



ASIA-PACIFIC MINISTERIAL CONFERENCE ON
Disaster Risk Reduction
Brisbane, Queensland, Australia 19–22 September 2022



SAFINA STEWART

Conference Report



Australian Government



UNDRR

UN Office for Disaster Risk Reduction

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Introduction

About the conference

Background and rationale

The 2022 Asia Pacific Ministerial Conference on Disaster Risk Reduction (APMCDRR) was hosted by the Australian Government and the United Nations Office for Disaster Risk Reduction (UNDRR) in Brisbane, Australia from 19-22 September. It took place after a delay of the initially planned Conference event in 2020 that was impacted by the COVID-19 pandemic. It was the first time that Pacific countries and territories were formally part of the Conference, which conveners and participants greatly welcomed.

The theme of the 2022 APMCDRR was 'From crisis to resilience: transforming the Asia-Pacific's future through disaster risk reduction'. It highlighted that disasters are not only affecting communities across the Asia-Pacific region more frequently and more severely but also that they are having flow-on effects in terms of stalling progress towards the Sustainable Development Goals (SDGs). The theme reflected a profound shift that must occur in our approaches to crises to 'get ahead of the curve' to reduce the risks posed by natural, biological and technological hazards and prevent them becoming disasters.

The conference was organised around three main pillars and three cross-cutting themes that informed content and guided discussion.

Pillar 1: Investing in resilience and preparedness

Pillar 2: Shock-proof infrastructure and systems

Pillar 3: Resilient communities

Cross-cutting theme 1: Localisation

Cross-cutting theme 2: Inclusion

Cross-cutting theme 3: Science, Technology and Knowledge

Objectives

The conference was an opportunity for key stakeholders and delegates to review efforts to prevent new and existing risks, to identify the priorities that must be scaled up and accelerated to advance disaster prevention and risk mitigation in the Asia-Pacific, and to make actionable commitments against the Sendai Framework for Disaster Risk Reduction 2015-2030.¹

The conference aimed to strengthen regional commitment and action to meet the wide-ranging challenges facing the Asia-Pacific ahead of forthcoming events, including the 2023 Sustainable Development Goals Summit, the High-Level Meeting of the General Assembly on the Midterm Review of the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030, the UN Water Conference, COP27 and COP28, the Fourth SIDS Conference, and the follow-up arrangements to the SAMOA Pathway and the Vienna Programme of Action.²

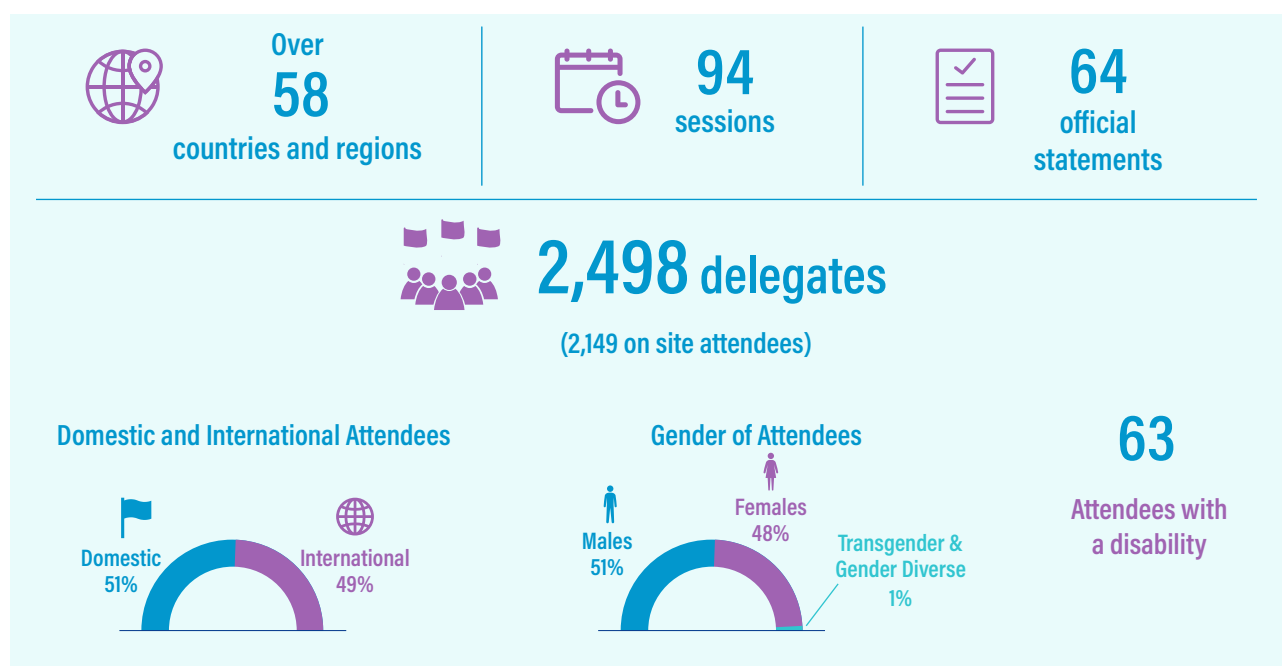
1 APMCDRR 2022, *Overview*, available at: <https://apmcdrr.undrr.org/about-1-welcome>

2 APMCDRR 2022, *Overview*, available at: <https://apmcdrr.undrr.org/about-1-welcome>

Summary of attendees

The APMCDRR attracted strong engagement from diverse attendees, consisting of nearly 2,500 delegates from over 50 countries, territories and regions, working with UN agencies, civil society, non-governmental organisations (NGOs), the business/industry/private sector, science, technology and academia, governmental and intergovernmental organisations, and others (see Figure 1). Ministerial sessions saw the delivery of 64 official statements from UN delegates, Member States, UN delegates and international, intergovernmental or regional organisation representatives, all expressing strong commitment and support for the implementation of the Sendai Framework.³ The conference was highly inclusive: 48% of the conference attendees were female, 51% male and 1% transgender and gender diverse. Higher proportions of delegates identified as people with disabilities, youth, indigenous people (including Aboriginal and Torres Strait Islander attendees) than at previous regional events.⁴

Figure 1: Summary of conference participation



Context to APMCDRR

The conference took place in a specific geographical and shifting policy context. The Asia-Pacific is the most disaster-prone region, and climate change and COVID-19 have heightened existing risks. Governments and policymakers must accelerate and upscale disaster risk reduction strategies, programmes and investments to reduce risk and to respond to the multiple threats to our region.

The APMCDRR was held at an important crossroads in the policy landscape. The Sustainable Development Goals, adopted by Member States in 2015 and to be achieved by 2030, is nearly midway through implementation and requires strengthened and accelerated commitments.⁵ Similarly, the Sendai

3 APMCDRR 2022, *Official Statements*, available at: <https://apmcdrr.undrr.org/program/program-3-official-statements>

4 APMCDRR 2022, *Registration Dashboard 22 Sept 2022*

5 United Nations (2015), *Sustainable Development Goals Report 2022*, available at: <https://www.un.org/sustainabledevelopment/progress-report/>

Framework for Disaster Risk Reduction 2015-2030, which aims to substantially reduce disaster risk and loss, is approaching the conclusion of the midterm review in May 2023.⁶ The review will:

assess progress on integration of disaster risk reduction into policies, programmes and investments at all levels, identify good practice, gaps and challenges and accelerate the path to achieving the goal of the Sendai Framework and its seven global targets by 2030.⁷

The Asia-Pacific has made significant progress in aligning national and regional policy frameworks with these global commitments, but APMCDRR delegates recognised that a significant shift from policy to embedded and consistent practice must occur. This shift remains difficult for some countries that are trapped in a cycle of disaster and recovery, with little space to focus on resourcing and implementation. The [Asia-Pacific Action Plan 2021-2024](#) aims to accelerate the Asia-Pacific's transformation to risk-informed development, by taking into special consideration the COVID-19 pandemic and the impacts of climate change.⁸ In the Pacific, the [Framework for Resilient Development in the Pacific](#) and the [2050 Strategy for the Blue Pacific Continent](#) successfully integrate climate change adaptation (CCA) and disaster risk reduction (DRR).

The unique timing of the APMCDRR, held just as the world was beginning to make sense of the COVID-19 pandemic alongside significant climate-induced disasters across the region, drove a focus on both the management of biological hazards and the prioritisation of climate resilience. The discussions elevated the Sendai Framework's inclusion of management of biological hazards such as pandemics and epidemics in 2015, and emphasised the need to enhance resilience of national health systems and improve the interoperability of health management and DRR systems.⁹ Consequently, the conference profiled and elevated existing work in the Asia-Pacific that places health resilience at the centre of DRR, including the [Bangkok Principles for the Implementation of the Health Aspects of the Sendai Framework](#), which promotes 'systematic integration of health into national and sub-national disaster risk reduction policies and plans'.¹⁰ The conference provided an important space for governments and stakeholders to learn from the experience of COVID-19 in order to enhance resilience in the Asia-Pacific.

The APMCDRR also highlighted the importance of prioritising inclusive, gender-transformative and universally accessible DRR. Disasters affect society's poorest and most marginalised groups disproportionately, widening existing social and economic inequalities. Conference attendees explicitly recognised that poverty reduction measures that lift people out of poverty, champion the inclusion of marginalised groups and limit social and economic inequalities can be effective measures to enable individual and community resilience to disasters, conflict, pandemics and economic shocks.

Conference sessions explored and acknowledged the benefit of diverse leadership in DRR and the experiences, knowledge and skills that women, youth, indigenous peoples, persons with disabilities and people with diverse sexual orientation, gender identity and expression and sex characteristics can bring in


6 UNDRR (2015), *Sendai Framework for Disaster Risk Reduction 2015-2030*, available at: <https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030>

7 UNDRR (2021), *The midterm review of the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030: Concept Note*, p. 1, available at: <https://afpr.undrr.org/sites/default/files/2021-11/Concept%20Note%20of%20the%20Midterm%20Review%20of%20the%20Implementation%20of%20the%20Sendai%20Framework.pdf>

8 UNDRR (2021), *Asia-Pacific Action Plan 2021-2024 for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030*, available at: <https://www.undrr.org/publication/asia-pacific-action-plan-2021-2024-implementation-sendai-framework-disaster-risk>

9 UNDRR (2015), *Sendai Framework for Disaster Risk Reduction 2015-2030*, p. 19

10 *The Bangkok Principles for the implementation of the health aspects of the Sendai Framework 2015-2030*, The International Conference on the Implementation of the Health Aspect of the Sendai Framework for Disaster Risk Reduction 2015-2030, Bangkok, Thailand, 10-11 March, 2016, available at: <https://www.preventionweb.net/publication/bangkok-principles-implementation-health-aspects-sendai-framework-disaster-risk#:~:text=The%20'Bangkok%20Principles'%20place%20strengthened,disaster%20and%20health%20risk%20management.>



strengthening DRR processes and unlocking new solutions to DRR problems. To this end, the conference sought and received the perspectives and advice of diverse women and youth groups and leaders and the LGBTQI+ community. This facilitated a greater understanding of the importance of fostering inclusive conversations and co-creating DRR planning processes.

The conference included the recognition of women's leadership in disaster risk reduction at the Women's International Network for Disaster Risk Reduction (WIN DRR) Awards ceremony. Dr Esline Garaebiti, Director of the Ministry of Climate Change Adaptation, Meteorology, Geo-Hazards, Environment, Energy and Disaster Management in Vanuatu received the Excellence award, and Dr Homolata Borah, a researcher from India working with communities on Majuli, received the Rising Star award.

This report provides a summary of the conference proceedings, but also aims to position the 2022 APMCDRR in the broader development policy context. Notably, APMCDRR 2022 took place only weeks after the release of the 2021/2022 UNDP Human Development Report,¹¹ which found that human development indicators were tracking in reverse in many countries, several of which are in Asia and the Pacific. The report attributed this outcome to the escalating and compounding impacts of disasters, conflict and the COVID pandemic driven by global trends, such as climate change, unplanned urbanisation and environmental degradation. Within this prevailing environment of uncertainty, disaster risk managers and development practitioners have a shared interest in the SDGs and other associated global agendas, including the COP meetings on climate change, the New Urban Agenda, the UN Water Conference, the Fourth SIDS Conference, the SAMOA Pathway and follow-up arrangements for the Vienna Programme of Action. The links between the conference and some of these policy platforms are articulated in Figure 2. The insights that the APMCDRR can provide to key policy platforms are exemplified in Text Box 1 (in relation to water security).

11 UNDP (2022), *Human Development Report 2021-2022: uncertain times, unsettled lives: shaping our future in a transforming world*. New York.

Text Box 1: Risk-informed development: disaster risk reduction and the case of water

While not the theme of any specific sessions, water security and water-related shocks permeated discussions at the APMCDRR. Water is a key determinant of disaster resilience, and an essential ingredient of food security, health security, livelihood and economic security. However, water can also be a destructive force.

Three years ago, much of the Asia-Pacific region was in the grip of an extended drought that resulted in widespread crop failure, livestock losses, wildfires, outbreaks of transmissible diseases and stress migration. However, APMCDRR 2022 took place in a vastly different environment, with the declaration of a third successive La Nina event that is forecast to bring above-average rainfall across the region.

As participants met in Brisbane, large swathes of Pakistan were under water – the result of extreme monsoonal rain falling on river systems already swollen with unprecedented volumes of glacial meltwater. And, just a few months earlier, the conference venue itself was under threat of flooding from the Brisbane River due to unusually heavy rainfall in its catchment.

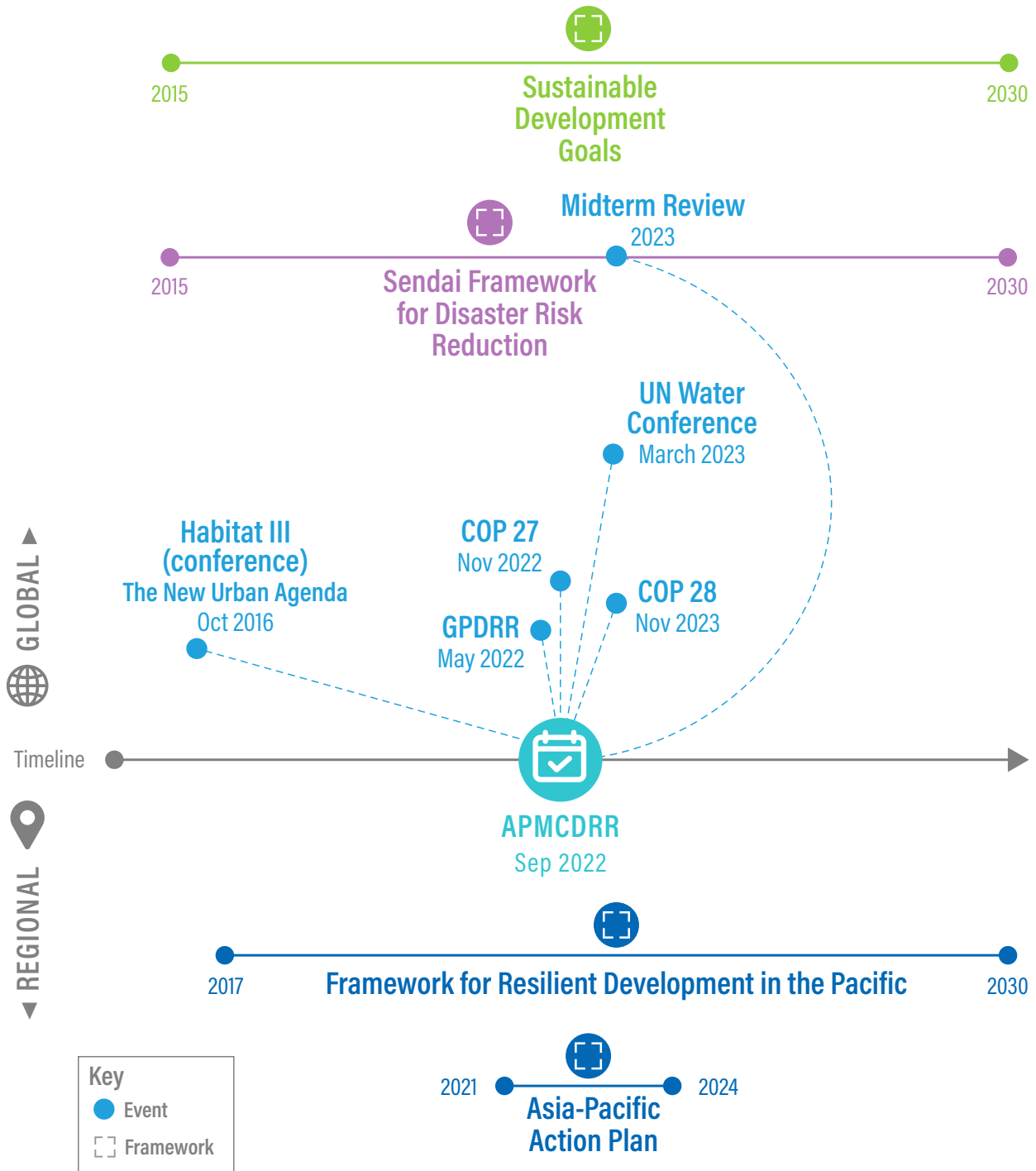
Against this backdrop, panellists called for investments that reduce water-related disaster risks, including durable water supplies and irrigation systems in times of water shortage, and effective systems to protect property and assets from inundation in times of excess water. Sponge cities were canvassed as a way to reduce flood risk and strengthen disaster resilience in urban areas.

Key messages

- Infrastructure and systems must be risk informed to maintain water supplies through droughts, while also able to regulate and absorb water flows during periods of excess rain. This calls for a ‘Think Resilience’ approach to investments.
- Water-related risks of the future will deviate from the historical risk profile. Therefore, there is an imperative to design water resource management systems for the future.
- Shock-proofing water infrastructure and systems will require investment, but costs less than repairing or reconstructing them after disasters.
- Risk-informed development to manage water requires collaboration across rural, urban and peri-urban environments and stakeholders.
- These priorities need to be highlighted in forthcoming events and processes, including the 2023 Sustainable Development Goals Summit, the UN Water Conference, COP 27 and 28, the Fourth SIDS Conference, and follow-up arrangements to the SAMOA Pathway and Vienna Programme of Action.¹²

12 APMCDRR 2022, *Co-Chairs’ Statement*, para. 3, available at: <https://www.undrr.org/publication/apmcdrr-co-chairs-statement-2022>

Figure 2: The APMCDRR in context



The report makes linkages to two of the key global agendas by indicating relevant themes or discussion points throughout the text using the following key:

- SDGs
- Sendai Framework

APMCDRR structure

Pillars

I. Investing in resilience and preparedness

The compounding impacts of disasters – such as the effects of climate change and the COVID-19 pandemic – have highlighted the importance of systemic risk-informed investment decisions, and the need to consider the role of financial investment in both mitigating crises and reducing their impact. Pillar 1 explored the roles of governments, the private sector, and communities in shaping and driving change in financial systems to increase DRR investments.

II. Shock-proof infrastructure and systems

New and existing infrastructure must enable communities and economies to prosper despite challenges. Given rapid urbanisation, cities and urban areas of all sizes and economic characteristics must embrace technology and make risk-informed infrastructure decisions. These decisions need to support continued functioning of existing infrastructure and essential social services and be inclusive and accessible. Strong leadership and governance at national, sub-national and local levels are required for infrastructure planning and recovery.

III. Resilient communities

Communities are often unprepared for multiple and cascading events, including those driven by climate, conflict and health security. Disasters affect people differently and exacerbate pre-existing inequalities. We must create more effective links between indigenous knowledge, technology, scientific evidence, planning, decision-making and communication in an all-of-society approach, and ensure no one is left behind.

Cross-cutting themes

Localisation

Local actors are the first responders to disasters, including those driven by climate, conflict, and food and health security. Disaster risk plans must be informed by local knowledge and expertise. Government and civil society actors must have the tools needed to lead the recovery of their own communities, while local and indigenous knowledge in DRR planning can improve outcomes and build inclusive resilience.

Inclusion

Including women and girls, persons with disabilities, young and aged people, LGBTIQ+ community and other marginalised groups in DRR planning is essential for resilience. Harnessing these voices and capabilities as agents of change, leaders and first responders in DRR will increase resilience at all levels.

Science, technology and knowledge

Supporting disaster prevention, preparedness and recovery requires integrating traditional knowledge with science-based approaches to strengthen community resilience. This also includes an emphasis on how science and technology supports risk communication and risk-informed decision-making.

Investing in resilience and preparedness

The first pillar of the APMCDRR focused on the importance of systemic risk-informed investment decisions. This included unpacking the roles of various actors in promoting and supporting financial investment in both mitigating crises and reducing their impact.

I. Prioritising investment in DRR

The **impacts of disasters on communities and economies** were described throughout the conference with reference to catastrophic and – in some cases – very recent events. Specific examples from 2022 included the eruption of the Hunga Tonga-Hunga Ha’apai volcano and subsequent tsunami in Tonga, flooding across eastern Australia, and flooding from monsoon rains and melting glaciers in Pakistan. It was frequently noted that these unprecedented events are becoming more frequent and severe, and often occur concurrently with multiple small-scale events that create debilitating cumulative impacts.

Despite some increases in investment in DRR noted at the conference, there is still a **significant shortfall in funding** for prevention relative to investment in response and recovery. The UNDRR’s 2021 report on international cooperation in DRR highlighted that out of every USD 100 spent on disaster-related official development assistance, only 50 cents was invested in protecting development from the impact of disasters.¹³

To encourage greater investment in DRR, conference participants and panellists emphasised the **importance of building a strong business case** founded on evidence and data that quantifies disaster-related risk and the positive impact of investment. For example, studies demonstrate that investing in resilient infrastructures in low and middle-income countries yields USD 4 in benefit for every USD 1 invested.¹⁴ Business cases need to take a long-term perspective that considers the importance of continuous investment in operation, maintenance and upgrades to protect development investments and avoid downward economic spirals as a result of continuous focus on disaster response. Additionally, it is important to ensure that new investments are designed to prevent the creation of new risks or inequalities as well as to mitigate current and future risks.

Cross-cutting theme: Science, technology and knowledge

The conference highlighted the need for new approaches, techniques and skills that support decision-making on DRR investment. Within Australia, the Resilience Valuation Initiative is a coalition that brings together stakeholders from public, private and community organisations to determine the value of a resilience-building asset, network, feature or activity.

- Sendai Framework Priority one: Building a strong understanding of disaster risk means articulating the importance of systematically recording and sharing the economic as well as social, health, education, environmental and cultural heritage impacts of disasters that would feed into the development of strong business cases.¹⁵

The APMCDRR panellists and participants recognised **the importance of political leadership** to act on business cases in order to translate commitment into concrete and resourced plans. In some country contexts, this includes a contingency fund within the national budget or accessed through pre-arranged

13 UNDRR (2021), *International Cooperation in Disaster Risk Reduction*, available at: <https://www.undrr.org/publication/international-cooperation-disaster-risk-reduction-target-f>

14 S Hallegate, J Rentschler and J Rozenber (2019), *Lifelines: Resilient Infrastructure Opportunity*. World Bank.

15 UNDRR (2015), *Sendai Framework for Disaster Risk Reduction 2015-2030*, page 14

lines of credit, such as the World Bank's Deferred Drawdown Option for Catastrophic Risk (Cat DDO) recently made available to Samoa and Tonga. Ministries of Finance were noted as critical in driving smarter investments that reduce rather than contribute to risk. Investing to reduce risk can be achieved by mainstreaming DRR and climate action in funds allocation processes. It was noted that concessional financing instruments should be expanded alongside financial instruments such as debt-for-climate swaps.

II. Pathways for investment

Conference participants discussed the **importance of prioritising DRR in public investment** in infrastructure, research and development that will mitigate both current and future risk. Legacy infrastructure that exacerbates risks needs to be identified and appropriate measures taken to reduce its risk profile – particularly in the context of climate change. Often, this will require retrofitting infrastructure to enable safe use, which can be cheaper and more politically feasible than investing in large new infrastructure projects.

There was considerable **discussion of the issue of 'build back better' during recovery** that both called for balance in speed and quality of recovery interventions and called for a shift in thinking towards a stronger focus on the future. The term 'build back better' was contested for its implied assumption that infrastructure and systems should always be built back. In contrast, a future-focused approach starts from what will be needed, and may not require rebuilding. It was also emphasised that 'build back better' needs to include community resilience and systems, not just infrastructure.

- Sendai Framework Priority four focuses on 'building back better' and includes preparing for disaster reconstruction and consideration of whether building back better might include future-focused relocation of public facilities and infrastructures outside the risk range.¹⁶

Conference participants identified **adaptive social protection systems as a powerful tool** to reduce poverty over time, prepare people to cope with shocks, build community resilience to hazards and enable recovery. The effectiveness of universal social protection systems was discussed in the context of the COVID-19 pandemic; it was proposed that countries with regular and predictable social protection transfers were more resilient and recovered more quickly from the pandemic. Countries with existing social protection policies and protocols were also best positioned to expand and adapt approaches to changing needs. Representatives from the Philippines, Indonesia and other countries spoke about the challenges of verifying eligibility and the importance of gathering consistent data for socioeconomic registries.

- Goal 1 of the Sustainable Development Goals recognises the need to implement nationally appropriate social protection systems and measures for all by 2030, particularly the poor and most vulnerable.¹⁷

Cross-cutting theme: Science, technology and knowledge

One conference panel discussed the role of technology to support social protection programming and focused on the M-PAiSA platform developed by Vodafone in Fiji. This innovation enables people to register for social protection assistance from their mobile phone and receive funds directly into their mobile wallets. It also facilitates the easy transfer of funds from diaspora to families. Technology was also noted as a means of preventing duplication of cash transfers and improving cost efficiencies. There are interesting options to use technology to facilitate insurance payments to customers regardless of location based on automatic data triggers, such as the level of rainfall in a geographic area.

16 UNDRR (2015), Sendai Framework for Disaster Risk Reduction 2015-2030, page 21

17 United Nations (2015), Sustainable Development Goal 1: No Poverty, available at: <https://sdgs.un.org/goals/goal1>

Cross-cutting theme: Inclusion

The conference promoted social protection systems that are inclusive and gender transformative. Examples included accompanying cash transfers with gender and development sessions for families in the Philippines, and targeted assistance to at-risk groups in Fiji. The Philippines Government has also modified its conditional cash transfer programme to include homeless families and house them temporarily so they can register for assistance. Local government and civil society are well positioned to help with the effective operation of social protection systems through advance planning to identify at-risk groups or those living in disaster-prone areas before an event, and to support rapid and efficient scale-up of assistance after an event.

The private sector, both independently and in partnership with government, creates important pathways for investment. Micro, small and medium enterprises (MSMEs) comprise more than 90% of businesses in the Asia-Pacific, and are critical in creating livelihoods, supporting well-being, and building social cohesion and value chains. Conference participants discussed **investment in MSMEs' capacity and resilience** and the value that this adds to community resilience. COVID-19 exposed the vulnerability of many MSMEs and the fact that **many businesses had inadequate risk reduction systems or business continuity strategies**. They also had low capacity to bid on large contracts or access credit that would give them a financial buffer in the event of a crisis. Panellists emphasised the importance of weaving climate and disaster risk transfer, assessment and mitigation into their core business models. COVID-19 also exposed the interdependencies and reliance of larger businesses on supply chains maintained by MSMEs, further elucidating the need to ensure the resilience of MSMEs for the continued prosperity of societies.

- Sendai Framework Section five includes the importance of businesses, and especially micro, small and medium-sized enterprises, integrating DRR and business continuity into business models and practices.¹⁸

The business world is changing, and there are opportunities to leverage corporate environmental, social and governance commitments, as well as invest in emerging sustainable markets such as ecotourism, renewable energies, or sustainable farming (e.g. seaweed production). **Opportunities to strengthen MSME resilience include investment in both localised and innovative approaches**. Supporting businesses to invest in sustainable and resilient products will allow them to get back on their feet quickly. Representatives from Papua New Guinea and Timor-Leste gave examples of individuals and businesses adapting and learning new skills quickly as a form of resilience; this community-based innovation needs to be recognised and supported.

Cross-cutting theme: Inclusion

The conference highlighted examples of women building their own economic independence to support their preparedness, resilience and recovery from natural hazards. The Papua New Guinea Business Coalition for Women is one example; it advocates for fairer representation of women in leadership and decision-making roles. The coalition supports recruitment and retainment of women and their access to training and financial management and marketing. It also works to prevent and respond to violence against women – a gross violation of human rights that also reduces women's participation in the economy.

Regardless of the pathway, conference panellists and participants reiterated the need to **embed multi-hazard risk analysis in public and private investment decisions**.

18 UNDRR (2015), Sendai Framework for Disaster Risk Reduction 2015-2030, p. 22

III. Role of different actors

Governments play a crucial role in ensuring DRR is prioritised in public and private investments and in mobilising resources – at different levels of government – to invest in DRR. While urgent response needs come with each crisis, governments must continue to invest in DRR and resilience, taking a long-term planning approach in order ‘to get ahead of the curve’ and build resilience to future natural, biological and technological hazards. Collaboration between levels of government in planning financing and implementing DRR remains critical, because coherent approaches are needed to build community buy-in and support.

- Sendai Framework Guiding Principles: the conference reaffirmed the Sendai principle that the State has primary responsibility to prevent and reduce disaster risk, including all relevant national authorities.¹⁹

The private sector has an important role in DRR that governments should support through a shared understanding of risks articulated in a national risk registry system. Private sector decision-making needs to be informed by consistent and trusted information through the accurate disclosure of climate change and disaster risks. In this way, governments can create a conducive environment for risk reduction in business. For example, banking institutions worldwide are now using evidence-based climate scenarios to inform decisions. Examples of private and public sector organisations working together include building codes and associated guidelines, and cooperation between insurance companies and local governments. In Queensland, Australia, insurance companies and banks work with homeowners to incentivise cyclone-proofing of building projects by offering cheaper insurance. In Japan, the government issues bonds for resilient infrastructure investments that are purchased by life insurance companies.

Discussions affirmed the **critical role of scientists** in generating knowledge about hazards, exposure and vulnerabilities. Scientists can analyse historical data and estimate risks, developing evidence to underpin decision-making. Such information must be disseminated in a way that is accessible and considers how local context (e.g. settlement, infrastructure and access to social services), multi-dimensional poverty and social protection, disabilities, age and gender intersect with hazards and exposure. Scientific knowledge must also draw on indigenous knowledge for enhanced understanding of risk. Connecting indigenous knowledge, science and policy begins with better inclusion of indigenous and local voices into mainstream DRR conversations and decision-making.

Communities and civil society hold the key to effective implementation of DRR and CCA measures. The engagement of local communities – including youth, children and marginalised groups – is critical to ensure the suitability and sustainability of DRR and CCA investments. They must be engaged in design and implementation, as well as in promoting DRR within their communities and supporting better investments.

- Sendai Framework Section five on the Role of Stakeholders highlights the importance of civil society engagement including a focus on the specific contribution of women, children and youth and people with disabilities.²⁰

Conference attendees repeatedly emphasised **that solutions need collaboration across stakeholders**, including community, private sector and government actors. The example of insurance illustrated this collaboration: insurance companies need to provide relevant and affordable insurance products, government needs to provide stability and strong communication channels with communities and MSMEs, who for their part, need to build preparedness and insurance into their risk management plans.

19 UNDRR (2015), Sendai Framework for Disaster Risk Reduction 2015-2030, p. 12

20 UNDRR (2015), Sendai Framework for Disaster Risk Reduction 2015-2030, p. 22

Recommendations and solutions proposed

Prioritising investment in DRR

- Ensure DRR plans are in place, resourced and engage all relevant government departments at all levels. Plans should be inclusive and accessible, include DRR and CCA-informed investment decisions, strategies to deal with non-climate hazards (including geohazards and biohazards), resilient recovery and investment in green energy opportunities. *Responsible: governments*
- Create a more purposeful link between DRR and CCA investments to optimise investment return and avoid duplication. *Responsible: governments*
- Ensure climate and disaster resilience is fully integrated into budget and financial decision-making and allocate more financial resources to DRR. *Responsible: All government entities, especially infrastructure, planning bodies, ministries of finance and private sector*
- Embed multi-hazard risk analysis in public and private investment decisions, recognising risks are interlinked and drawing on historical and prospective data. *Responsible: governments and the private sector*
- Strengthen cooperation between public and private sectors and in particular, financial institutions to embed multi-hazard risk analysis. *Responsible: governments, private sector, financial institutions*
- Integrate disaster risk rating into the due diligence processes of financial institutions to shock-proof investments. *Responsible: financial institutions*
- Expand the use of concessional financial instruments for DRR and CCA investments. *Responsible: financial institutions*

Pathways for investment


- Create and promote a range of responsive, long-term, innovative financial instruments and mechanisms for DRR investment, including incentivised insurance. *Responsible: governments, private sector*
- Develop policies and approaches to mobilise insurance company resources into DRR investments. *Responsible: governments and insurance companies*
- Coordinate adaptive social protection programming with ministries of finance and statistics bureaus; ensure social economic registries are updated regularly and designed for use before and after shocks. *Responsible: governments, disaster risk managers*
- Link social development programmes, such as training or family support, with adaptive social protection initiatives to achieve co-benefits. *Responsible: governments and civil society*
- Identify contingent financing streams that will enable individuals to quickly access financial support. *Responsible: finance institutions and civil society*
- Support MSMEs to incorporate risk transfer, mitigation and assessment practices into their business models. *Responsible: national and local governments, peak industry bodies*
- Establish mechanisms that support MSMEs to manage residual risk and recover from shocks and disasters, such as fair insurance options. *Responsible: governments and insurance companies*
- Continue to build the business case for engaging women-owned and led MSMEs in domestic production and supply chains that strengthen community resilience. *Responsible: MSMEs*
- Advocate for greater government and private sector support for MSMEs as crucial contributors to supply chains. *Responsible: MSMEs and civil society*


Role of different actors

- Provide consistent and trusted information through the accurate disclosure of climate change and disaster risks. *Responsible: government*

- Involve communities in DRR processes, ensuring diverse representation. Mobilise all stakeholders to understand risks, prevent and mitigate them, and establish anticipatory response mechanisms. *Responsible: government and civil society*
- Pre-identify community networks and strengths that can be accessed for preparedness and recovery and mobilise them for pre-disaster recovery planning and preparedness. *Responsible: local government and civil society*
- Develop 'build back better' plans, assign roles and responsibilities and identify contingent financing mechanisms for recovery ahead of any event, so that they can be quickly scaled up to facilitate effective post-event recovery implementation. *Responsible: government, private sector and civil society*

Profiled practices and examples

 [Georisk Philippines](#) is a multi-agency initiative that provides information on hazards, exposure and risk assessment to help people, communities, local governments and national agencies plan how to reduce risks from natural hazards. The initiative offers a range of services accessible to a wide range of stakeholders from governments to communities, and allows users to assess the risk profiles of geographic locations through an online platform that generates seismic, volcanic and hydro-meteorological assessment reports.²¹ The initiative is a key tool for supporting the Priorities for Action of the Sendai Framework, in particular to strengthen understanding of disaster risk, and aligns with the Pillar's emphasis on enhancing community resilience to disasters.²²

 The [G20 Principles for Quality Infrastructure Investment](#) (QII Principles) were endorsed at the 2019 G20 summit in Osaka, and set out six voluntary principles designed to promote strategic direction and aspiration for quality infrastructure. Aligned closely to the objectives of Pillar 1, the QII Principles aim to mobilise financing for resilient infrastructure from the private sector, multilateral development banks and other sources to promote and enhance quality infrastructure investment according to country conditions. The QII Principles support key objectives of both the Sendai Framework and the APMCDRR's Pillar 1, including the need to consider social aspects of infrastructure investment and strengthen long-term risk-informed financing.²³

 The [UN Pacific Insurance and Climate Adaptation Programme](#) (PICAP) equips governments and communities with tailored financing strategies and solutions to enable them to combat the effects of climate change. In 2021, PICAP launched a micro-insurance product in Fiji that covers 1,388 households (32% women-headed households) and includes important accessibility features designed through work with the Pacific Disability Forum. The PICAP aligns closely to priorities for actions three and four of the Sendai Framework, and gives stakeholders the resources needed to advance priority actions highlighted in the Conference's Pillar 1, most notably the need to strengthen DRR and CCA alignment, increase government-private sector collaboration, and scale up risk-informed investment to improve resilience to current and future risks – particularly for MSMEs.²⁴

21 *GeoRisk Philippines*, available at: <https://www.georisk.gov.ph/>

22 UNDRR (2015), *Sendai Framework for Disaster Risk Reduction 2015-2030*

23 G20 Osaka Summit 2019, *G20 Principles for Quality Infrastructure Investment*, available at: https://www.mof.go.jp/english/policy/international_policy/convention/g20/annex6_1.pdf

24 United Nations MPTF Office Partners Gateway, *Pacific and Climate Adaptation Programme (PICAP)*, available at: https://mptf.undp.org/fund/jxg00?utm_source=EN&utm_medium=GSR&utm_content=US_UNDP_PaidSearch_Brand_English&utm_campaign=CENTRAL&c_src=CENTRAL&c_src2=GSR&gclid=EAlaIqObChMIn5rB6vui-glVuplmAh3aGAm1EAAAYASAAEgLtpfD_BwE

Shock-proofed infrastructure and systems

Pillar 2 of the APMCDRR focused on ensuring that new and existing infrastructure and systems enable communities and economies to prosper in the face of future challenges. The focus on non-structural measures supported recognition of the equal importance of interconnected systems such as food systems, health systems, and supply chains. The conference explored the roles of different stakeholders, planning and regulatory standards, and nature-based solutions, as well as the role of governance, in inclusive and accessible infrastructure planning and recovery.

- Sendai Framework Priority three equally recognises the importance of investing in structural and non-structural measures to reduce risk and build resilience of infrastructure and systems.²⁵

I. Protection of hard infrastructure

Existing **infrastructure systems and the services they provide are increasingly being affected by natural and man-made hazards**. As a result, both new and existing infrastructure needs to be designed and upgraded to increase resilience.

- Sustainable Development Goal 11 call for cities and human settlements to be made inclusive, safe, resilient and sustainable.²⁶

Conference panellists and participants emphasised that **climate finance and disaster financing must be significantly scaled up** and made accessible to developing countries to support infrastructure resilience. In 2019, the UN Economic and Social Commission for Asia and the Pacific estimated that to accomplish the SDGs, the additional investment required in infrastructure in the developing countries of Asia and the Pacific would be USD 1.5 trillion per year, equivalent to 5% of their combined gross domestic product in 2018.²⁷

Accessible financing is important, because making infrastructure resilient to the effects of climate change is beyond the fiscal capacities of many countries. At the same time, the cost of no action on climate resilient infrastructure – or even the cost of delayed action – is understood to be immensely high. Attendees described instances of proactive rather than reactive funding; for example, pooled funding mechanisms, such as the National Disaster & Risk Management Fund (NDRMF) in Pakistan, encourage government and private contributions to resilient infrastructure. It was also noted that pooled funds can face challenges such as understanding the scale of funding required and the logistics of rapid disbursement of funds after disasters.

A **combination of regulations and incentives is required** to bring about public–private partnerships for not only new infrastructure, but crucially, the maintenance of existing infrastructure. UNDRR is working with regulators to develop a global standard for resilient infrastructure, the Principles for Resilient Infrastructure;²⁸ governments and insurance companies will need to incentivise compliance.

Cross-cutting theme: Localisation

Traditional knowledge can be quite localised, offering context-specific insights to DRR processes such as building codes. Traditional and/or local knowledge can be embedded in DRR processes, empowering communities and strengthening resilience.

25 UNDRR (2015), Sendai Framework for Disaster Risk Reduction 2015-2030, p. 17

26 United Nations (2015), *Sustainable Development Goals: 11 – Sustainable cities and communities*, available at: <https://sdgs.un.org/goals/goal11>

27 Working session 4: Financing Resilient Infrastructure, Conference Concept Note

28 UNDRR (2022), Principles for Resilient Infrastructure, available at: <https://www.undrr.org/publication/principles-resilient-infrastructure>

II. Equal importance of non-structural systems

Conference participants highlighted the skewed focus on hard infrastructure and facilities, and called for **greater emphasis on services and systems**. The conversation shifted to the social aspects of resilience, including health systems, food security and supply chains that have been damaged by factors such as climate change, the COVID-19 pandemic, and conflict.

There was strong recognition that **food security and systems are complex and can both exacerbate and mitigate crises**. There is potential for more localised forecasting and anticipatory action to reduce future impact on food security. In the Pacific, for example, a localised projection model could support understanding of the effect of a 1.5°C increase in temperature on the growth of crops and production of food.

Cross-cutting theme: Localisation

Act local/go local was a key message at the conference; it underscores the way domestic production contributes to food security. For example, the revival of traditional systems strongly supports resilience to the impacts of COVID-19 in the Pacific.

As the COVID-19 pandemic has highlighted with respect to health systems, **hazards affect all sectors and require collaboration and integration of disciplines**. This remains challenging, because sectors (such as health and DRR) often operate within their own highly specialised silos. As highlighted in the [Bangkok Principles for the implementation of the health aspects of the Sendai Framework](#), there needs to be mutual systematic integration of priorities from multiple technical areas into national and sub-national DRR policies. Continuing to operate in silos can result in confusion, overlaps and even inaction, as seen during the [2022 Hong Kong heatwaves](#), when low health risk literacy in the community had serious consequences.

Nature-based solutions include actions to protect and sustainably manage ecosystems that are the basis of livelihoods and food security. Conference panellists and participants argued that **nature-based solutions should be embedded in efforts to promote and strengthen resilience** and mitigate the impacts of climate change. Forests and oceans, for instance, are also central to decarbonisation. 'Blue carbon' – carbon stored in coastal and marine ecosystems – is increasingly understood as critical to not only support biodiversity but in mitigating and adapting to the impacts of climate change. 'Green infrastructure', such as forests, floodplains, wetlands and soils are important for flood protection and climate regulation. Part of the solutions proposed include mixing green infrastructure such as natural coastal buffers with traditional grey infrastructures such as concrete dams and seawalls.

Nature-based solutions cover a wide spectrum, taking many forms and involving many disciplinary practices, including ecological conservation, restoration, rehabilitation and biomimicry. The sponge city concept was explored as a new philosophy for urban infrastructure design. The concept aims to build the resilience of cities by tackling multiple interrelated water issues, including stormwater harvesting and reuse, with site-specific ecological spatial planning.

- Sendai Framework Priority three promotes the implementation of 'ecosystem-based approaches' that include building resilience and reducing risk within systems such as rivers and along coastlines.²⁹

III. Role of different actors

Governments need to take the lead in supporting resilient infrastructure and systems. In addition to prioritising funding in budgets, they need to generate and share consolidated knowledge of risk, support DRR-sensitive regulations, and create a conducive environment for private sector investment and partnerships.

29 UNDRR (2015), Sendai Framework for Disaster Risk Reduction 2015-2030, p. 17

The conference emphasised **the important role of the private sector** in DRR. Discussion focused on the insurance and banking sectors. Both sectors are keenly focused on DRR, though the market incentives for each differ. The insurance sector is focused on the 'pre-incident' stages of a disaster cycle, including risk assessment, preparedness, mitigation, disaster prediction and early warning systems. In contrast, the finance sector focuses on post-incident stages, including damage assessment, disaster response, recovery and rehabilitation, and reconstruction. Integration of these is vital and requires recognition of the potential 'win-win-win' for clients, the insurance sector, and the banking sector.

Cross-cutting theme: Localisation

The involvement of local engineering firms in infrastructure design and local contractors during both construction and maintenance can yield significant flow-on economic benefits.

The **importance of collaboration between actors** was again emphasised under this pillar. One example provided was the [Coalition for Disaster Resilient Infrastructure](#), a partnership of national governments, UN agencies and programmes, multilateral development banks and financing mechanisms, the private sector, and knowledge institutions that aims to promote climate and disaster-resilient infrastructure systems. At a local level, the UNDRR *Making Cities Resilient 2030* initiative aims to connect multiple layers of government and building partnerships to improve the resilience of urban infrastructure and systems.

Understanding community priorities is vital and engagement with other stakeholders – such as unions and business chambers – is needed to identify new and alternative pathways and opportunities to make infrastructure and systems more resilient. There is a crucial need to understand the local context, and this requires a more people-centric approach. Plans are of no use unless they are meaningful at local levels.

Cross-cutting theme: Science, technology and knowledge

Experience was shared from New Zealand, where traditional knowledge that certain areas were inappropriate for building had not been incorporated into regional or city planning processes. These areas were damaged heavily during the Canterbury earthquake (2010). In the years that followed, however, better decisions were made with wide community engagement. Local building codes were developed and are now updated through an annual process.

- Sendai Framework: 'Indigenous peoples, through their experience and traditional knowledge, provide an important contribution to the development and implementation of plans and mechanisms, including for early warning'.³⁰

Cross-cutting theme: Localisation

Sustainable development plans, such as Fiji's Tikina Nacula, are village specific, with each village having its own committee; they apply sustainable practices to natural resource management. Such examples offer local contextualisation, while being integrated with larger frameworks, including the SDGs, the Sendai Framework and the Paris Agreement.

- Sendai Framework: 'Civil society, volunteers, organized voluntary work organizations and community-based organizations to participate, in collaboration with public institutions, to, inter alia, provide specific knowledge and pragmatic guidance in the context of the development and implementation of normative frameworks, standards and plans for disaster risk reduction.'³¹

30 UNDRR (2015), Sendai Framework for Disaster Risk Reduction 2015-2030, p. 22

31 UNDRR (2015), Sendai Framework for Disaster Risk Reduction 2015-2030, para 36 (a)

Recommendations and solutions proposed

Protection of hard infrastructure

- Commit to resilience in long-term infrastructure planning and design. *Responsible: government*
- Incentivise investment in resilient infrastructure, with greater emphasis on maintenance over its lifetime. *Responsible: government and private sector*
- Understand local needs in their local contexts. Building codes and regulations should include sufficient flexibility to adapt to local conditions. *Responsible: government, private sector and civil society*
- Integrate multi-hazard climate risk investment assessments into the preparation of infrastructure investment projects and determine investment priorities according to these assessments. *Responsible: government and private sector*

Non-structural measures

- Include non-structural systems and processes such as food security in DRR plans and strategies. *Responsible: government, civil society and multilateral agencies*
- Consider the importance of social resilience when planning and building new infrastructure. *Responsible: government and private sector*
- Document lessons from COVID-19 on how to strengthen multi-hazard resilience of health systems by integrating risk information and resilience building measures into the public health management systems. *Responsible: government and health sector*
- Ensure risk reduction strategies, including risk communication, preparedness and contingency plans consider biological risks, such as epidemics. *Responsible: government and health sector*
- Embed evidence-based and feasible nature-based solutions in efforts to promote and strengthen resilience. *Responsible: government, private sector, civil society and multilateral organisations*
- Consult widely within communities to ensure the integration of needs in the planning of infrastructure and services. *Responsible: government and civil society*

Roles of different actors

- Generate and share consolidated knowledge of risk, support DRR-sensitive regulations and create a conducive environment for private sector engagement in the creation of resilient infrastructure. *Responsible: government*
- Provide financial incentives for resilient projects. *Responsible: government and private sector*
- Participate in forums that share knowledge and approaches to the development of resilient infrastructure that focus on shared objectives and mutually beneficial initiatives. *Responsible: government, insurance and banking sectors, multilateral organisations*
- Integrate insurance and banking sector investment activity across stages of a disaster cycle for mutual benefit. *Responsible: insurance and banking sectors*
- Connect historical data about disaster impacts with future climate risk analytics by strengthening cooperation between disaster and environmental agencies. *Responsible: government, disaster and environmental agencies*
- Engage community in the planning and development of infrastructure, including creating opportunities to harness and build on local knowledge and insights. *Responsible: government, private sector, civil society*

Profiled practices and examples



A [National Disaster Risk Management Fund](#) in Pakistan funds a range of structural and non-structural interventions that reduce risk associated with climate change and natural hazards. The NDRMF aligns with existing national, regional and global policies and strategies, including the Sendai Framework. It was initially financed by a loan of USD 200 million from the Asian Development Bank and grants of AUD 3.4 million from the Government of Australia and USD 1.5 million from the Swiss Agency for Development and Cooperation.

The fund supports:

- Flood prevention and mitigation initiatives, such as physical structures to reduce/prevent the impact of flooding on government and individual infrastructure, and mitigation through redirecting flood runoff with embankment and flood gates
- Retrofitting buildings and critical infrastructure to become more resistant and resilient to hazards
- Community-based DRR that increases the disaster resilience of a community by strengthening its local capacity.³²



The [DRR hazard information profiles](#) were established in 2021 as a supplement to the UNDRR-ISC Hazard Definition and Classification Review – Technical report, in response to calls for a ‘data revolution, rigorous accountability mechanisms and renewed global partnerships’. The profiles provide a comprehensive analysis of various hazard profiles and their associated risks, so are an important tool in relation to this Pillar. They explain how specific hazards and climate change impacts – such as air pollution, ocean acidification, drought, and soil degradation – affect food security. The profiles offer valuable guidance for stakeholders considering food security and other systems in DRR-CCA planning and forecasting, in line with Pillar 2’s emphasis on non-structural systems.



The importance of [sponge cities](#) was highlighted during the conference as an example of urban infrastructure designed to mitigate the impacts of climate- and disaster-related shocks. Sponge cities are ‘urban areas with abundant natural areas intended to absorb rain and prevent flooding’.³³ Sponge cities can provide co-benefits, such as cooling and nature conservation, while natural approaches to absorb water are estimated to be 50% more affordable than artificial solutions.³⁴ With 44% of all disasters estimated to be flood-related, this concept can contribute to shock-proofed infrastructure and systems in densely populated areas, and can support stakeholders’ efforts to achieve key outcomes and priorities of the Sendai Framework, as well as the UNFCCC Paris Agreement and the New Urban Agenda.

32 Text adapted from website text accessed 11 Oct 2022 <https://www.ndrmf.pk/major-interventions/>

33 Harrisberg. K (2022), ‘A new AI-based study compares cities’ trees and lakes to how much concrete they have, to gauge their ability to respond to climate shocks’, *Thomson Reuters Foundation*, 24 March, available at: <https://news.trust.org/item/20220327192248-8ntoq/>

34 Arup (2022), *Global sponge cities snapshot*, available at: <https://www.arup.com/perspectives/publications/research/section/global-sponge-cities-snapshot>

Resilient communities

Communities are often unprepared for multiple and cascading events, including those driven by climate, conflict and health threats. Disasters affect people differently and exacerbate existing inequalities. To build resilience at the community level, there is a need to better link indigenous knowledge, technology, scientific evidence, planning, decision-making and communication in an all-of-society approach. Local actors are best placed to understand context-specific risks and potential solutions. They are also the first responders when a disaster occurs and lead recovery efforts. An inclusive and accessible approach to building resilience, that connects leadership, innovation and expertise at the community level, is vital to ensure no one is left behind.

- Sendai Framework Section V recognises that civil society, volunteers, organised voluntary work organisations and community-based organisations can provide specific knowledge and practical advice on implementation of DRR.³⁵

I. Inclusive DRR

Disaster risk reduction planning and programming needs to be more inclusive to ensure the most at-risk groups are protected. Consultation and engagement across communities – including women, children, youth, people with disabilities, LGBTQI+ people and marginalised groups – is essential to support the resilience of all community members. Engagement is important because groups are affected differently by disasters and because different groups will have insights and contributions that strengthen DRR programming. For example, previous research has shown that people with disabilities are two to four times more likely to die or be injured during disasters than the general population. However, their participation in risk reduction and preparedness can mitigate potential harms.

Disasters also exacerbate pre-emergency marginalisation. For example, conference participants spoke about LGBTQI+ people facing difficulties in obtaining relief and government assistance because they lack government-issued identification that recognises their gender (e.g. the transgender community in Nepal, following the earthquake), or due to rigid definitions of what counts as ‘family’ in vulnerability and needs assessments (e.g. in the Typhoon Haiyan response in the Philippines). This results in data and evidence gaps about LGBTQI+ people, which contributes to the government and NGOs not meeting their needs during and after disasters.

Conference participants emphasised that diverse voices should be included in the planning, design, implementation and review of any DRR activities or research (such as censuses and surveys). This will support a stronger evidence base and more inclusive representation of the needs and ideas of specific groups. Women, people with disabilities, indigenous communities, young people, people with diverse sexual orientation, gender identity and expression, and sex characteristics (SOGIESC), the poor, migrants and refugees and socially marginalised groups are often under-represented in decision-making roles and forums. The conference highlighted the need for an **intersectional approach** that recognises and seeks to overcome the inequality and marginalisation that can exacerbate individuals’ risk and therefore reduce the resilience of communities.

- The Sustainable Development Goals emphasise the need to empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.³⁶

35 UNDRR (2015), Sendai Framework for Disaster Risk Reduction 2015-2030, p. 22

36 UNDRR (2015), Sustainable Development Goal 10: Reduce Inequality Within and Among Countries, available at: <https://sdgs.un.org/goals/goal10>

The importance of **civil society organisations (CSOs) in representing diverse voices** and linking DRR actors with community members to develop inclusive, equitable and effective partnerships was recognised throughout the conference. These CSOs come in various shapes and forms, from large international organisations to village-level organisations. All of them play their part in bringing communities together and creating more inclusive approaches to DRR. Local and national organisations are often crucial in elevating community voices in decision-making. These organisations need to be supported and resourced to influence change – particularly women’s organisations, and organisations of people with disabilities (OPDs), people with diverse SOGIESC, and youth.

Cross-cutting theme: Inclusion

Receiving input from specialised OPDs and people with diverse SOGIESC enables better programme design and informed decision-making based on lived experience community insights. For example, OPDs in [Vanuatu and Solomon Islands](#) are already showing how they can enable more inclusive DRR design and implementation, despite minimal funding and few partnership opportunities.³⁷

The vital work of women leaders and women-led networks and organisations in building resilient communities was also highlighted. They have been important in mainstreaming gender-transformative DRR policies and strategies, lobbying for gender-responsive budgeting and planning, promoting community-level early warning initiatives, and responding to the needs of diverse women and girls. These efforts need to be continually recognised and supported by governments and policymakers.

Conference participants agreed that **meaningful engagement requires moving beyond meeting quotas or tokenistic actions**. This requires a genuine effort to share power with marginalised and underrepresented groups. While having a seat at the table is a good start, these groups’ representatives must be given sufficient influence in decision-making, and the diversity within these groups must be recognised. Communities have the right to participate in decisions affecting them, but disasters – particularly those that cause displacement – can remove people’s agency. Inclusion must be founded on a human-rights based approach that protects and promotes the rights and individuality of affected people. They need to be valued as holders of information and lived experience that can shape better DRR, resilience building and response and recovery. This will also require governments to draw on and adhere to multiple global conventions such as the Convention on the Rights of the Child, the Convention on the Rights of Persons with Disabilities, the Convention on the Elimination of all forms of Discrimination Against Women, the Declaration on the Rights of Indigenous Peoples, and the UN Guiding Principles on Internal Displacement.

The need for **youth and children to be more involved in DRR** processes was a recurring theme at the conference. Youth and children rarely have a meaningful way of engaging in or contributing to DRR processes, which is particularly unfair because current actions (both positive and negative) have huge implications for their futures. Youth and children are also valuable advocates and conduits for DRR messaging into the community. Therefore, investment is needed to support youth and children to become more DRR smart and agents for building community resilience. Instead of being viewed as merely another at-risk group, **youth and children need to be engaged as innovators and problem solvers**.

- The Sendai Framework highlights that ‘Children and youth are agents of change and should be given the space and modalities to contribute to disaster risk reduction’.³⁸

37 HAG, CBM, PWDSI, VDPAA, PDF (2022): [organisations of persons with disabilities: making a difference in Vanuatu and Solomon Islands](#)

38 UNDRR (2015), Sendai Framework for Disaster Risk Reduction 2015-2030, p. 22

II. Localised preparedness and early warning

Conference participants noted that accessible and inclusive early warning and early action systems help save lives. While the UN Secretary General in March 2022 called for [everyone on Earth to have access to early warning systems](#) for extreme weather and climate change, **coverage of effective early warning systems is inadequate, particularly among those vulnerable to risks**. Only 50% of communities globally have access to effective early warning systems that combine predictions with pre-approved action plans and financing so communities can act in advance of hazards. Furthermore, a third of the global population – mostly in small island developing states and least developed countries – is not covered by warning systems.

Inclusive multi-hazard early warning systems are critical to ensure communities can engage with the information and use it effectively. This requires recognising and supporting the roles of different groups within communities – both through enabling more people-centred local approaches and equipping them with information and technology. For example, women in Fiji were given simple handsets to send and receive weather information and connected into the regional forecasting centre.³⁹ Once equipped with information, women use it to act.

- Sendai Framework Priority one focuses on understanding disaster risk and the importance of government, civil society and community members having access to real-time and reliable data.⁴⁰

The success of any DRR, resilience building and early warning systems will rely on **targeted, localised and simplified communication and engagement strategies** that create incentives for communities to make changes. For example, while slow-onset climate change-driven disasters are most likely to create significant problems in cities, they tend to be abstract to the people most at risk in these areas, who are often focused on their daily subsistence. Understanding how to communicate effectively with them is a critical factor of success and sustainability.

Cross-cutting theme: Inclusion

The Mahila Housing Trust has been supporting people living in low-income communities (100 low-income in eight cities in India, one in Nepal and one in Bangladesh) to [adapt to climate change-induced risks, including heat stress and flooding](#). They recognise that women are their key audience and agents of change in these low-income communities. To get them engaged and motivated, the Trust links climate change impact to their day-to-day activities (such as water and sanitation) and the implications of climate change for their children.

Preparedness is strengthened when all facets of knowledge are integrated, and when local governments and communities are involved in planning and decision-making. Communities recover faster when local knowledge is incorporated into practice. It is important to **combine indigenous knowledge, science and policy in solutions**. Some policymakers do not understand, engage with and respect indigenous knowledge when making decisions. Similarly, indigenous leaders and elders need to be supported to contribute to and engage with government policymaking processes. However, often **DRR policies and programmes fail to integrate indigenous knowledge and experience**.

Cross-cutting theme: Science, technology and knowledge

It is widely recognised that the knowledge of indigenous communities in Australia (particularly traditional land management and cultural burning techniques) can help manage forests, protect

39 UNDRR, Women's International Network for Disaster Risk Reduction, Shifting the Power Coalition, ActionAid - Australia (2022), *Inclusive and accessible multi-hazard early-warning systems: Learning from women-led early-warning systems in the Pacific*

40 UNDRR (2015), Sendai Framework for Disaster Risk Reduction 2015-2030, p. 14

biodiversity and prevent catastrophic bushfires.⁴¹ While efforts have been made at government and [local council](#) level to incorporate indigenous practices into formal fire management plans and processes, further progress is needed. With increasing intensity of bushfires, there is growing recognition that traditional and modern practices need to be integrated to reduce risks for communities.

Localisation must be leveraged as a key vehicle for delivering DRR and resilience to communities.

Conference participants spoke about local and national CSOs and NGOs as critical partners in ensuring DRR, resilience and response work reflects the needs of the communities served. A diverse range of local and national organisations (e.g. pursuing rights, gender equality or environmental agendas) provides a strong network to inform thinking and practice – and, in some contexts, channel indigenous knowledge. These organisations continue to face shortages of funding and support that need to be reversed in order to create a strong and vibrant NGO and CSO network that will hold governments to account on behalf of communities.

III. Adaptive and innovative DRR

Conference panellists and participants concurred that as urban risks increase with growing populations and impacts of climate change – particularly in disaster-prone, high-density urban centres – **understanding hazards, exposure and vulnerability in cities** becomes more critical. This information, however, needs to be used effectively to inform policy and procedure changes and shape codes and standards. This requires national and local government structures to co-create relevant plans and policies with communities for greater sustainability. **Multi-layered engagement and planning creates greater buy-in** as transparency in approaches, decisions and activities leads to trust and ownership.

Cross-cutting theme: Science, technology and knowledge

Incheon, South Korea, has updated policies and introduced more integrated practices to become a [safe and smart city](#) that is better prepared to manage climate change and disasters. The municipality has a disaster emergency forum that can respond to varying crises. It also tracks global trends (looking outside) that may have environmental, economic and social implications for the city, while supporting zones within the city to formulate tailored plans that are updated regularly (looking inwards), relying on technology and data-driven approaches to plan and respond.

Conference participants spoke of the need to prioritise more context-relevant and sustainable DRR and resilience-focused solutions for communities. **Scaling up innovations and technology for DRR requires greater collaboration and partnerships**, including with communities. Co-creation of solutions is critical within community contexts to recognise and learn from lived experience and should replace the approach of bringing in external solutions. Failure to engage with and listen to people directly affected by natural hazards and biohazards misses significant opportunities for innovation and improvement. Locally led innovation initiatives yield appropriate solutions that work for low-resource environments, rely on local skills and experience, and are potentially replicable in scale. Piloting and community validation of technical solutions is critical to enable community buy-in, but also to understand and test how they interact with the communities and their practices.

Participants called for **greater investment in supporting innovation and local solutions**. One of the main challenges of supporting local innovation in DRR (and innovation more broadly) is securing sufficient funding to develop solutions and scale them for application. DRR activities and innovation can have intangible or undetermined outputs, so it is important that these ideas are backed by evidence through research and available data to entice investment. In addition to evidence-based validations, enabling local

41 World Economic Forum (2022), [Fires and droughts: how indigenous knowledge can offer solutions](#)

solutions (and scaling up adoption of solutions) requires strong institutional partnerships that support the poor to make investments and adapt to risks they face.

High-quality disaggregated data can support better decision-making, better planning and more accurate early warning. Conference participants regarded this as particularly relevant in mainstreaming gender and disability considerations during planning and budget allocation. For example, the Ministry of Women's Affairs in Cambodia has lobbied the Ministry of Economy and Finance for gender-responsive DRR budgeting, based on specific issues and gaps identified using disaggregated data provided by the Institute of Statistics. For decision-making to be effective, it is important that stakeholders – particularly those collecting and sharing data – can present decision-ready data that will be effective in disaster-prone contexts when time and ability to absorb large amounts of data are scarce.

Cross-cutting theme: Science, technology and knowledge

The Pacific Community (SPC) have made disaster and climate-related data for the Pacific more accessible through a new web-based platform called [Nexus](#) – with the intention of strengthening multi-hazard risk information systems and knowledge sharing to support risk-informed decision-making.⁴² SPC is using satellites to map data (such as vegetation cover, coral cover and sea levels) across all Pacific countries to enable better planning for and response to disasters. This data can be used for pre- and post-impact tracking, and real-time planning during disasters. SPC is working to implement arrangements with Pacific governments on how this information can be shared easily in a decision-ready format.

Recommendations and solutions proposed

Inclusive DRR

- Engage women, children, youth, people with disabilities, LGBTQI+ people and at-risk or marginalised groups in DRR planning and programming. *Responsible: governments, private sector, civil society*
- Take an intersectional approach to vulnerability mapping. *Responsible: governments, civil society*
- Prioritise inclusive, people-centred and gender-transformative approaches to reduce risks and vulnerabilities, with preparedness planning processes anchored in local government structures. *Responsible: governments*
- Engage local CSOs and NGOs in all spheres of decision-making and planning, and ensure they are adequately and sustainably resourced. *Responsible: governments*
- Recognise and invest in the work of women-led organisations and networks leading community-level DRR initiatives. *Responsible: governments, civil society*
- Use standardised tools such as the [Washington Group Questions](#) to enable more respectful and valid collection of data on people with disabilities. *Responsible: governments, civil society*
- Proactively involve youth in the DRR decisions that will affect their futures. *Responsible: National and sub-national government, civil society*

Localised preparedness and early warning

- Invest in accessible and inclusive multi-hazard early warning and early action systems. *Responsible: governments, multilateral organisations, civil society*
- Support communities and local civil society to have access to real-time and reliable data. *Responsible: governments, multilateral organisations, civil society*

42 The Pacific Community (2022), [Disaster and climate related data for the Pacific now more accessible through a new web-based platform](#)

- Recognise and invest in the work of women-led organisations and networks leading community-level early warning initiatives. *Responsible: governments, multilateral organisations, civil society*
- Integrate local, traditional and scientific knowledge into the development of early warning and early action systems. *Responsible: governments, multilateral organisations, civil society*
- Support targeted, localised and simplified communication strategies for behaviour change that supports effective early warning systems. *Responsible: governments, multilateral organisations, civil society*

Adaptive and innovative DRR approaches

- Plan disaggregated data collection, use and sharing that supports better DRR coordination, and importantly, seeks informed consent on the use and distribution of data. *Responsible: governments*
- Support locally led initiatives, particularly those generated by youth and women, and leverage the role of local actors for innovation that is grounded in and generated through lived experience. *Responsible: governments, multilateral organisations, civil society*
- Change ‘inclusivity’ mindsets away from bringing something to community and towards co-creation (meaning innovation coming from the community). *Responsible: governments, multilateral organisations, civil society*
- Provide long-term resources to help indigenous communities develop their own adaptive DRR and climate action approaches. *Responsible: governments, multilateral organisations, civil society*

Profiled practices and examples



The importance of scientific data to support decision-making for early warning and action.

In Vietnam, data has been used to prepare a disaster zoning map that supports a forecasting and warning system. This allows for the development of action plans specific to hazards. The effectiveness of this early warning and action system was highlighted when the authorities compared the impact of salt intrusion and drought in 2015–16 with the same hazard in 2020, after system implementation. Early action in 2020 included providing funds to communities, front-line working groups supporting local government, building temporary dams, storing drinking water and managing irrigation. As a result, communities suffered less harm from the 2020 hazard, which was larger in both scale and scope, than the 2015 event.



Women and community involvement and support through enabling technology

Young women from six Pacific countries were taken to the weather office in Fiji to learn about how early warning worked. Tropical Cyclone Yasa was forecast shortly afterwards, and the women showed the value of using this information to help their communities prepare for it. Once equipped with information, women use it to act. In Vanuatu, women talked about keeping firewood dry to support economic recovery, preparing mosquito nets or moving livestock prior to cyclones striking.



Local organisations mobilising

In response to the volcanic eruption and tsunami in Tonga, the Pacific Islands Association of NGOs and the Fiji Council of Social Services mobilised the Fiji community to collect relief supplies to send one of the [first consignments of relief aid to Tonga](#). These items were received and distributed among vulnerable families (some not covered by official distributions) by the Civil Society Forum of Tonga. The ability for these civil society networks to coordinate even during a communication blackout highlights their value and the importance of local knowledge (in this case, of Tongans living in Fiji).

Conclusion

The APMCDRR was held at an important crossroads in the policy and implementation landscape in the Asia-Pacific region. The Sustainable Development Goals and the Sendai Framework for Disaster Risk Reduction 2015-2030, among others, have been translated into concrete policy commitments in the region. However, implementation has been difficult in a rapidly changing context with significant challenges, including escalating and compounding impacts of disasters, conflict, the COVID-19 pandemic, climate change, unplanned urbanisation and environmental degradation. The conference provided a timely opportunity to strengthen regional commitment and action on DRR.

The APMCDRR highlighted the importance of **investing in resilience and preparedness**, which requires considerable political will and long-term planning. Panellists and participants shared examples of pathways for increased investment that have delivered results across the region, including examples of strong public-private partnerships, 'build back better' initiatives and adaptive social protection systems. Across the board, DRR investments need to be informed by multi-hazard risk analysis that draws on both traditional and scientific knowledge. The conference generated specific recommendations designed to support better informed and targeted investments.

Shock-proofed infrastructure and systems were recognised as critical to achievement of the SDGs and to enable communities and economies to prosper in the face of future challenges. Conference participants recognised that hard infrastructure needs to be protected through effective decisions on new investments as well as upgrading and planning for maintenance of existing infrastructure. Of equal importance, the continuity of non-structural systems, including health systems, food systems and supply chains, needs to be considered and factored into DRR planning and investment. The important role of community and indigenous peoples and the particular insights and knowledge that they bring to sustainable and resilient system planning were recognised.

Underpinning all the sessions and learning at the conference was the focus on **resilient communities**. There was broad recognition that DRR planning and programming needs to be more inclusive in order to support a stronger evidence base and more inclusive representation of needs and ideas of specific groups. The success of any investment in DRR, resilience building and early warning systems will rely on targeted, localised and simplified communication and engagement strategies. Funding and support need to be targeted to the civil society, women and youth groups that are pioneering new and innovative DRR approaches.

The APMCDRR provided some interesting insights and learning to inform the Midterm Review of the Sendai Framework for Disaster Risk Reduction 2015-2030.

- **Development investments that are not resilient will not be sustainable.** Climate-related hazards, geohazards, biohazards and technological disasters undermine progress towards the SDGs and set back human development.
- **Historical risk is not a reliable indicator of future risk.** The context of the conference – in the midst of unprecedented extreme and catastrophic weather events – highlighted the impact of global trends, such as climate change, risk-blind development and environmental degradation, on disaster risk. Governments, developers and investors must plan for a different profile of vulnerability and risk in the future.
- **Resilience is not optional; ‘think resilience’.** Strengthening the resilience of communities, infrastructure, services and systems comes at a cost, but far less than the cost of reconstruction and repair after disaster.
- **COVID-19 has heightened awareness of the threats posed by biohazards.** The timing of the conference – in the midst of a global pandemic – strengthened the focus of the DRR community on the overlapping and compounding impacts of biological hazards on other hazards, and on non-structural systems such as food systems, supply chains and health systems.
- **Strengthening resilience requires a multi-hazard approach.** The conference highlighted the importance of both increasing investment in DRR and ensuring that investment is targeted and informed by multi-hazard risk analysis. This approach requires the scientific and development community to work closely with public and private actors. Most helpfully, it promotes a narrative of ‘risk-informed development’.
- **Think local; act local.** The conference brought together participants from vastly different contexts, including the small island states of the Pacific, the land-locked states of the Hindu Kush Himalayan region, the mega-cities of South and South-East Asia, and remote rural communities of Papua New Guinea. The disaster risk challenges and solutions discussed were similarly diverse, but there was consensus that they must be informed by lived experience and knowledge of those on the frontline – communities themselves.
- **Diversity of context has generated a rich pool of knowledge that the Asia-Pacific region can share.** From nature-based solutions such as sponge cities to management practices that marry indigenous knowledge with cutting-edge science, the conference showcased innovative solutions to disaster risk.
- **Leave no one behind; nothing about us without us.** The conference gave voice and profile to groups that are often marginalised in the planning and implementation of DRR, including representatives of the LGBTIQ+ community, women and youth groups, and organisations for people with disabilities. Diversity of participation at the conference must translate into diversity of representation and leadership in decision-making about DRR investments.
- **DRR is everybody’s business.** The conference highlighted the mutual interest in partnerships between the public and private sectors in meeting disaster risk challenges. Participants also highlighted the critical role of the private sector in shoring up community resilience in times of crisis, as well as in investing in DRR.
- **Climate change adaptation and DRR agendas are mutually reinforcing.** The observations and learnings presented in this conference report are highly relevant to the mid-term review of the Sendai Framework, as well as other global agendas, including the 2030 Agenda for Sustainable Development, the COP on Climate Change and the 2023 UN Water Forum and the New Urban Agenda.

Annexes

Co-Chairs' Statement

22 September 2022

1. We thank Ministers and their delegations for their participation in the 2022 Asia-Pacific Ministerial Conference on Disaster Risk Reduction, which has highlighted the particular challenges and needs of Least Developed Countries, Landlocked Developing Countries and Small Island Developing States in the Asia-Pacific region. We particularly stress the importance of formally including Pacific countries in this conference. We welcome the *Nadi Declaration*, adopted at the inaugural meeting of the Pacific Disaster Risk Management Ministers in Fiji on 16 September. We also thank participants from sub-national governments, civil society, the business sector, scientific community, academia, youth, indigenous groups and other stakeholders for their inputs.
2. Participants re-affirmed their commitment to the *Sendai Framework for Disaster Risk Reduction 2015–2030*, which lies at the nexus of sustainable development, climate and humanitarian agendas, and is an enabler of the *2030 Agenda for Sustainable Development*, the *Paris Agreement on Climate Change*, the *Agenda for Humanity* and the *New Urban Agenda*, with the *Asia-Pacific Action Plan 2021–2024 for the Implementation of the Sendai Framework* intended to accelerate their implementation.
3. The *Midterm Review of the Sendai Framework* is an important benchmark of progress towards the achievement of the goal, outcomes, priority actions and guiding principles of the *Sendai Framework*. It will enable us to identify the priorities that must be accelerated, those that must be honed to better reflect the future risk environment and to identify areas of inadequate data. We agreed to bring these priorities to forthcoming events and processes, including (but not limited to) the *2023 Sustainable Development Goals Summit*, the *UN Water Conference*, *COP27* and *COP28*, the *Fourth SIDS Conference*, and the follow-up arrangements to the *SAMOA Pathway* and the *Vienna Programme of Action*. **We call on governments to submit timely reports based on the best available data to UNDRR on national progress towards implementing the Sendai Framework and, subsequently, to transform the findings of the Midterm Review into enhanced domestic and international cooperation in order to accelerate progress in the Asia-Pacific region.**
4. Participants expressed strong concern about current disaster trends and impacts. Climate change amplifies risk with far-reaching consequences, especially on the most vulnerable. With concerted action from all sectors, the impacts of climate change can be addressed. Business as usual is not an option; current development and investment practices must change. Governance mechanisms must address existing and emerging risk. Furthermore, international cooperation in all its manifestations, as outlined in the *Sendai Framework* and reinforced by the *Addis Ababa Action Agenda*, should be scaled up, building on existing regional and sub-regional organisations and mechanisms. **We call on governments and stakeholders to further integrate disaster and climate resilience into national and local development strategies and budgets and call on the scientific community, academia, civil society and the private sector to join them in enhancing the resilience of communities.**

5. Participants stressed the necessity to scale up implementation of integrated and comprehensive disaster and climate risk management at national and local levels. It was appreciated that the Pacific is a global leader in this regard, through its adoption of the *Framework for Resilient Development in the Pacific* and the *2050 Strategy for the Blue Pacific Continent*. Multi-hazard risk analysis and climate projections must guide risk-informed approaches to sustainable development and investment. A more holistic approach that draws on local, indigenous and traditional knowledge and experience combined with science, technology and innovation, is necessary to reduce existing and emerging risk while recognising that investments in preparedness and anticipatory action remain important to address residual risk. **We call on governments and stakeholders to adopt a 'Think Resilience' approach to sieve all opportunities to advance the priorities that we agreed in Sendai and re-affirmed during the Global Platform in Bali and again here in Brisbane, and significantly scale-up finance for disaster risk reduction and climate adaptation and enhance accessibility to financing instruments.**
6. In line with the principles of '*leave no one behind*' and '*nothing about us, without us*', disaster risk reduction must be inclusive and people-centred. Systemic discrimination and inequality are drivers of risk. Intersecting inequalities further exacerbate risk, including gender-based violence and access to sexual and reproductive health in emergencies. It is essential to learn from each other and begin education about disaster risk reduction and climate change at an early age. A gender-transformative, disability-inclusive and human rights-based approach that promotes and supports diverse participation and leadership of women, youth, persons living with disability, LGBTQI+ people, indigenous people and older persons reduces disaster risk. Participants echoed the call from the *66th Session of the Commission on the Status of Women* for a gender action plan for the *Sendai Framework*. **We call on governments and stakeholders to uphold the guiding principles of the Sendai Framework and ensure that the capacities, networks, resources, and insights of all people are incorporated into planning, decision-making and implementation of disaster risk reduction initiatives.**
7. Disaster-related disruptions to business continuity are felt most acutely by micro, small and medium enterprises whose financial reserves are limited. Businesses are likely to experience interruptions in supply chains. The flow-on effects to neighbouring communities are profound and undermine efforts to strengthen resilience. Private sector investments in risk prevention and reduction therefore not only protect business infrastructure and assets, but also contribute to the resilience of the communities they serve. **We call on central and local governments and the private sector to develop partnerships that strengthen business resilience to climate and disaster risk, adopt risk disclosure frameworks, promote disaster risk transfer options based on effective risk level pricing and harness the innovation of businesses while also facilitating the rapid and effective recovery of communities.**
8. Risk-informed, inclusive and shock-responsive social protection mechanisms are important tools in empowering people to prepare for, cope with and recover from disasters. To be effective, contingent finance must be available to scale up anticipatory action rapidly and efficiently before impact, provide assistance following a shock and be accessible to the most marginalized in society. **We call on governments to develop, reform or enhance universally-accessible, adaptive social protection mechanisms and to identify contingent financing streams that will enable individuals to quickly access financial support in preparing for and recovering from a disaster.**

9. Participants welcomed the *Principles for Resilient Infrastructure* that embed disaster and climate resilience in planning and construction of critical infrastructure. They called for the urgent upgrade of existing infrastructure and associated operation and maintenance systems to better withstand the impacts of future hazards. **We call on governments, developers, investors and the business sector to integrate the Principles for Resilient Infrastructure into their decision-making processes, including by 'Building Back Better' after disasters.**
10. While working towards a global blueprint for reducing disaster risk, many challenges and solutions are local. Our endeavours are most likely to succeed through whole-of-society approaches that support community priorities and local institutions. Local government authorities are well-positioned to harness this critical pool of experience by creating an enabling environment and facilitating partnerships. **We call on governments and stakeholders to strengthen collaboration with – _and support to – _sub-national entities, local civil society and business as well as communities to ensure that disaster risk reduction investments are community-driven and 'fit-for-purpose'.**
11. In an increasingly urbanised world, it is essential to integrate a multi-hazard, systems-based approach into urban planning and development that takes into account climate projections. Participants recognised the *Making Cities Resilient 2030* initiative as an important platform for cities and partners to collaborate to harness resources and solutions to build urban resilience. **We call on governments, local governments and all stakeholders to further integrate disaster and climate resilience into urban planning and development processes.**
12. Responsible ecosystems approaches can effectively mitigate many of the harmful impacts of natural hazards. Local communities, particularly, Indigenous people and women, have an acute understanding of the benefits of blue-green infrastructure and sustainable management practices. **We call on governments and stakeholders to harness nature-based solutions, including by working with indigenous people and women to draw on their knowledge of land and marine management practices.**
13. Resilient health systems that can withstand the challenges of trans-boundary health emergencies and other crises are critical for the well-being and resilience of communities and individuals. The COVID pandemic has challenged health systems across Asia and the Pacific. The *Bangkok Principles* seek to enhance the inter-operability of health and disaster risk management systems to better address the cascading impacts of health and disaster emergencies. **We call on governments and stakeholders to apply the Bangkok Principles and share lessons identified in reviews of COVID responses.**
14. Food security is a critical element of disaster and climate resilience – _hungry and malnourished people are poorly equipped to withstand the impacts of disasters that degrade vital natural resource bases, deplete food reserves, raze agricultural infrastructure, decimate livestock, and impede food supply chains. Disaster risk reduction enables continuity of affordable and nutritious food supplies, shores up nutrition levels and facilitates resilient recovery. **We call on governments and stakeholders to strengthen support for resilient agricultural practices and durable food supply chains.**
15. Conflict multiplies the impact of disasters on communities by limiting their capacity to self-manage risk. Concurrently, disasters may trigger instability and displacement. Approaches to financing and implementing disaster risk reduction in these situations must be flexible and based on the principles of '*Do No Harm*'. **We call on governments and stakeholders to integrate disaster risk reduction and a risk-informed approach into humanitarian action.**

16. The UN Secretary-General has called for early warning systems to reach everybody within five years. Early warning systems are to be multi-hazard, end-to-end, people-centred and tied to contingent financing mechanisms to enable anticipatory action. They must leverage scientific and local, indigenous and traditional knowledge. **We call on governments and stakeholders to accelerate development and/or expansion of impact-based forecasting; and universally-accessible, end-to-end, people-centred and gender-responsive, multi-hazard early warning systems.**
17. Planned evacuation and spontaneous movement away from at risk and disaster areas are critical strategies to protect lives. Ensuring that places of refuge are safe and accessible enables resilient recovery and mitigates onward displacement. **We call on governments to review legal, policy, strategic frameworks and plans to better integrate measures that avert, minimise and address disaster displacement and support durable solutions.**

Participants expressed gratitude for the hospitality of the Government of Australia, the Queensland Government and the City of Brisbane.

Glossary: Terminology

Affected: People who are affected, either directly or indirectly, by a hazardous event.

Building code: A set of ordinances or regulations and associated standards intended to regulate aspects of the design, construction, materials, alteration and occupancy of structures which are necessary to ensure human safety and welfare, including resistance to collapse and damage.

Build back better: The use of the recovery, rehabilitation and reconstruction phases after a disaster to increase the resilience of nations and communities through integrating disaster risk reduction measures into the restoration of physical infrastructure and societal systems, and into the revitalization of livelihoods, economies and the environment.

Contingency planning: A management process that analyses disaster risks and establishes arrangements in advance to enable timely, effective and appropriate responses.

Capacity: The combination of all the strengths, attributes and resources available within an organization, community or society to manage and reduce disaster risks and strengthen resilience.

Critical infrastructure: The physical structures, facilities, networks and other assets which provide services that are essential to the social and economic functioning of a community or society.

Disaster: A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts.

Disaster risk management (DRM): Disaster risk management is the application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses.

Disaster Risk Reduction (DRR): Disaster risk reduction is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.

Disaster risk: The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability and capacity.

Disaster risk information: Comprehensive information on all dimensions of disaster risk, including hazards, exposure, vulnerability and capacity, related to persons, communities, organizations and countries and their assets.

Disaster risk governance: The system of institutions, mechanisms, policy and legal frameworks and other arrangements to guide, coordinate and oversee disaster risk reduction and related areas of policy.

Disaster risk assessment: A qualitative or quantitative approach to determine the nature and extent of disaster risk by analysing potential hazards and evaluating existing conditions of exposure and vulnerability that together could harm people, property, services, livelihoods and the environment on which they depend.

Disaster management: The organization, planning and application of measures preparing for, responding to and recovering from disasters.

Early warning system: An integrated system of hazard monitoring, forecasting and prediction, disaster risk assessment, communication and preparedness activities systems and processes that enables individuals, communities, governments, businesses and others to take timely action to reduce disaster risks in advance of hazardous events.

Economic loss: Total economic impact that consists of direct economic loss and indirect economic loss.

Hazard: A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.

Mitigation: The lessening or minimizing of the adverse impacts of a hazardous event.

Preparedness: The knowledge and capacities developed by governments, response and recovery organizations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current disasters.

Prevention: Activities and measures to avoid existing and new disaster risks.

Recovery: The restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society, aligning with the principles of sustainable development and "build back better", to avoid or reduce future disaster risk.

Response: Actions taken directly before, during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.

Resilience: The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management.

Residual risk: The disaster risk that remains in unmanaged form, even when effective disaster risk reduction measures are in place, and for which emergency response and recovery capacities must be maintained.

Risk transfer: The process of formally or informally shifting the financial consequences of particular risks from one party to another, whereby a household, community, enterprise or State authority will obtain resources from the other party after a disaster occurs, in exchange for ongoing or compensatory social or financial benefits provided to that other party.

Rehabilitation: The restoration of basic services and facilities for the functioning of a community or a society affected by a disaster.

Reconstruction: The medium- and long-term rebuilding and sustainable restoration of resilient critical infrastructures, services, housing, facilities and livelihoods required for the full functioning of a community or a society affected by a disaster, aligning with the principles of sustainable development and "build back better", to avoid or reduce future disaster risk.

Structural and non-structural measures: Structural measures are any physical construction to reduce or avoid possible impacts of hazards, or the application of engineering techniques or technology to achieve hazard resistance and resilience in structures or systems. Non-structural measures are measures not involving physical construction which use knowledge, practice or agreement to reduce disaster risks and impacts, in particular through policies and laws, public awareness raising, training and education.

Underlying disaster risk drivers: Processes or conditions, often development-related, that influence the level of disaster risk by increasing levels of exposure and vulnerability or reducing capacity.

Vulnerability: The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.

Types of Sessions



Plenaries

The APMCDRR featured three 75-minute plenary sessions, with one focused on each of the three conference pillars.



Working sessions

The APMCDRR featured 12 60-minute working sessions, focused on strategic and policy-related challenges structured around the three pillars.



Spotlight events

Ten 60-minute spotlight events featured at the conference, highlighting a series of cross-cutting themes, case studies and best practice examples.



Partner events

The APMCDRR featured 19 60-minute partner events, hosted by participating organisations, and which covered a series of topics relating to the 2022 APMCDRR theme: *From Crisis to Resilience*.



Ignite stage

The ignite stage was a key part of the APMCDRR programme and featured 15-minute presentations from a diverse range of speakers on key conference topics. The ignite stage aimed to create an accessible and interactive space for knowledge sharing and discussion.



Learning labs

The conference featured six 90-minute learning labs, designed to form an information sharing space through peer-to-peer learning on approaches for implementing the Sendai Framework for Disaster Risk Reduction.



Marketplace

The marketplace formed the heart of the conference. It featured 57 partner booths, multiple meeting hubs, the ignite stage and an array of displays. It was a place for attendees to meet, connect and collaborate.



Pacific pavilion

The conference featured a collaborative learning and engagement space to showcase Pacific cultures and scientific and technical innovations created to reduce disaster risk in the Pacific.⁴³

43 APMCDRR 2022, *Sessions and Exhibitions*, available at: <https://apmcdrr.undrr.org/program/program-2-sessions-and-exhibits>

Abbreviations

APMCDRR	Asia Pacific Ministerial Conference on Disaster Risk Reduction
CCA	climate change adaptation
CSO	civil society organisation
DRR	disaster risk reduction
GPDRR	Global Platform for Disaster Risk Reduction
LGBTQI	Lesbian, gay, bisexual, transgender, queer and intersex
MSMEs	micro, small and medium-sized enterprises
NDRMF	National Disaster & Risk Management Fund (Pakistan)
NGO	non-governmental organisation
OPD	organisation for people with disabilities
PICAP	Pacific Insurance and Climate Adaptation Programme
QII Principles	Principles for Quality Infrastructure Investment
SDG	Sustainable Development Goal
SOGIESC	sexual orientation, gender identity and expression, and sex characteristics
SPC	The Pacific Community
UN	United Nations
UNDRR	United Nations Office for Disaster Risk Reduction
UNFCCC	United Nations Framework Convention on Climate Change