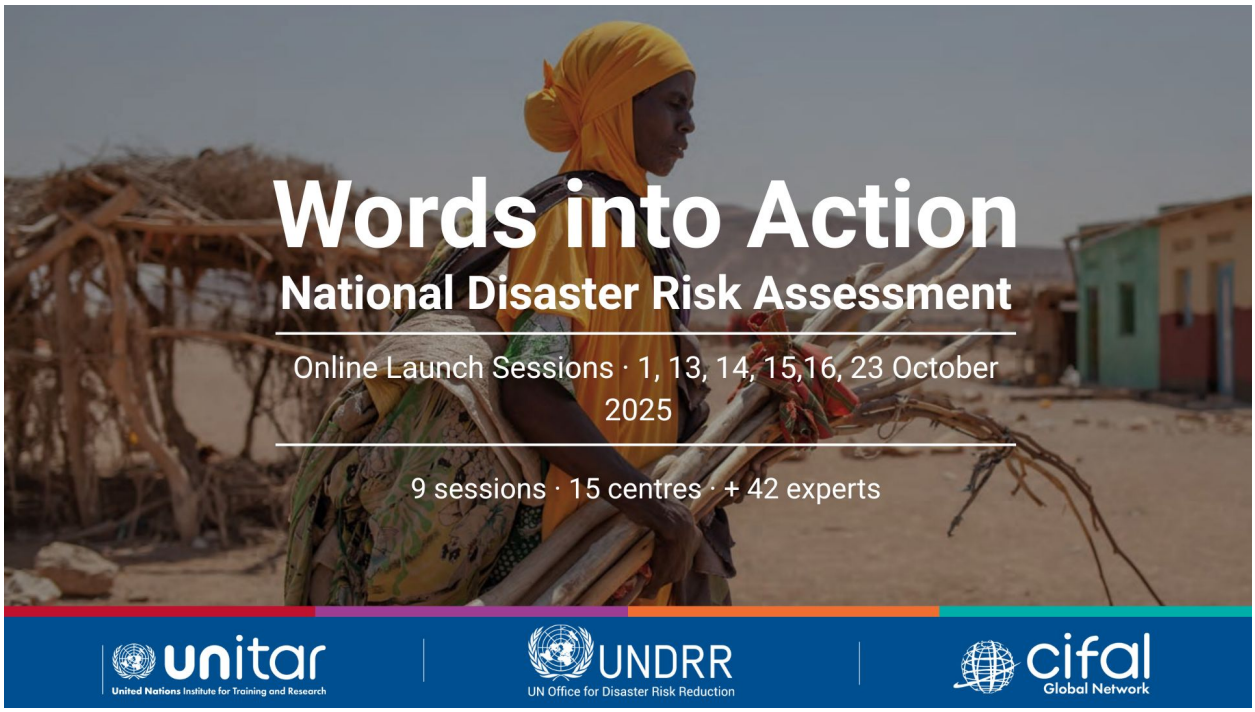
Key Takeaways-Words into Action Sessions

1 October-23 October 2025



The inaugural **Asia-Pacific session,** held on 1 October, focused on experience sharing in developing national risk calculation and governance frameworks. Led by Dr. Adam Switzer, Director of CIFAL Singapore and Dr. Brodie Beales, Director of CIFAL Newcastle, the session explored strategies for port safety planning and vulnerability assessments for tsunamis and tropical storms.

Dr. Adam Switzer, Director of CIFAL Singapore and Professor of Coastal Science at Nanyang Technological University explained Singapore's national disaster risk priorities and strategies for protecting **critical port infrastructure and coastal communities**. Research has indicated positive cascading effects of establishing risk governance frameworks at the national level to coordinate disaster risk management plans for coastal hazards. He highlighted qualitative methods to evaluate port vulnerability to long term hazards such as sea level rise and disaster shocks including storms and tsunamis. Discussions emphasized how local authorities can leverage national disaster risk assessments by embedding risk evaluation and prioritization in national development plans, budgets, and government structure.

Dr. Constance Chua, research fellow at Tohoku University International Research Institute of Disaster Science in Japan provided evidence-based methods used by national agencies to identify risks and impacts of coastal hazards on critical infrastructure and rapid response mechanisms. Risk assessments for critical infrastructure help keep trade flowing, protect livelihoods, and adapt emergency plans to evolving hazards. Dr. Chua's research identified damage and future risk assessments as critical for disaster risk reduction plans in port cities to increase the accuracy of risk predictions. Effective risk assessments contributed to positive outcomes of mitigation planning, investment in infrastructure, and developing evacuation routes.

Dr. Brodie Beales, Director of CIFAL Newcastle, Australia and Strategic Research Project Officer from the University of Newcastle provided examples of how extensive **risk assessments are used to support long-term protection of infrastructure, biodiversity, economic growth and public safety**. Considering ports are one of the most vulnerable infrastructures to disasters, Dr. Beales highlighted the example of Newcastle, host of the largest port in the world, indicated the largest vulnerability as major entry points for movement of invasive species. Disaster risk assessments for ports of support in identifying high-risk species to coordinate preventative measures against significant ecological and economic damage.

Ms. Virginia McKay, Director of Risk Services at University of Newcastle highlighted the importance of integrating a **multistakeholder approach to mitigating environmental and economic risks**. Recent extreme weather events, particularly in Australia, have revealed gaps in maritime risk management and port safety planning creating education opportunities to raise public awareness of shipping hazards and concentrated efforts in coastal disaster preparedness.

The **Asia-Pacific session** on 13 October reviewed disaster risk reduction responses to **hydrological hazards** and presented recommendations for implementing vulnerability assessments and capacity-building. Led by Dr. Voravate Chonlasin, Director of CIFAL Bangkok, the session introduced technological innovations in disaster risk reduction and its application in risk assessments.

Mr. Bill Ho, Project Manager of the Asian Disaster Preparedness Centre highlighted the application of technologies to enhance decision making for disaster risk management and reducing impacts of disasters. He introduced the use of **climate smart devices in identifying vulnerabilities and harnessing technology as a tool for predictive analytics and real-time situational awareness**. The data analysis informed the assessment of people-centred risks and critical service systems to identify the key drivers of natural disasters' long-term impact from gaps in social protection, housing, gender dynamics, and local governance variance.

The **Africa session** held on 13 October focused on long term risks including **seasonal flooding and wildfires,** with an in-depth discussion on community-led interventions and national risk prioritization. Led by Ms. Ihuoma Njemanze, Director of CIFAL Nigeria and Dr. Christopher Belford, Director of CIFAL Banjul, the session explored good practices in risk governance and developing community resilience from disaster shocks and implications of long-term hazards.

Ms. Mbassi Sanneh, Senior Programme Manager of the National Disaster Management Agency of The Gambia, shared insights into the unique **hazards and impact of displacement from disasters**. She introduced the national disaster management platform as a good practice for coordinating effort to centralize data for assessing risk and inclusive data ranging from village leaders to state authorities. One of the key priorities for national risk assessments in the African region is identifying underlying risks of disaster shocks and mitigating long-term hazards.

Dr. Williams Onuegbu, Professor in the Institute of Geosciences and Environmental Management, Rivers State University explained the emerging risks in Nigeria and vulnerability assessments in the Niger River Delta, facing high exposure **to seasonal flooding in coastal areas**. Results highlighted the role of community-led interventions in identifying people-centred risks and accurate prediction models for reoccurring disasters such as seasonal flooding. Dr. Onuegbu demonstrated the use of vulnerability assessments to prioritize risks in supporting national governments with facilitating resource allocation, emergency preparedness plans and mitigation strategies aimed at gradually reducing the impact of long-term hazards.

The **Arab States session** conducted on 13 October focused on national achievement and disaster risk reduction strategies from the scientific, government, and civil society stakeholders. Led by Dr. Aiman Albarakati, Director of CIFAL Saudi Arabia, the session highlighted good practices in **emergency communications and protecting critical infrastructure from evolving climate change hazards**.

In the context of the Kingdom of Saudi Arabia's national development strategy, Vision 2030, Mr. Hussain Alqahtani, Official Spokesperson and Director of Corporate Communications presented high-level efforts of the Kingdom of Saudi Arabia National Centre of Meteorology in early warning systems and emergency communications. He shared insights from his role in coordinating warnings and emergency communications during **impactful weather events such as sandstorms in major cities**. The national initiatives demonstrated the value of risk assessments in supporting disaster management communications and data collection.

Mr. Mohammed S. Albakri, Director, Department of Crisis and Disaster Management, National Centre of Meteorology of the Kingdom of Saudi Arabia discussed the significance of **emergency contingency planning in protecting critical infrastructure during natural disaster events**. Mr. Albakri shared insights from emerging climate change trends across The Kingdom of Saudi Arabia, and its subsequent national adaptation plans to mitigate the impacts of rapidly evolving natural disasters. Mr. Albakri explored the strengths of the Kingdom of Saudi Arabia's institutional development for crisis management mechanisms to monitor meteorological phenomena. Drawing from experience in developing national disaster response plans for nuclear and environmental emergencies, Mr. Albakri detailed the key components of developing national risk performance indicators and critical infrastructure registers. The Kingdom of Saudi Arabia's legislative and regulatory frameworks for disaster risk reduction set a robust organizational foundation for agencies to share data to anticipate disaster impacts.

The **Americas and Asia-Pacific session** held on 14 October focused on community inclusion and resilience strategies. Moderated by Ms. Akiko Ito, Director of CIFAL Japan, Dr. Gail Grabowsky, Director of CIFAL Honolulu and Dr. Helen Turner, Research Director at Chaminade University, CIFAL Honolulu, the session highlighted similarities between conditions of **island communities and frameworks for ensuring active risk governance participation of vulnerable groups including persons with disabilities and indigenous communities.**

Mr. Connor Flynn, Lead, Data Analytics Research Team at Chaminade University provided guidance on assessing data suitability for site-specific risks and inclusion of vulnerability data. Mr. Flynn shared his experience in scaling accessibility of data science in education and local institutions to overcome the challenge of connectivity among Pacific-island communities. The use cases showed the critical need for reliable and **accurate risk data collection to improve continuity and quality of services in remote locations and outcomes of local prevention and emergency response**.

Ms. Athline Clark, CIFAL Honolulu Affiliate Fellow, described the main hazards faced by remote island communities. Adaptation measures adopted by local leaders integrated traditional knowledge and nature-based solutions to strengthen disaster response networks to provide critical services in remote locations. She further highlighted **the unique characteristics of vulnerable communities in pacific-island settings underpinning the need for equal risk representation**. She emphasized the effectiveness of integrating remote island communities' unique knowledge based on their isolation and limited access to resources to build effective disaster risk strategies and increase efficiency of emergency response networks.

Dr. Viann Yomai, Research Fellow at the East West Centre and Pacific Drought Knowledge Exchange, detailed her experiences in leading community consultations for disasters and climate adaptation measures

in remote island communities. She emphasized the **role of regional and cultural considerations in developing risk assessments**.

Dr. Yomai used the example of homestead farmer communities to facilitate contextually specific risk questions, local knowledge, and technical advisories. The qualitative methods informed identification of vulnerabilities and opportunities for transboundary risk governance through knowledge exchanges and embrace local ownership of proactive risk reduction measures.

Dr. Gail Grabowsky, Director of CIFAL Honolulu focused on **methods of developing multi-stakeholder engagement and resource mobilisation in local institutions** through evaluating synergies with diverse expertise, available resources, and local perspectives. Higher education institutions can leverage monitoring and evaluation to unlock investments for community resilience and assessment of addressing the risks of diverse stakeholders, particularly vulnerable populations.

H.E. Ambassador Toshiya Hoshino, former Permanent Representative of Japan to the United Nations in New York and Professor in Osaka University shared Japan's disaster management approach by reflecting on the 2011 East Japan Great earthquake, tsunami events and nuclear disasters. He demonstrated how **community resilience was fortified through knowledge exchanges across sectors, strengthening prevention and recovery from disasters**. Japan's approach to disaster risk assessments prioritizes accuracy of forecasts through targeted data collection and minimizes damages from frequent and extreme weather events.

Dr. Hiroshi Kawamura, Vice President of Assistive Technology Development Organisation emphasized the **importance of leadership and active participation of persons with disabilities in disaster risk governance**. One emerging trend presented by Dr. Kawamura is the use of assistive technologies to reach persons with disabilities during emergencies. Dr. Kawamura enriched discussions with his expertise in qualitative methods rooted in psychology and data science to guide persons with disabilities and impairments with navigating complex hazards and environments. Assistive technologies play an important role in ensuring equal access to mobility and communication in emergency situations.

Dr. Takayuki Nakamura, Iwaki City Representative and Professor at Higashi Nippon International University shared lessons learned from addressing social and **human dimensions of disaster recovery after nuclear and natural disasters**. Based on his local governance and research experience, Dr. Nakamura highlighted the significance of collaboration among local government, academia and citizens to embed disaster risk assessments in urban planning.

The **Africa and Arab States session conducted on 14 October** focused on risk financing and hazard identification in natural and human-induced disasters. Led by Ms. Michelle Tan, Managing Director of CIFAL Lebanon and Dr. Mpilo Ngubane, Director of CIFAL Durban, the session highlighted the gaps and solutions for increasing monitoring, evaluation, training in disaster risk awareness and decision making.

Dr. Andrew Mather, Project Executive, Engineering Department, eThekwini Municipality, South Africa focused on risk financing for critical infrastructure and strengthening public awareness initiatives to promote **local ownership in disaster risk reduction plans**. Dr. Mather shared how city-wide disaster risk assessments are applied to drive investments for preparing and recovering critical infrastructure such as stormwater drainage during frequent flooding incidents. Dr. Mather shared key elements of sustaining long-term disaster resilience, including consistent public awareness and strengthening local ownership of disaster risk management through volunteering, consultations, and continuous training.

Ms. Sandy Zakhem, Senior Programme Manager of CIFAL Lebanon guided participants through a hazard identification and risk assessment planning of the 'Beirut Blast', one of the largest non-nuclear explosions in history. Underlying risks included a lack of enforcement, monitoring, and inter-agency coordination. The limited capacity for conducting disaster risk assessments highlights the need for a 'culture of safety' to ensure stakeholders are aware of risks and the necessary assessments to implement disaster risk reduction procedures. Retrospectively, the s**ystematic management of hazards and oversight of multi-stakeholder coordination are identified as fundamental components of effective risk assessments** for human-induced disasters.

The **Americas session, held on 16 October,** focused on strategies for community engagement and constructing holistic approaches to risk management. Led by Dr. Maleknaz Nayebi, Associate Director, CIFAL York and Dr. Nicole Bates-Eamer, Associate Director, CIFAL Victoria the session explored how national disaster risk assessment strengthen institutions' capacity for effective disaster preparedness and community resilience.

Dr. Sahar Safaie, founder and principal consultant of Sage on Earth Consulting drew from her experience and contributions to the first edition of the UNDRR National Disaster Risk Assessment to evaluate the progress in achieving the Sendai Framework 2015-2030 and NDRA objectives while offering best practices in **building multi-hazard risk assessments**. NDRA guidelines in local contexts have enabled stakeholders with the resources and structure to collect information and facilitate interactions between communities and agencies. Cross-sector collaboration has increased exchanges of quantitative and qualitative data required to inform disaster risk strategies for the protection of lives, livelihoods, and infrastructure.

Ms. Kaitlin Minivielle, Regional Manager of First Nations Health Authority, provided insights from indigenous governance structures and examples of integrating traditional knowledge in risk management. She imparted good practices in **culturally rooted resilience from First Nations disaster management** and discussed the deeply rooted traditions in community cohesion, strong social networks and a collective responsibility for land use management. She emphasized the key to effective consultations of First Nations communities is co-development and risk assessments must be community driven.

Dr. Aaida Mamuji, Professor of Disaster and Emergency Management from York University presented research findings from disaster management in public health crises highlighting the **behavioural science dimension in developing evidence-based risk reduction strategies**. Risk perception has been identified as a useful tool for motivating individual and community behaviours, increasing participation in disaster risk strategy development, and compliance with safety protocols in emergency situations. Her research findings indicated an increase in public risk awareness and proactive behaviour across civil society and government agencies. Dr. Mamuji highlighted the growing demand for disaster risk reduction research from higher education institutions and the value of investing in formal disaster risk management education.

The **Americas session held on 23 October** focused on **risk modelling and emergency preparedness for hurricanes and national risk management strategies**. Led by Ms. Maricarmen Estrada, director of CIFAL Miami and Ms. Ana Cristina Munoz, Senior Programme Manager of CIFAL Merida, the session introduced emerging trends of hurricanes in the Atlantic region and quantitative methods for evaluating the effectiveness of emergency preparedness for infrastructure and response networks.

The session featured UNDRR Regional-Scientific and Technical Advisory Group for The Americas and the Caribbean member Mr. Gabriel Bernal who provided case studies and statistics on emerging **trends for hurricanes in the Atlantic region highlighting adaptation** strategies for climate-change induced challenges. Based on scientific methods of storm modelling and measuring infrastructure resilience, key

results indicate the need for concentrating on planning exposure to disasters and likelihood of vulnerabilities for residential zones in high-risk areas.

Dr. Luis Manuel Garcia Moreno, Consultant in Risk Management and Civil Protection and Former Secretary of Civil Protection for the State of Chiapas, Mexico shared his expertise in civil protection and leading disaster risk reduction management strategy development. Key elements of **effective disaster risk management planning include multi-hazard early warning systems, intersectoral governance, and decisions supported by open data**. He elaborated on the results of national risk assessment cycles and culminating adaptation solutions for emerging climate-change induced risks such as risk-based adaptation, nature-based solutions and energy resilience for reducing vulnerabilities and strengthening community participation.

Dr. Robert Jorge, Senior Director of the Academy for International Disaster Preparedness at Florida International University emphasized the importance of building relationships to strengthen coordination of emergency response networks. He highlighted **techniques implemented by first responders to enhance communication, increase coordination of resources, and share information during crises**. Disaster risk assessments were used to scale implementation and streamline integration of local and national response networks.

The learning sessions concluded with a in-person workshop led by CIFAL Jeju on 23 October in Bangkok, Thailand, bringing together 30 CIFAL Jeju alumni participants and UNDRR experts for an interactive discussion and scenario-based application of the NDRA guidance. Participants discussed the benefits and opportunities to use the NDRA tool in developing local disaster risk reduction strategies for integrating national action in local community resilience, emphasizing how collaboration and localized strategies translate policy into practice.

Learn more:

Publication: Words in to Action- National Disaster Risk Assessment: A Guide for National Practitioners

Online course: Words into Action: National Disaster Risk Assessment - Toolkit for National Practitioners