits in DRR investments. With regard to capacity building through the exchange of young professionals, she assured GADRI about IRDR intention to draw a memorandum of understanding to implement international exchange and collaboration.

Participatory Convergence: Advancing Science and Reducing Risk through Community Participation

Prof. Lori Peek, Director, Natural Hazards Center (NHC), Institute of Behavioral Science, University of Colorado Boulder, USA

In her address, Prof. Lori Peek stated that “Convergence was all about how do we work across disciplinary borders and boundaries?”. She discussed the progress of convergence research, highlighting three waves: first wave - the initial fundamentals of convergence should be problem focused, solution based and deeply interdisciplinary; second wave was convergence research expansion to include social sciences; and the third wave was emergence of participatory convergence. Societal transformation at its root requires that scientific innovations are received, understood, and implemented by researchers, practitioners, and policymakers. She shared examples to strengthen her argument how participatory convergence can lead to actionable and sustainable solutions. The two stories were a study on 911 calls during heat and smoke events

and noted direct pre-disaster interventions to ensure more equitable public health outcomes and solve the problem; and a project on Frontline Government Workers, assessing post disaster, burnout, and quality of life. Prof. Peek concluded by emphasizing “the idea that community engagement needs to be at the center specifically participatory convergence is an approach where convergence can happen across the scientific disciplines, but also with for and on behalf of communities and organizations, with relevant expertise related to societal needs.”



UNDRR/ISC Hazard Information Profiles update 2025

Prof. Virginia Murray, Head, Global Disaster Risk Reduction, UK Health Security Agency, United Kingdom

Prof. Virginia Murray presented an update on the Hazard Information Profiles (HIPs) which works across all UN landmark agreements and went online. HIPs will be useful for governments and stakeholders to understand strategies to manage disaster risk reduction. She discussed about collaborative effort between UNDRR, the International Science Council, European Commission and various stakeholders in putting together the HIPs. She explained that HIPs profiles offer detailed insights into various hazards, aiding risk assessment, preparedness, planning, and resource allocation by enhancing community awareness. Hazard Information Profiles contribute to monitoring and evaluating effectiveness, so that we know how risk reduction measures foster proactive and resilient approaches to managing the impacts of natural hazards at local national and



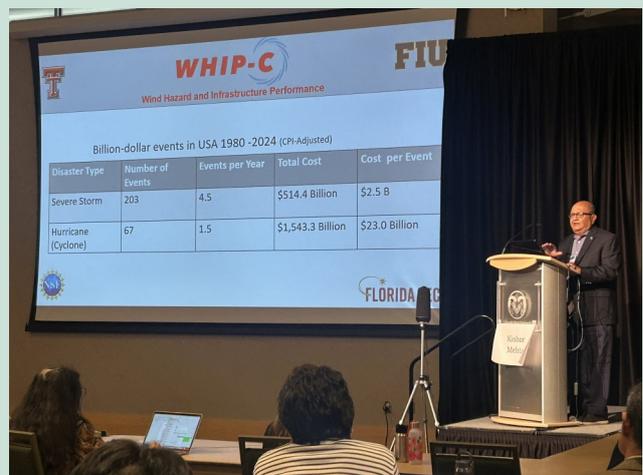
Prof. Virginia Murray—center right—speaking as a panelist at the 10th Anniversary Celebration of GADRI

international levels. HIPs will be useful, usable and used.

Applied Academic Research to Prevent Wind Hazard from Becoming Disasters

Prof. Kishor Mehta, Emeritus P. W. Horn Professor, Department of Civil, Environmental and Construction Engineering, Texas Tech, USA

Prof. Kishor Mehta focused on wind hazards and their impact on infrastructure and people; and the importance of preventing wind hazards from becoming disasters which is the goal of their institute WHIP – Wind Hazard and Infrastructure Performance Center. It is a partnership between the government, industry and the academia. He discussed about WHIP facilities including the Vortex simulator and Wall of Wind, as well as a computer program developed to predict wind and surge damage to buildings in hurricanes, which is being used by insurance companies. Prof. Kishor discussed the need for convergent research across disciplines. He stated that instead of putting research papers on a shelf, convert that report or research into actionable and usable solutions; a one that the industry could implement and be of service to the industry and minimize impact on people.



Plenary Session III: Underscoring the need for fundamental research, and focus on advances in disciplinary and transdisciplinary research

The final plenary session on Underscoring the need for fundamental research, and focus on advances in disciplinary and transdisciplinary research for natural hazards, cascading hazards, the resulting disasters, and models to reduce adverse impacts was chaired by Prof. Mahua Mukherjee and Prof. Hirokazu Tatano.

- Topic on Transdisciplinary Research for Natural Hazards was covered by Prof. Peter Sammonds, Department of Risk and Disaster Reduction (RDR), University College London, UK.
- Accelerating the implementation of the Sendai Framework for Disaster Risk Reduction – outcome of the 8th Session of the Global Platform for Disaster Risk Reduction was presented by Dr. Yuki Matsuoka, Head, United Nations Office for Disaster Risk Reduction (UNDRR), Kobe Office, Japan.
- On the theme of Dance in Harmony with the Twister: One Step Back and Two Steps Forward toward Tornado Resilience was delivered by Prof. Grace Yan, Department of Civil, Architectural and Environmental Engineering, Missouri University of Science and Technology, USA; and
- A lively and very informational discussion on Risk Reduction Beyond Borders: Science-Based Policy and Community Resilience in Mexico was delivered by Dr. Enrique Guevara, General Director, National Disaster Prevention Center (CENAPRED), Federal Government of Mexico.



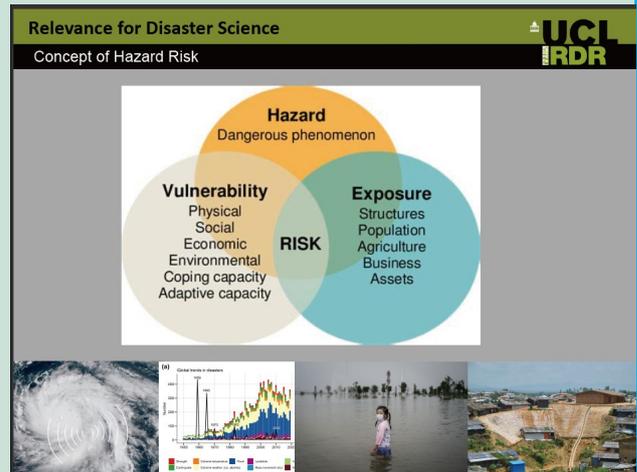
Transdisciplinary Research for Natural Hazards

Prof. Peter Sammonds, Department of Risk and Disaster Reduction (RDR), University College London, UK

The abstract of the talk by Prof. Peter Sammonds stated that “Methodological divisions characterised the emergence of modern scientific disciplines with resulted in incredible scientific progress. But the drive to solve real-world problems has led to the emergence of transdisciplinarity across different academic disciplines working jointly with practitioners. Transdisciplinary research (Hoffmann-Riem et al. 2008) aims to overcome the mismatch between knowledge production in academia, and knowledge requests for solving societal problems: In a world characterised by rapid change, uncertainty and increasing interconnectedness there is a growing need for science to contribute to the solution of persistent, complex problems, which include not only some of the now broadly known environmental issues such as climate change and biodiversity loss, but also related issues such as poverty, security and governance.”

Drawing on examples from earthquakes and cyclones hazards and their cascades, the talk addressed the challenges of transdisciplinary

research. How to incorporate research inputs from different disciplines, practitioners and from broader society into models, involving different methodologies and data formats were discussed. He concluded the talk by highlighting on the importance of transdisciplinary research in addressing real world problems; work needed on integrating research inputs across different methodologies and data formats; and mainly the need of funding for research.

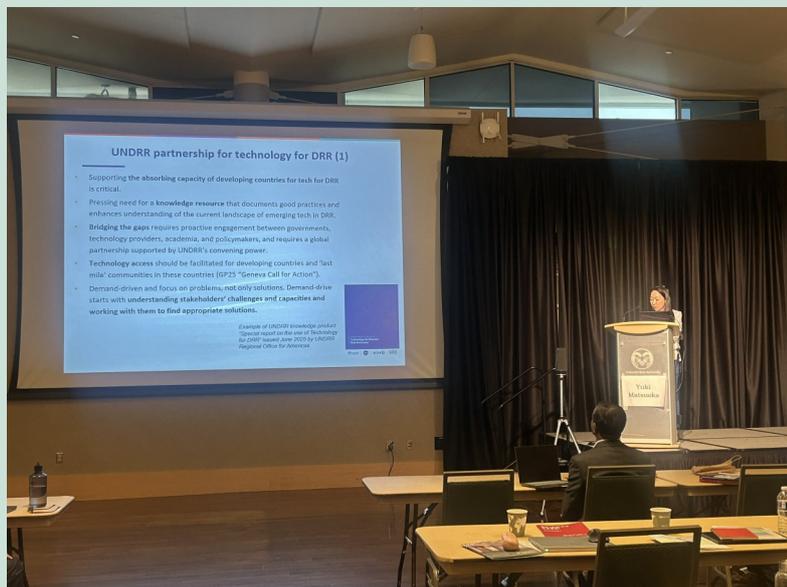


Copy of PPT from the presentation by Prof. Peter Sammonds



Accelerating the implementation of the Sendai Framework for Disaster Risk Reduction – 8th Session of the Global Platform for Disaster Risk Reduction

Dr. Yuki Matsuoka, Head, United Nations Office for Disaster Risk Reduction (UNDRR), Kobe Office, Japan



successes over the last ten years in the implementation of the Sendai Framework are a cause for optimism, especially as local actors and communities are inspiring the world with examples of how they are managing risks. As the cost of disasters increases and international assistance dwindles, urgent, more concrete actions are needed in the next five years to sustain progress towards achieving the expected outcome and goal of the Sendai Framework by 2030, thereby contributing to meeting the goals of the 2030 Agenda, and post-2030 considerations.

Dr. Matsuoka's presentation shared the outcome of the Global Platform including "the Geneva Call for Disaster Risk Reduction" and urged participating science and technology stakeholders to further contribute to

Dr. Yuki Matsuoka presented a detailed outline of the outcomes of the 8th Session of the Global Platform for Disaster Risk Reduction which took place from 2 to 6 June 2025 in Geneva, Switzerland. The 8th Global Platform focused on the theme of "Everyday Counts, Act for Resilience Today," which sought to rally governments and stakeholders to accelerate the implementation of the Sendai Framework in the remaining five years until 2030.

accelerating the implementation of the Sendai Framework towards 2030.

Dr. Matsuoka also created a page for the Global Alliance of Disaster Research Institutes (GADRI) under SFVC platform.

In the abstract, Dr. Matsuoka stated that the

VOLUNTARY COMMITMENTS
SENDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030

<https://sendaicommitments.undrr.org/>

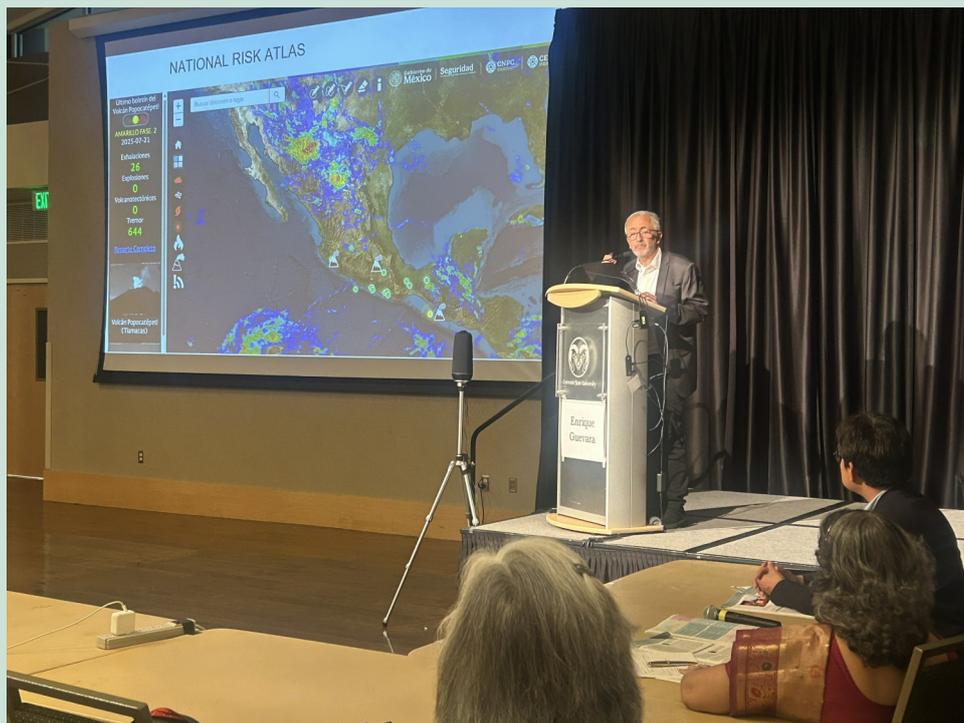
SFVC online platform is the tool for all of society engagement and for promoting stakeholders' contribution to the Sendai Framework implementation

SFVC Synthesis and Analysis Report launched at GP2025

Inform
Take stock
Monitor
Mobilize

Copy of PPT from the presentation by Dr. Yuki Matsuoka

Risk Reduction Beyond Borders: Science-Based Policy and Community Resilience in Mexico



Dr. Enrique Guevara, General Director, National Disaster Prevention Center (CENAPRED), Federal Government of Mexico

Dr. Enrique Guevara is the Director General of the National Center for Disaster Prevention (CENAPRED) as well as national focal point for monitoring and reporting on the Sendai Framework for Mexico. He gave a detailed presentation with examples about Mexico's experience in integrating disaster risk science into public policy and community action, with a focus on systemic approaches to managing natural hazards and cascading risks.

Drawing from 35 years of institutional development, the talk highlighted key strategies implemented by the National Center for Disaster Prevention (CENAPRED), including risk mapping through the National Risk Atlas, multi-level early warning systems, and community-based resilience programs. His very lively and detailed presentation on Risk Reduction Beyond Borders: Science-Based Policy and Community Resilience was well received by the audience. He concluded his presentation by emphasizing and encouraging everyone to “turn science into action”.



Copy of PPT from the presentation by Dr. Enrique Guevara

Dance in Harmony with the Twister: One Step Back and Two Steps Forward toward Tornado Resilience

Prof. Grace Yan, Department of Civil, Architectural and Environmental Engineering, Missouri University of Science and Technology, USA



As a member of a leading interdisciplinary research teams in enhancing tornado resilience, coastal resilience, and climate change adaptation, Prof. Grace Yan focused on “Dance in Harmony with the Twister: one step back and two steps forward towards tornado resilience”. In her abstract for the talk, she stated that “The devastation from recent tornadoes left no doubt as to vulnerability of the Central and Southeastern USA to tornadoes and prompted an urgent need in enhancing tornado

resilience. To address this emerging societal need, we took one step back by conducting fundamental, interdisciplinary research to live in harmony with tornadoes, via three NSF Projects. One is to reveal the long-standing mystery of why some supercell thunderstorms can produce a tornado, while others with similar conditions cannot, by examining whether the vortex tubes are experiencing inverse energy cascade, instead of (forward) energy cascade. The findings will improve our fundamental understanding of tornadogenesis, bettering the NWS practice of tornado warning issuance and thus reducing tornado fatalities. Once a tornado is generated, another project is to find how terrain and land cover affect tornado intensity. This will better NWS’s prediction of tornado impact on communities. To reduce property loss, proactive measures of retrofitting existing buildings or designing new buildings against tornadoes are essential. To facilitate the adoption, high-fidelity numerical model of tornado-community interaction has been developed in the third NSF project and validated in their large-scale tornado simulator. These efforts will help pave the path for communities to THRIVE under worsening tornado hazards.”

Through the talk, Prof. Yan gave a detailed presentation of their current project activities and outcomes.



Copy of the PPT from the presentation by Prof. Grace Yan

Day 2: Podcast Summary

Prof. Lori Peek, Director, Natural Hazards Center (NHC)

Institute of Behavioral Science, University of Colorado Boulder, USA

Today's summit was rich with collaboration, regional insights, and forward-thinking conversations on disaster risk reduction.

A key moment from the day was the presentation of regional alliance reports from across the globe, including North America, Latin America and the Caribbean, South Asia, Africa, and the UK. Each shared their progress and challenges, underscoring the importance of regional collaboration feeding into a global strategy. Prof. Lori Peek noted how established alliances are already mentoring emerging ones, setting a precedent for mutual learning and support.

The theme of "Convergence for Disaster Resilience" was visible throughout the summit, not just in formal sessions but in the spirit of interdisciplinary, community-centered dialogue. Presenters called for problem- and solution-

focused approaches that combine rigorous science with local engagement. This emphasis on equity, justice, and community voice marked what Peek described as a "next wave of convergence."

The conversation also explored how the summit is prioritizing youth engagement and leadership development. From youth-focused regional programs to rising star awards and subcommittees for early-career researchers, the message was clear: the next generation must not only be included but empowered.

Finally, issues of gender, race, and cultural context were woven into discussions, with several sessions underscoring the risks of top-down solutions that fail to reflect local realities. Through case studies and candid dialogue, the summit emphasized the need to view disaster resilience through a deeply human and intersectional lens.

GADRI Website - <https://gadri.net/events/2025/07/7th-global-summit-of-gadri---day-1-summary-1.html>

#31 - GADRI2025 - Day 2 Recap (Prof. Lori Peek)

IDRiM Podcast · Episode — open.spotify.com



Regional Alliances of GADRI



Prof. Desmond Manatsa, President, AADRI; and Executive Dean, Faculty of Science and Engineering, Bindura University of Science, Zimbabwe presenting African Alliance for Disaster Research Institutes (AADRI)

Session on the GADRI Regional Alliances provided an opportunity to introduce Regional Alliances - Showcasing Collaboration and Research work and other activities.

The session was Chaired by Prof. Paul Kovacs, and Prof. Tetsuya Takemi

- North American Alliance of Hazards and Disaster Research Institutes (NAAHDRI): Empowering Communities to Prevent Natural Hazards from Becoming Disasters Together presented by Prof. Grace Yan, Chair, NAAHDRI
- Latin American and the Caribbean Disaster Research Institutions (LACARDI) presented by Dr. Rodrigo Cienfuegos, Director, CIGIDEN, and Associate Professor, Pontificia Universidad Católica, Chile
- African Alliance for Disaster Research Institutes (AADRI) presented by Prof. Desmond Manatsa, President, AADRI; and Executive Dean, Faculty of Science and Engineering, Bindura University of Science, Zimbabwe
- South Asia Alliance of Disaster Research Institutes (SAADRI) presented by Prof. Mahua Mukherjee, Secretary-General, SAADRI; and Professor, IIT Roorkee, India
- UK Alliance for Disaster Research (UKADR) presented by Prof. Andrew Collins, Advisor, UKADR; and Disaster and Development Network, Northumbria University Newcastle, UK
- 4th World Bosai Forum, March 2024-Outcomes and Recommendations presented by Prof. Yuichi Ono, Director, IRIDeS, Tohoku University, Japan

Podcast Session on Regional Alliances: UKADR

Dr. Susanne Sargeant [British Geological Survey, United Kingdom]

The UK Alliance for Disaster Research (UKADR) is a national network that brings together researchers, institutions, and stakeholders working on disaster risk, resilience, and reduction. It is an independent, voluntary alliance supported by contributions from academia, government agencies, civil society, think tanks, and research institutions that focus on disaster-related research in the UK. Its main aim is to foster collaboration among researchers and to represent the UK's disaster research community at both national and international levels, with a particular emphasis on engaging with the UN Sendai Framework for Disaster Risk Reduction.

Membership of UKADR is open to staff and PhD candidates based at UK institutions who are active in disaster-related research, including preparedness, response, and recovery. The alliance serves as a national coordination point for disaster research and works closely with international partners such as the UN Office for Disaster Risk Reduction, the Institute

for Risk and Disaster Reduction, and the Global Alliance of Disaster Research Institutes.

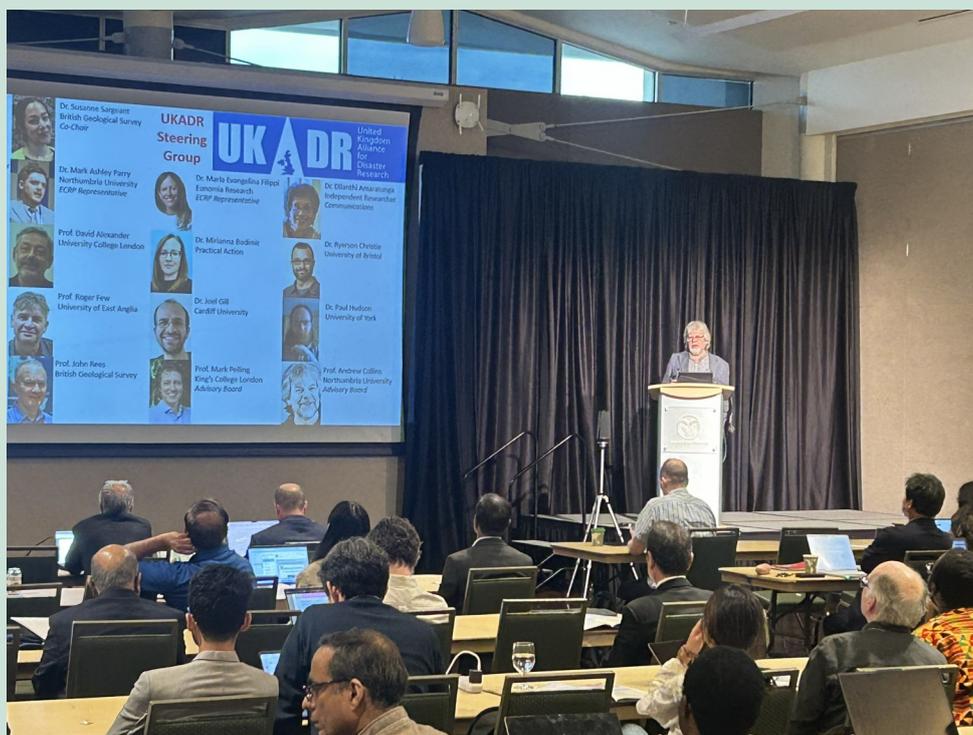
UKADR's activities include hosting regular conferences, which provide a platform for sharing research, networking, and fostering interdisciplinary approaches to disaster risk. Recent events have covered topics such as multi-hazard risk, resilience, climate change impacts, and the use of emerging tools such as artificial intelligence and serious games. In 2024, the conference was hosted by University College London, and the 2025 event will take place at Durham University in September.

By coordinating research efforts, facilitating knowledge exchange, and promoting evidence-based approaches, UKADR plays an important role in strengthening disaster risk reduction in the UK. It helps align national research priorities with global frameworks and ensures that research has a direct impact on policy and practice, both domestically and internationally.

Co-Host:

- Dr. Mark Ashley Parry [Northumbria University, United Kingdom]
- Dr. Haris Rahadianto [Lund University, Sweden]

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Prof. Andrew Collins, Advisor, UKADR; and Disaster and Development Network, Northumbria University Newcastle, UK presenting UK Alliance for Disaster Research (UKADR)

Presentations of Outcomes and Recommendations of the Panel Discussion Session II: Understanding and improving the relationship between science and technology, policy, and community

Chairs: Prof. Nobuhito Mori, DPRI, Kyoto University, Japan; and Prof. Virginia Murray, UK Health and Security Agency, UK

Panel discussion session two focused on the Understanding and improving the relationship between science and technology, policy, and community in the context of the elements of the UNDRR Sendai Framework for Disaster Risk Reduction and the UNCCC Paris Agreement. There were three group discussion sessions covering the three sub-themes of the conference:

- Convergence approaches in research and implementation
- Focus on engagement, partnerships, communication, and resulting policies: Strengthening societal resilience for disasters
- Underscoring the need for fundamental research and focuses on advances in disciplinary and transdisciplinary research



Discussion Session II-A-Convergence approaches in research and implementation

Chaired by: Prof. Lisa Wang, Old Dominion University, Norfolk, Virginia, USA

The session was organized and chaired by Prof. Lisa Wang who summarized presentations on convergent research methods, highlighting examples from Haiti earthquake studies, tornado hazard research, and the IN-CORE computational platform.

Panelists:

- **The Value of Localization in Convergence Research: Lessons from Haiti, Prof. Tracy Kijewski-Correa, University of Notre Dame, Notre Dame, Indiana, USA**

The presentation started with the definition on convergence. Prof. Kijewski-Correa broke it to three

major convergent approaches: disciplinary convergence by different disciplines and methodology; convergence by different methodologies, such as a human computational experiment in the field study, and also institutional convergence to relate to policy, science, or practice, especially for the local community to have a local engagement, local situation, local design. She presented her research work challenges; benefits and needs; and about the value of localization in convergent research and lessons learned from Haiti.

- **The need for convergent research to reduce the impact of tornado hazard, Prof. Delong Zuo, Texas Tech University, Lubbock, Texas, USA**

Prof. Zuo focused on the need for convergent research to reduce the impact of tornado hazards.

To do the convergent research; first, there is a need to have a problem-focused, and then the need to have solution-based, a concept echoed by other presenters as well, and it is essential to do the deep interdisciplinary research. He focused on human behavior in tornado events and warning; housing displacements and long-term recovery; mental health and psychological effects; and inequality in tornado hazard (race and ethnicity, income, education level, etc.). He emphasized that perhaps instead of being inside silos, it is better to see how to work together, and collaborate further with other agencies or other researchers or different communities which would benefit and produce results.

- **The Role of Research Software Engineering Process in Convergence Research, Dr. Jong Sung Lee, NCSA, Univ. of Illinois at Urbana-Champaign, Champaign, Illinois, USA**

Dr. Jong Sung Lee introduced the role of research Software Engineering (RSE) process in convergence research. *“Research Software Engineering (RSE) is a multidisciplinary field that combines expertise in software development with a*

deep understanding of academic research”. He used IN-CORE project as a product of convergence research. Convergence research requires very strong collaboration and integration of diverse knowledge and focus on a real problem and practical solutions.

- **From Hazards to Recovery: A Network-Based Lens on Community Resilience, Dr. Chia-Fu (Joey) Liu, University of Kansas, Lawrence, Kansas, USA**

Dr. Joey Liu used two products related to describing hazard to recovery through network-based lens on community resilience. The community social networks, and network-based resilience metric. He considered why the social network will be impacted by higher exposure. Because even though some lifeline systems are outside the higher exposure, they can still relate to shelter, supplies or emotional support for the people which may not be available locally.

The second example was about business recovery as diffusion. He considered using consumer behavior data to model long term or complicated business recovery dynamics.

He also mentioned that resilience is not static. It needs connection; it is shaped by its position in a broader dependency chain.



Discussion Session II-B: Focus on engagement, partnerships, communication, and resulting policies: Strengthening societal resilience for disasters

Chaired by: Prof. Kaushal Keraminiyage, University of Salford, UK

Co-Chair: Dr. Yuki Matsuoka, Head, UNDRR Kobe Office, Japan



The session was organized and chaired by Prof. Kaushal Keraminiyage and Dr. Yuki Matsuoka. Under context of the session theme, the session focused on how to strengthen social resilience for disasters. Discussions were based on effectiveness of partnerships and multi-stakeholder gaps in formulating disaster risk strategies. It also focused on how to enhance risk communication, especially transforming science into policy for new innovations; policy integration; legal challenges with finance and local capacity issues as well as inclusive and informative data for informed policymaking; how science and policy are integrated, and how partnerships can enhance the communication and the dialogue between science and policy.

- **A Kaleidoscope of Initiatives in Asia Pacific to navigate dynamic Resilience-scapes and Unpredictable Risk, Prof. Mahua Mukherjee, IIT, Roorkee, India**

Prof. Mahua Mukherjee highlighted the fact that resilience is a dynamic terrain. It is shaped by science values, politics and lived experience. From the perspective of Asia Pacific region, she particularly referred to some case studies and examples as to how emerging collective insights and how science policy and communities interact across shifting risk landscapes.

- **From Scenario Simulation to Policy Dialogue: Enhancing Inclusive Recovery through Evidence-Based Planning, Prof. Kenji Koshiyama, Kansai University, Japan**

Prof. Kenji Koshiyama presented from the perspective of technology, specifically about simulation and using simulations for policy dialogue. This relates back to the previous communication on how technology can enhance the policy dialogue in specific terms. He shared the idea about enhancing recovery planning through narrative driven scenario construction. For example: if we use technology to generate scenarios that can influence policy discussions, then that may be a good way of enhancing the resilience that we are looking at. He also said, post-disaster recovery is a temporal process marked by nonlinear societal transitions and epistemic uncertainties which indicates that yes, the disaster recovery is actually not to be seen as a permanent process, but as a temporal construct which are characterized by context, specific variables. He also stated that conventional DRR approaches tend to overlook the community defined priorities.

- **IN-CORE Engagement, Prof. Jamie Kruse, Colorado State University, USA**

Prof. Jamie Kruse talked about the IN-CORE project specifically focusing on integrated models for hazard resilience dimensions such as physical, socio-economic, hazard shocks, and recovery. Those are the key trajectories of integrated models for hazard resilience. She also noted that there are roadblocks for implementing such models. The definitions are not properly communicated or properly understood by the user groups. The usability and the clarity of objectives are some of the key constraints.

- **UNESCO-CODATA Data Policies in Times of Crises facilitated by Open Science, Prof. Virginia Murray, UK Health and Security Agency, UK**

Prof. Virginia Murray's key message was how we use data. What are the characteristics, what are the important aspects of data usage and what we need

to think about when using data for disaster risk reduction. It must be ethical, timely, and inclusive, which are key characteristics and which are essential for saving lives and sustaining recovery. She emphasized the importance of better data to understand the risk and policy formulation as it converges into similar aspects covered before. Do we have sufficient and reliable data to link the gap between policy formulation and scientific knowledge? Prof. Murray introduced quite a few tools to help agencies and organizations to align the data to the studies that are conducted. She introduced the data policy for times of crisis which has links with UNESCO. She mentioned that it was designed to confront urgent and emerging crises with data policies aligned to open science principles. She concluded with open science principles in detail, fair care and trust principles which are quite paramount to making data available across scientific communities in a shareable and understandable format.



Discussion Session II-C: Underscoring the need for fundamental research and focuses on advances in disciplinary and transdisciplinary research

Chaired by: Prof. Elaina Sutley, University of Kansas, USA



This session was organized and chaired by Prof. Elaina Sutley. The discussion session focused on disciplinary and transdisciplinary research. Panelists discussed post-disaster reconnaissance as a turning point for researchers and the challenges of translating scientific findings into practical applications. They emphasized the need for collaboration beyond academia and highlighted the importance of understanding different perspectives to effectively communicate and implement research findings. The session concluded with recommendations for continued post-disaster reconnaissance, closing the gap between government agencies and aligning academic training with critical problems, and using existing evidence-based research and data prior to setting new agendas.

Panelists:

- **Dr. Ali Nejat, Texas Tech University**

Dr. Ali Nejat's presentation talk about post-disaster reconnaissance as a turning point for researchers from a disciplinary and transdisciplinary perspective. Dr. Nejat presented a testament to witnessing that trauma and damage to buildings lead to decision making on household relocation. He also stated that he was much more compelled to solve the human related problems instead of the pure engineering related problems.

- **Lessons from the Field: Observing the Need to Advance Resilience Globally, Dr. Remy Lequesne, University of Kansas**

Dr. Remy Lequesne presented witnessing construction quality control issues. This has led to catastrophic damage and deepening his connection to structural engineering. While recognizing that the human and perhaps political angles of this problem and to think through the engineering solution. Perhaps designing stiff buildings would be better as they will not be as sensitive to construction defects.

- **Dr. Shiling Pei, Colorado School of Mines**

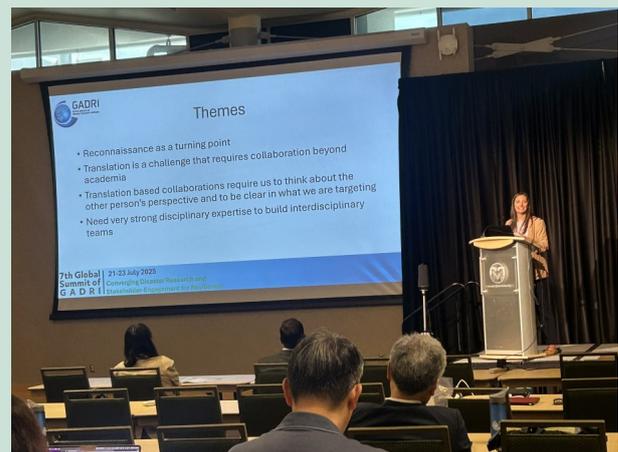
His presentation focused on building resilient timber

buildings, and collaborating and engaging with various stakeholders such as the wood industry, insurers, financial services, government agency engineering, contractors, researchers, investors and others.

- **Bridging Disciplines and Supporting Teams: Leveraging the Natural Hazards Center and CONVERGE Facility to Advance Interdisciplinary Disaster Science, Dr. Jennifer Tobin, Natural Hazards Center, University of Colorado Boulder**

Dr. Tobin, who is the Assistant Director at CONVERGE, and where they facilitate training, guidance, documents, and connections amongst researchers to deploy post-disaster reconnaissance to collect data supporting a wide range of problems.

Summing up the discussions, Prof. Sutley stated that topics that emerged in the discussion session were: reconnaissance is a turning point for researchers, and second theme that emerged was translation which is a challenge that requires collaboration beyond academia. Reconnaissance is where so many different disciplines individually work and disciplines come together to work. That is where the theme arose from and then translation is the challenge that requires collaboration beyond academia. Translation based collaborations require us to think about the other person's perspective. Not only do we need to think about that other person's perspective but be clear in our own minds as well as in our communication by building deep disciplinary expertise in all disciplines. She concluded by stating: Let's learn from each other; identify the problem and use the approach, whether disciplinary or transdisciplinary, that will best solve the problem. Both are needed.



Day 3: Podcast—Wrap-up of the Global Summit 2025

Prof. John van de Lindt, Host of the Summit; and Co-Director, Center for Risk-Based Community Resilience Planning, Colorado State University, Fort Collins, Colorado, USA

In this concluding episode of the IDRiM Podcast's GADRI2025 recap series, Ashley Parry sits down with Professor John van de Lindt, local host and Co-Director of the NIST-funded Center of Excellence for Risk-Based Community Resilience Planning, to reflect on a landmark summit held for the first time outside of Japan.

The episode opens with a discussion of the significance of hosting GADRI in Fort Collins, Colorado, not only a geographical milestone but also a symbolic shift toward a more global and inclusive identity. Professor van de Lindt speaks to the challenges and triumphs of bringing the 10th anniversary event to life, emphasizing the importance of blending technical sessions with informal, human-centered moments, like jazz at the closing reception and “lunch with keynote speakers,” which fostered dialogue between early-career researchers and established experts.

The summit's theme, “Converging Disaster Research and Stakeholder Engagement for Resilience,” was unpacked through three main strands: convergence, engagement, and fundamental research. Across the plenary sessions, keynote speakers tackled how to integrate

multidisciplinary methods with community involvement, navigate complex data ethics, and link fundamental research to policy change. Particularly powerful was the concept of participatory convergence, a model where stakeholders are not just consulted, but embedded in the research process.

John also reflects on initiatives like the Seeds and Needs networking session, the focus on ethical and open data use, and the increasing attention to AI and indigenous knowledge in disaster risk reduction. While GADRI's traditional resolution was once again adopted at the summit's close, van de Lindt stresses the importance of ensuring these resolutions lead to real-world impact, particularly in the lead-up to the post-2030 Sendai Framework.

Looking to the future, he hopes GADRI will continue deepening its commitment to inclusivity, data accessibility, and youth leadership, while exploring practical strategies to bridge the persistent gap between research and policy. With the next summit slated for Kyoto in 2027, the conversation ends on a hopeful note, that the seeds planted in Fort Collins will grow into stronger, more resilient global collaborations.

Host:

Dr. Mark Ashley Parry [Northumbria University, United Kingdom]

Music: “Sunset” by Kai Engel, available at Free Music Archive, licensed under CC BY 4.0.

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7th Global Summit of GADRI 2025

Final Outcomes and Recommendations

The wrap-up session was chaired by Prof. Paul Kovacs, Chair of the Board of Directors of GADRI; and Executive Director of Institute for Catastrophic Loss Reduction at Western University, Canada.

Final Resolution document of outcomes and recommendations was drafted and presented by Prof. Andrew Collins and Prof. John van de Lindt.



The Summit affirms that:

- 1.1 GADRI members maintain their commitment to improving engagement between science and technology, policy and all levels of stakeholders in accelerating the implementation of the Sendai Framework for Disaster Risk Reduction: The eight areas identified in The Geneva Call for Disaster Risk Reduction, June 2025 will be given special attention. We are committed to this agenda indefinitely beyond the current 2030 timespan of United Nations agreements.
- 1.2 In respect of the Sendai Framework Targets, members recognise the need to orientate their specialist knowledge to addressing the ongoing issues of; i) unabated rises in numbers of disaster affected people, ii) higher economic losses and iii) failing infrastructure.
- 1.3 The global context of increasing conflict, unmitigated climate change, ecosystem degradation, shortfalls and reductions in financial and political investment into resolving these issues strengthens our resolve to enable evidence-based and action orientated risk-informed decision making in disaster prevention and response.
- 1.4 There is a specific need to support, and seek to identify, innovative ways of getting disaster data and information sharing to better contribute to reducing disaster risk, strengthening disaster resilience and informed policymaking through collaboration, community engagement, ethical data practices, and innovative technologies.
- 1.5 Data for DRR needs to be disaggregated, well communicated, open source, accessible usable and used. Work is needed on integrating research data inputs across different methodologies and data formats.
- 1.6 Disaster research, policy and practice will adhere to principles of inclusivity and to bring about investment that addresses risk reduction more equitably, particularly for marginalised, minority and low-income groups, supporting all of society approaches and intergenerational equity in disaster prevention.
- 1.7 A disciplinary, methodological and institutional convergence approach, particularly when grounded in participatory processes, supports interdisciplinary contributions to disaster research capacity and impact. This includes through field study experimentation using mixed data sets, software engineering processes and modelling, and whereby different disciplines better collaborate in solving critical problems.
- 1.8 Participatory convergence that advances scientific inquiry and societal problem-solving requires trust building and mutually beneficial actions in research.

1.9 DRR and disaster recovery processes, orientated by post disaster needs assessments and effective data reconnaissance requires research and engagement that accounts for multi-hazard, multi-vulnerability, cascading and compounded systemic risk environments and principles of good risk governance.

1.10 Build Back Better is a holistic approach requiring innovation, inclusivity, forward planning, and strong science-policy-practice linkages to build resilient societies in the face of complex disasters.

1.11 Building back better lacks assessment through research that monitors and evaluates its effectiveness in terms of physical infrastructures, improvements to well-being and societal impact. Principles of building back differently and of building up early need to be better included in these assessments. Nature based solutions need to be explored as part of this and the wider DRR agenda.

2. Based on Panel Discussion Session 1:

Priority Area 1: Understanding disaster risk,

2.1 Urban expansion and land use change produces wildfire and other risks particularly where the higher vulnerability of immigrant communities unveils latent and deeper societal conflicts. Reconstruction risks include re-creating vulnerabilities mismatching response and prevention motivation.

2.2 Historical events and response plans have led to a lack of trust whereby institutionalised DRR and Climate Change vulnerability reduction has not been effective. Meanwhile, integrating indigenous traditional knowledge into DRR Strategies reduces this effect increasing trust and resilience (Zimbabwe examples have shown this).

2.3 Incorporating indigenous traditional knowledge into DRR has added benefits of re-connecting modern societies to nature and brings valuable perspectives on risk and resilience.

Priority Area 2: Strengthening disaster risk governance to manage disaster risk

2.4 Understanding the role of governance requires a clear theoretical framework. In particular, it is critical that we understand that governance unfolds at multiple levels from 'self-governance' at the individual level to the societal level. Such a theoretical framework is key because it shapes what we see (and don't see) in the context of disaster risk reduction.

2.5 Whilst we have made incredible progress in terms of gathering and publishing data that could inform disaster risk governance, much data are not being used effectively, not understood, or not easily available (usable) by people who need these data to make critical decisions before, during, or after disaster.

2.6 There continues to be limited integration of science into policy - this has been well documented. What this panel spotlights however is that there are examples - from the local to national where data and research *have* informed policymaking. These stories need to be captured and shared.

2.7 The fact that there are political and institutional constraints to disaster risk reduction has also been well documented. There needs to be more integration of practitioners, policy makers, local champions, advocates, and others from the outset (the design and conceptualization stage) of research. This is critical if the research is going to be used and taken up in the policy making process.

Priority Area 3: Investing in disaster reduction for resilience

2.8 Financial investment in DRR initiatives needs to be from more varied sources using innovative technologies and research collaborations to enhance disaster resilience and build effective partnerships amongst diverse stakeholders.

2.9 Policies, governance frameworks, and institutional arrangements need to be re-prioritized for DRR investments. There are multiple sources that can assist this process (e.g. World Bank Global Rapid Post-Disaster Damage Estimation (GRADE) Report, The Austrian Science Plan for Disaster Risk Reduction 2030+ and others).

2.10 Methods of evaluating countermeasures in disaster risk reduction for resilience consider direct physical damage reduction. These countermeasures also need to contribute to quicker recovery that reduces higher order impacts to the economy. Novel approaches of evaluating the benefits of these measures should be developed with empirical evidence. There needs to be improved methods of evaluating business continuity, including through exposure and recovery curves that better model DRR.

Priority Area 4: Enhancing disaster preparedness for effective responses to “Build Back Better” in recovery

2.11 Pre-disaster community-led recovery and resilience planning is a powerful mechanism to achieve transformative enhancement in disaster risk reduction while also achieving accelerated restoration of community functioning.

2.12 Insurance mechanisms, disaster safety frameworks, and sound economic policies are enablers of Build Back Better, whilst partnerships between authorities and the private sector at both local and national levels are essential to mobilizing finance.

2.13 A value-based approach is needed, allowing end-users and investors to define and justify investments in Build Back Better. Build Back Better extends beyond rebuilding infrastructure to include processes and systems that improve emergency response and long-term recovery.

2.14 There are challenges in timely decision-making under uncertainty and scarce resources, and the cognitive gap between planning and real-world situations. A combination of normative and adaptive approaches and promoting pre-disaster recovery planning using advanced digital tools like AI, Digital Twins, and the Metaverse should be pursued.

2.15 Enhancing community resilience is central to Build Back Better. Concepts like “Build Forward Better” emphasize not only post-disaster recovery but also proactive capacity building. Predictive models such as DFRM, CCM, and DAM can inform anticipatory action. The use of Living Labs is suggested to capture ground-level needs and challenges, ensuring recovery strategies are context-sensitive.

2.16 Innovation, collaboration, and knowledge sharing through multi-stakeholder collaboration are key drivers. Bridging the gap between scientific research, evidence-based decision-making, and practical policy implementation is vital: institutions such as GADRI can facilitate global knowledge exchange and partnerships, translating research into actionable strategies for resilient communities.

Based on Panel Discussion Session 2:

A. Convergence approaches in research and implementation

2.17 There is a need to promote collaborative research, including through encouraging funding agencies and institutions to support long-term convergence-focused research initiatives.

2.18 Data and tool sharing should create more interoperable data formats, validation tools, and open platforms that facilitate integration across different methodologies.

2.19 There needs to be more support for educational training including development of educational programs and workshops that train the next generation of researchers in convergence science, systems thinking, and community collaboration.

2.20 Stakeholder engagement can be strengthened through actively involving community members, policymakers, and practitioners in the research process to ensure that outcomes are actionable and widely adopted.

B. Focus on engagement, partnerships, communication, and resulting policies: Strengthening societal resilience for disasters

2.21 Resilience is shaped by the interplay of science, values, politics, and lived experiences, as especially emphasised with reference to the Asia-Pacific context. The concept of a dynamic “resilience-scape” underscores how science and technology, such as early warning systems, remote sensing, risk mapping, and digital twin cities, enables adaptive resilience.

2.22 Community engagement has a transformative role whereby local knowledge complements scientific research, facilitated by multi-actor partnerships.

2.23 Scenario simulations can be a tool for inclusive policy dialogue and deliberative recovery planning. Post-disaster recovery is complex and non-linear, often shaped by community-defined priorities and changing expectations, as evidenced in the Kobe (1995) and East Japan (2011) earthquakes amongst others.

2.24 Artificial Intelligence augmented scenario design should be able to support flexible, inclusive decision-making processes.

2.25 Integrated models can combine physical, socio-economic, hazard, and recovery data to enhance resilience planning. However, key challenges, include unclear definitions, data complexity, and usability barriers. The IN-CORE project is an example of a platform facilitating convergence between disaster research and stakeholder engagement to address these barriers effectively.

2.26 Ethical, inclusive, and timely data use is particularly needed in emergencies. UNESCO-CODATA Data Policy for Times of Crisis (DPTC) initiative provides factsheet guidance and checklists to align data use with Open Science principles. The framework, based on FAIR, CARE, and TRUST principles, supports ethical and efficient data mobilization across scientific, humanitarian, and policy sectors, relevant to crises ranging from pandemics to climate-induced disasters.

C. Underscoring the need for fundamental research and focuses on advances in disciplinary and transdisciplinary research

2.27 We need to continue, and always do, post-disaster reconnaissance following extreme events: this is also a critical training ground for students, early career researchers and other learning, fueling motivations and making measurements compelling for change.

2.28 We must work to close the disconnect between government agencies and government aid programs using evidence-based best practices, and research: this requires transdisciplinary collaboration with practitioners, advocacy agencies, government agencies, and academic researchers, and being clear about what we are targeting.

2.29 GADRI and those with power and more stability in their positions need to continue to help align academic institutions – education, training, degree programs, academic award systems – with the most critical problems. However, before setting research agendas for disciplinary or transdisciplinary work, scholars should see what is already out there and stop “reinventing the wheel”. They can then identify which existing problem-based approach (whether disciplinary or transdisciplinary) best solves the problem identified.

3. In response to these points recorded from the Summit, GADRI resolves to:

Bring all the above affirmations, findings and outcomes to its Board of Directors as GADRI resolutions.



4th Meeting of the General Assembly of GADRI

Lory Student Center, Colorado State University, Fort Collins, Colorado, USA

23 July 2025

The Fourth meeting of the General Assembly of GADRI was held soon after the successful conclusion of the 7th Global Summit of GADRI. The meeting was attended by nearly 50 members of GADRI. The session was chaired by Prof. Paul Kovacs, Chair of the Board of Directors of GADRI; and Prof. Hirokazu Tatano, Secretary-General of GADRI.

After a brief welcome, Prof. Kovacs call on all present members of the Board of Directors of GADRI to give a brief self-introduction. This was followed by the call for amendments and approval of the draft outcomes and recommendations document of the 7th Global Summit of GADRI. Due to time constraints, Prof. Kovacs requested the members to share their comments if any directly with the GADRI Secretariat.

A brief introduction to the Disaster and Risk Research: GADRI Book Series under imprint Springer was given; and announced the publication of the Proceedings of the 6th Global Summit of GADRI held in March 2023.

Finally the venue for the 8th Global Summit of GADRI was announced—it will be held at the Disaster Prevention Research Institute (DPRI), Kyoto University, Uji Campus, Kyoto, Japan in March 2027.



ORAL PRESENTATIONS

Advancing Global Disaster Risk Reduction and Resilience

Day 1 : Monday, 21 July 2025

Presenter	Affiliation	Title
Milad Roohi	University of Nebraska –Lincoln, USA	Post-Event Functional Recovery and Decision Support through Hybrid Mechanics-Informed Model-Sensor Fusion
Mark M. Morales, and Dina Magnaye	Planning and Development Research Foundation Inc.	Development and Application of a tool towards Assessing the Feasibility of Permeable Pavement as one of the significant Flood Management Strategy
	School of Urban and Regional Planning, University of the Philippines	
Edris Alam	Rabdan Academy, Abu Dhabi	Cyclone disaster resilient community-based housing and shelter plans- a proposal
Rosita Junneman	CIGIDEN - P. Universidad Católica de Chile	A Platform for Seismic and Tsunami Risk Assessment in Coastal Chile
Rubayet Bin Mostafiz	Louisiana State University, USA	Wind Resilience in Coastal Louisiana: A Social Equity Approach to Enhanced Building Code Practices
Juel Mia	Texas State University, USA	Social, Temporal and Spatial Risk Analysis of Lightning Fatalities in Bangladesh Using News Media Monitoring and GIS Techniques
Yuichi Ono	Tohoku University, Japan	Evaluation of DRR researcher's work beyond publication
Christian Resch	Disaster Competence Network Austria	Austrian Science Plan for Disaster Risk Reduction 2030+

Day 3 : Wednesday, 23 July 2025 - Morning Session

Presenter	Affiliation	Title
Shelley McMullen	University of Colorado Denver, USA	International Frameworks and Local Realities: Land Use Planning and Disaster Risk Management in Rwanda
Katarina Holla	University of Zilina, Slovakia	Enhancing Urban Resilience: Lessons learned from three pilot cities in disaster preparedness and response
Mohsen Zaker Esteghamati	Utah State University, USA	A data-driven risk-based design to support community resilience objectives through high-performing buildings
Rodrigo Cienfuegos	CIGIDEN - P. Universidad Católica de Chile	Innovative Approaches to Disaster Awareness and Risk Reduction: The Role of Art, Technology, and Community Engagement in Chile
Dina Magnaye	University of the Philippines	From Informality to Formality: Resilient Settlement Development Actions for Local Government-Unit Administered Resettled Communities in Highly Urbanized Cities of Metro Manila
Jack Puleo	University of Delaware, USA	Total water level prediction for military installation resilience
Qiushan Li	Sichuan University, China	Integrating Local Knowledge and Environmental Simulation in Post-Disaster Recovery: A Convergent Framework for Vernacular Settlements
Munsur Rahman	Bangladesh University of Engineering and Technology (BUET), Bangladesh	Use of Cyclone Classifier Model: A Next Generation Approach for Enhancing Community Resilience against Cyclonic Storm Surges
XuZhou	Beijing Institute of Technology, China	Research on the Risk Formation Mechanism of Carbon Markets under Major Shocks
Jong Sung Lee	National Center for Supercomputing Applications, University of Illinois, USA	IN-CORE Studio: Visual Model Builder for Community Resilience
Jagbir Singh	University of Delhi, India	Climate Change and Sustainable Development: A Community Approach in India



Shelley McMullen, University of Colorado Denver, USA



Rodrigo Cienfuegos, CIGIDEN - P. Universidad Católica de Chile



Katarina Holla, University of Zilina, Slovakia



Mohsen Zaker Esteghamati, Utah State University, USA



Prof. Lori Peek moderating the Oral Session B on Day 1

Presenters (L) Juel Mia, Rubayet Bin Mostafiz, Yuichi Ono; and Christian Resch

Poster Session

Chair: Prof. Toshio Fujimi, Prof. Ryukei Yoshimura, and Prof. Michio Sanjo

Supported by: Mr. Hideki Matsuura

Poster session particularly encouraged young scientists to share their respective institutes research activities, achievements, and progress of implementations in support of the Sendai Framework's Four Priority Areas.

Poster No.	Presenter	Presenter Affiliation	Presentation Title
P01	Freeda Jane Madius	Freeda Jane Madius (1) Graduate School of Engineering, Kyoto University, Japan. Norio Maki (2) Disaster Prevention Research Institute (DPRI), Kyoto University, Japan .	Bridging Qualitative and Quantitative Disaster Risk Reduction Assessments: Developing a Weighted Comparison Matrix for the Sendai Framework
P04	Nkongho Ayuketang Arreyndip	Department of Environmental Sciences, Informatics, and Statistics, Ca' Foscari University of Venice, Venice, Italy	The Russia-Ukraine Conflict: A Global Impact Assessment in the Corn and Wheat Sectors
P05	Julia Choolwe Munsaka	Colorado State University, Department of Political Science, USA	Institutionalizing Disaster Risk Reduction in Africa: Traditional Knowledge and Traditional Leaders' Role
P06	Md. Munsur Rahman	Anisul Haque, Rayhanur Rahman, Bangladesh	Pathway towards building community Resilience in the Coastal zone of the Ganges-Brahmaputra-Meghna Delta in Bangladesh
P09	Rubayet Bin Mostafiz	LaHouse Research and Education Center, LSU AgCenter, USA	Louisiana Disaster Reduction Initiative: Advancing Disaster Resilience through Innovation
P10	Toshio Fujimi	Disaster Prevention Research Institute (DPRI), Kyoto University, Japan	Neural basis of emotion for enhancing flood mitigation intention through virtual flood experience
P11	Muhammad Sajjad Rashid	(1) Civil, Environmental and Architectural Engineering, University of Kansas, Lawrence, KS 66045, USA (2) University of Waterloo, Waterloo, ON, Canada (3) Department of Civil, Environmental, and Construction Engineering, Texas Tech University, Lubbock, Texas, USA, (4) Stony Brook University, Stony Brook, NY, USA	Analyzing Managed Retreat Needs and Constraints: Insights from Historical MR Programs and FEMA Datasets
P17	Malte von Ramin	Fraunhofer Institute for High-Speed Dynamics, Ernst-Mach-Institut, EMI, Germany	Strengthening disaster risk management strategies through comprehensive understanding of high-speed dynamic phenomena
P18	Malte von Ramin	Fraunhofer Institute for High-Speed Dynamics, Ernst-Mach-Institut, EMI, Germany	Resilience Assessment of Buildings Against Extreme Weather Events

Poster Session

P19	Konstantinos Trelopoulos	BRGM - French Geological Survey, France	Post-Seismic Reconstruction in Le Teil: Progress Since the November 11, 2019 Earthquake and Focus on Building Rehabilitation
P20	Konstantinos Trelopoulos	BRGM, 45060 Orleans, France	Developing Damage State-Dependent Fragility Models for Reinforced Concrete Buildings Under Flood and Seismic Hazards
P21	Yoshihiro Ito	Disaster Prevention Research Institute, Kyoto University, Japan	Establishing a Global Research Hub for Comparative Earthquake and Tsunami Disaster Science: Kyoto University On-Site Laboratory "International Research Laboratory for Earthquake and Tsunami Risk Cognition and Reduction (iLETs)"
P23	Prashanna Mishra	Civil and Environmental Engineering, College of Engineering, Colorado State University, Fort Collins, CO, USA	Advancing Resilience-Based Design: Insights from Full-Scale Testing of Tall and Midrise Mass Timber Buildings
P24	Afeez Badmus	Department of Civil, Environmental and Architecture and Engineering, University of Kansas, Lawrence KS 66045, USA	Lifecycle Benefit-Cost Analysis of Wood-frame Residential Buildings to Tornado Hazard
P25	Saba Faghirnejad	(1)The University of Kansas, Lawrence, KS, USA. (2) Kansas State University, Manhattan, KS, USA	Tornado Sheltering Behavior and Access in Urban and Rural Communities
P27	Katarína Hollá	University of Zilina, Slovakia	Urban Adaptation and Alert Solutions for a TIMEly (re)Action - RETIME project initial results
P28	Tabassam Raza	(1) Planning and Development Research Foundation, Inc., Philippines(2) School of Urban and Regional Planning, University of the Philippines, Philippines (3) University of Delaware, Newark, DE, USA	Development and Application of a Framework for Assessing Effectiveness of EWS for Flood Resiliency: Comparative Analysis and Solutions for Marikina and Pasig Cities, Philippines
P29	Mohamad Habibniaykoochesfahani	Colorado State University, USA	Probabilistic Multi-Scale Hurricane Surge Loss Mapping to Support Resilience Strategies in Coastal Communities
P30	Michio Sanjou	Disaster Prevention Research Institute, Kyoto University, Japan	Estimation of Dimensionless Bottom Shear Stress in Tsunami by Model Experiments
P32	Kenji KOSHIYAMA	Kansai University, USA	Preparedness for Build Back Better - Modeling of Recovery scenarios simulation -
P33	Yota HIRONO	(1) Disaster Prevention Research Institute, Kyoto University (2) Sompo Risk Management Inc., Japan	Development of Business Continuity Planning System Using Recovery Process Estimation from Survey Data

Seeds and Needs Networking with Institutions Session

Chair: Prof. Yuki Matsushi and Prof. Hiroyuki Goto

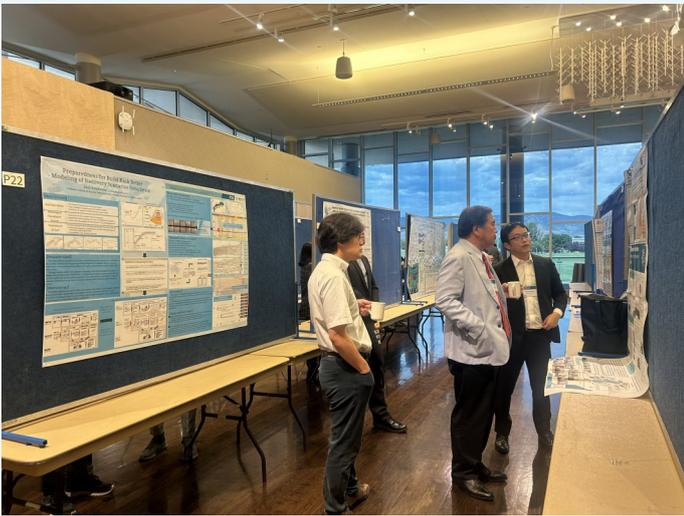
Supported by: Mr. Hideki Matsuura

The Seeds and Needs - Networking with Institutes aimed to provide institutes with opportunities to network and connect with other institutes, showcase their institute's resources, enable to find potential partners among GADRI members to collaborate, engage and enhance ongoing or new research project activities. For instance, some institutes may have an abundance of seeds such as their own methodologies, datasets, experimental equipment, computer resources, etc., but lack users, application

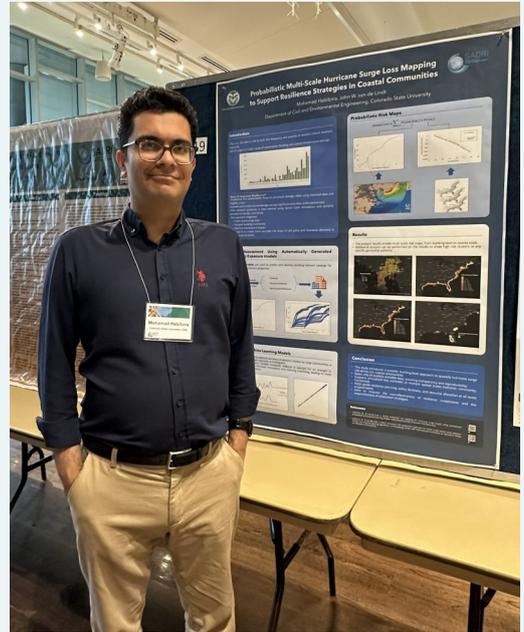
fields, in-situ data for validation, etc. Other institutes may have human resources (researchers) but many unsolved issues and in need of scientific knowledge, experience, experimental and observation equipment, and technological supports and vice versa.

The session, in particularly, explored research seeds and needs and assist to realize the effective/active collaboration among GADRI members.

Poster No.	Presenter	Presenter Institute	Presentation Title
N01	Dr. Malte von Ramin	Fraunhofer Institute for High-Speed Dynamics, Ernst-Mach-Institut, EMI Risk Management and Protective Structures, Germany	Transdisciplinary model approach for holistic disaster forecasting
N02	Prof. Dr. Tabassam Raza	Planning and Development Research Foundation, Inc., Philippines	Enhancing Existing International Fellowship Program (IFP) towards its Sustainability
N03	Prof Desmond Manatsa	Bindura University of Science Education	Seeds of Synergy: Cultivating Institutional Networks for Inclusive Disaster Risk Reduction in Africa
N04	Prof. Tian-You Yu	Advanced Radar Research Center, University of Oklahoma, USA	Building Partnerships for Advancing Radar Technology and Science
N05	Dr. Shohei Matsuura	National Research Institute for Earth Science and Disaster Resilience (NIED), Japan	Development of SMART Area-BCM Planning Tool Based on Flood Monitoring, Prediction and Business Impact Assessment
N06	Prof. Rubayet Bin Mostafiz	LSU AgCenter, USA	Bridging Research and Outreach to Improve Resilience and Sustainability of Louisiana Homes and Communities
N07	Dr. Genta Nakano	Disaster Prevention Research Institute, Kyoto University, Japan	Establishment of the All-phased Earthquake and Tsunami Comparative Science for Disaster Risk Reduction
N08	Prof. Delong Zuo	Texas Tech University, USA	Convergent Research for Reducing the Impacts of Tornado Hazard

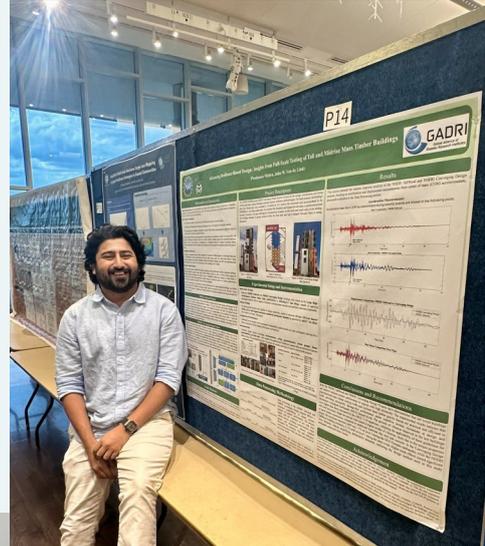


(L): Yuki Matsushi, Kaoru Takara and Genta Nakano at the Poster presentation session



7th Global Summit Secretariat Members

(L): Hirokazu Tatano; Prashanna Mishra, and Connie Hale



7th Global Summit Secretariat Members

(L): Mohamad Habibniaykoochesfahani; Hirokazu Tatano; and Connie Hale



Trung Do and Ayuna Matthews



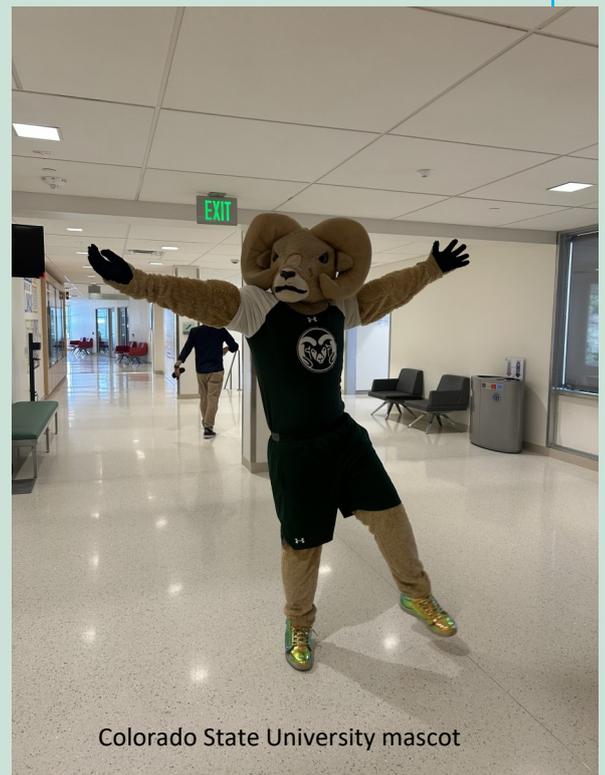
(L) Chair of the Board of GADRI Paul Kovacs, Prashanna Mishra, Virginia Murray, Kaushal Keraminiyage; and Trung Do



(L) Prashanna Mishra and Gretchen Kalonji



(L): Md. Juel Mia; Amit Dhiman, Md. Munsur Rahman, Mahua Mukherjee; and Prashanna Mishra



Colorado State University mascot

GADRI Members

Established in March 2015, the Global Alliance of Disaster Research Institutes support the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) and the work of the Scientific and Technical Advisory Group of the United Nations Office for Disaster Risk Reduction (UNDRR).

In line with its vision, GADRI strives to deepen the understanding of disasters and find implementable solutions to achieve disaster resilience; i.e. human, technical system and infrastructure resilience,

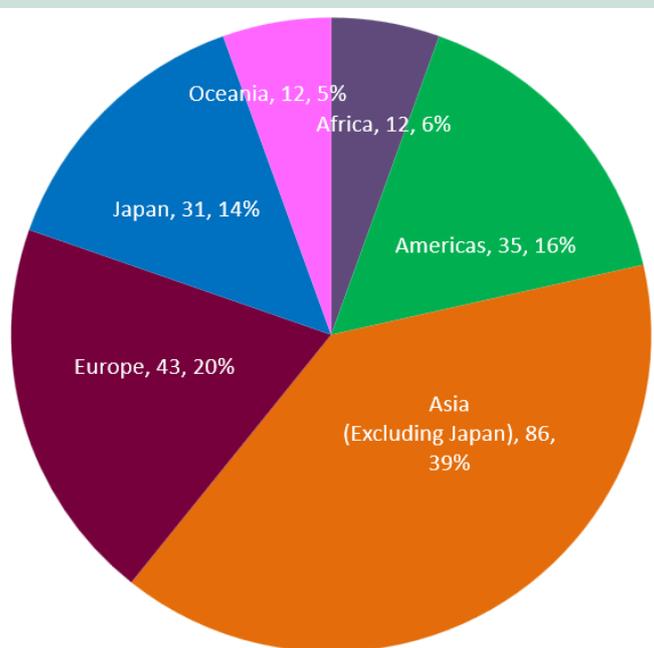
survivability and well-being, by integrating knowledge and technologies from around the world. Over 200 institutions have joined GADRI. GADRI membership is free; and completely voluntary and non-binding.

GADRI Secretariat is currently headquartered and hosted by the Disaster Prevention Research Institute (DPRI), Kyoto University, Japan.

To join GADRI, please contact the GADRI Secretariat: secretariat-gadri@dpri.kyoto-u.ac.jp

Geographical Distribution of GADRI as of 31 December 2025

Area	Members	Economies
Africa	12	7
Americas	35	8
Asia (Excluding Japan)	86	24
Europe	43	15
Japan	31	1
Oceania	12	2
Total Institutes	219	57
	57 economies	



GADRI
Global Alliance of
Disaster Research Institutes

Global Alliance of Disaster Research Institutes (GADRI)
Secretariat

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