The Reducing Disaster Risk Cluster at SEI Asia

Asia is one of the most disaster-prone regions in the world, and has suffered many of the largest and most devastating disasters on record. In the last two decades several major disasters have occurred across the region, including the 2004 Indian Ocean tsunami, which killed at least 200,000 people across seven Asian countries, most severely impacting Indonesia, Sri Lanka, India and Thailand; Cyclone Nargis, which killed over 100,000 people in Myanmar in 2008; the 2011 floods in Thailand that led to over US $40 billion in economic loss and damage; and Typhoon Haiyan (Yolanda) in 2013, which killed more than 6,000 people across the Visayas in the Philippines.

Disasters occur as a result of complex interactions between human activity and natural hazards. Disasters are a growing threat to the development and prosperity of nations, societies and people across Asia, with trends showing that the frequency, magnitude and impacts of disasters are increasing. In large parts of the region, ***disaster risks*** are continually being created and perpetuated by processes of development – processes that determine the extent to which people, resources and assets are exposed to hazards, how susceptible they are to harm and damage, and the capacity of societies to cope with and adapt to new conditions.

Climate change is expected to magnify the impacts of disasters such as floods, tropical cyclones and droughts through the 21st century. Holistic and inclusive approaches are required from a range of actors across many sectors in order to ***reduce disaster risk***. The 2015 Sendai Framework for Disaster Risk Reduction, which provides all stakeholders with a framework for action up to 2030, sets a range of priority areas, goals and targets. In 2016, Asian ministers adopted the Asia Regional Implementation Plan of the Sendai Framework. The Reducing Disaster Risk Cluster at SEI Asia is focused on meeting the research, policy and capacity development needs of our partners in academia, decision-making and civil society across Asia in pursuit of the Sendai Framework priorities and targets, as well as the Sustainable Development Goals.

Houses on stilts near Tonle Sap, Cambodia

The Reducing Disaster Risk Cluster's Strategic Framework

Vision

Reduced disaster risk for all people across Asia

Mission

To reduce vulnerability and enhance resilience to disasters of individuals, communities and countries in Asia through effective scientific research, policy engagement and capacity development

Objectives

Research: To conduct innovative and novel research that contributes to reducing disaster risk and building resilience, including engaging with the linkages between development and disaster risk in theory and practice.

Policy engagement: To provide effective support for decision-making in the implementation of the Sendai Framework to key DRR and development policy-makers and influencers.

Capacity-building: To strengthen the capacity of people at risk and key DRR and development actors to respond to risk by providing effective tools, guidance and services.

Thematic areas

The Reducing Disaster Risk Cluster is a multi-disciplinary group of professionals with backgrounds in the social and physical sciences, including geography, disasters and adaptation, development studies, sustainability science, environmental science, and hydrology. Our current work spans research on risk, vulnerability, adaptation and resilience; inclusion and stakeholder engagement; collaborative learning; and developing analytical methods and tools. The cluster has the following four thematic areas to organize this work and enable increased impact.

Regional cooperation

The cluster leads the SEI Initiative on Transforming Development and Disaster Risk, which aims for transformation towards equitable, sustainable and resilient development. The initiative is currently working with the Association of Southeast Asian Nations (ASEAN) and other stakeholders in Asia to improve cooperation across the DRR, adaptation, development, and humanitarian fields, and in support of this engagement we are collaborating with the Integrated Research on Disaster Risk (IRDR) programme of the International Council for Science (ICSU), the International Social Science Council (ISSC), and UNISDR. On the research side, our membership of the UNISDR Asian Science, Technology and Academia Advisory Group (ASTAAG) will enhance our efforts to provide evidence-based solutions to risk and vulnerability in the region.

Disaster recovery and resilience

The cluster is leading a research consortium of partners in Thailand, Vietnam, Cambodia and Indonesia conducting an analysis of long-term recovery processes following major disasters in Southeast Asia. The consortium carried out a set

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Helicopter douses fire

of long-term recovery case studies, and the findings were synthesized to derive common lessons and challenges for recoveries and building resilience. The research revealed the important influence that different disaster recovery narratives, such as "Build Back Better", have on who shapes recovery processes, but also who ultimately benefits and loses out. We are also developing a new global initiative on urbanization, to be co-led by SEI Asia. The initiative will connect with the cluster's research and policy engagement on understanding urbanization as an underlying driver of risk and on building resilience in urban contexts.

Empowering vulnerable groups

The cluster is supporting people with disabilities in Thailand, Cambodia and the Philippines to access disaster risk knowledge and build their resilience to disasters. Through the Global Resilience Partnership (GRP), and with partners across Southeast Asia and Australia, we are conducting vulnerability assessments of people with different disabilities, providing trainings on risk awareness and disability-inclusive DRR (DiDRR), and producing a toolkit to mainstream disability into DRR practice. The project also examines the specific challenges women with disabilities face during disasters in the region. We are also undertaking a small research project concerning child-centered risk reduction and resilience in Thailand, and looking to expand our research outputs and policy engagement in this area, across the region.

Culture and risk

The cluster has conducted research on the role of culture and cultural practices in disaster risk reduction. We've investigated how cultural differences between international DRR organizations and communities at risk can create and perpetuate vulnerability to disasters. The team is exploring the use of a place-based approach to address these differences, and to support the development of tools and frameworks that equitably reflect diverse, culturally-influenced understandings of risk.

Selected publications

Boyland, M., Nugroho, A. and Thomalla, F. (2017). The role of the Panglima Laot customary institution in the 2004 Indian Ocean tsunami recovery in Aceh. In *Disaster Risk Reduction in Indonesia: Progress, Challenges, and Issues*. R. Djalante, M. Garschagen, F. Thomalla, and R. Shaw (eds.). Springer International Publishing AG. Germany.

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