APP-DRR Forum
Asia-Pacific Partnership for Disaster Risk Reduction

1-2 December 2020
Virtual Forum

APPDRR Forum Report
Contents

1. Background ................................................................................................................................. 3
2. Setting the Stage .......................................................................................................................... 4
3. Strengthening Disaster Risk Governance .................................................................................. 6
4. Key priorities to strengthen disaster risk governance ............................................................... 8
5. APMCDRR Pillars ...................................................................................................................... 10
   5.1 Resilient Investment and Recovery ......................................................................................... 10
   5.2 Resilient Systems, Services and Infrastructure ..................................................................... 13
   5.3 Resilient Communities ........................................................................................................... 15
Annex 1 – Priorities for Action ........................................................................................................ 18
Annex 2 – Participants ..................................................................................................................... 34
Annex 3 – Programme ...................................................................................................................... 37
Executive Summary

Over 200 participants and representatives from 32 UN Member States and several intergovernmental organizations, stakeholder groups, non-governmental organizations, UN entities and other international organizations gathered virtually on 1-2 December 2020 for the Asia-Pacific Partnership for Disaster Risk Reduction (APP-DRR) Forum. This virtual forum was an opportunity to provide input to shape the agenda of the 2021 Asia-Pacific Ministerial Conference on Disaster Risk Reduction (APMCDRR). The APP-DRR Forum was also followed by thematic consultations structured around the pillars of the APMCDRR: Resilient Investment and Recovery; Resilient Systems, Services and Infrastructure; and Resilient Communities.

The APP-DRR Forum was organised against the backdrop of challenges posed by the COVID-19 pandemic, which, despite being a once-in-a-century crisis, is only a symptom of a larger set of risks that are systemic in nature, which, if not addressed, may lead to more such crises in the future necessitating a major shift in the way disaster risk is currently governed.

The Asia-Pacific region has borne the brunt of the compounded impact of the pandemic amid other disasters resulting from natural hazards. The combination of these impacts has set the region off-course to achieving the Sustainable Development Goals (SDGs) and the Sendai Framework for Disaster Risk Reduction 2015-2030. While it was known that the road to Sendai is not linear, business as usual will not be enough. Hence, a transformational change is needed to achieve the Sendai Framework by 2030.

It is critical, therefore, to shift the balance in investment from response to prevention; from addressing symptoms to causes; and from investing in drivers of risk to drivers of resilience. Investment in data and risk analytics is the hallmark of the new approach that informs policy and decision-making on the one side, and communication and behavioural change on the other. Investment in disaster risk reduction should be enhanced, both through increased financing and through revisiting public financing mechanisms to embed climate and disaster risk in social and economic planning and mainstream DRR across all sectors. Anticipatory actions should be promoted, including through ensuring the shock-responsiveness of social protection.

The COVID-19 pandemic has reinforced the need for resilient infrastructure supporting social service delivery, including health and education. Resilient infrastructure is more than the protection of ‘hard’ infrastructure, and by nature is dependent on both the interconnected and standalone systems and people that support it. There is an urgent need to shift the focus in the domain of infrastructure from assets to services.

Finally, local action and inclusiveness are critical enablers of risk governance. COVID-19 has demonstrated that vulnerable groups, in particular, are at higher risk for a range of hazards, including pandemics. Effective disaster risk reduction strategies not only focus on the vulnerabilities of different groups, but also include and engage people with disabilities, women and girls, youth and children in disaster risk reduction planning. Investing in women’s leadership, especially at the local level, and addressing institutional barriers to support gender-sensitive and inclusive DRR, is an efficient and effective way to build resilience.

1 https://www.undrr.org/event/asia-pacific-partnership-disaster-risk-reduction-app-drr-forum-0
2 www.undrr.org/apmcdrr
1. Background

The Asia-Pacific region has made considerable progress in disaster risk reduction, enhancing the resilience of countries and communities. All countries in the region have some national guiding document on disaster risk reduction, with several backed by regulatory provisions, and structured institutional mechanisms for disaster risk management. Inclusiveness has increased and responsibility for managing disasters and disaster risk has expanded from the sole remit of governments to civil society and the private sector. Preparedness measures have seen high progress in particular, which has resulted in a decline in disaster-related mortality, and in several cases, a decline in affected populations.

However, despite these remarkable achievements, challenges remain. Economic losses continue to rise, exacerbated by a nexus between disaster risk, poverty and inequality. Amplified by climate change, the frequency and magnitude of disasters have increased with extreme weather events becoming the norm. Unplanned urbanization and environmental degradation continue to act as risk drivers. All the while, COVID-19 has demonstrated that a narrow focus on a small set of hazards, by one or two government agencies, is not enough to prevent or even respond to complex disaster risks.

Despite being a once-in-a-century crisis, COVID-19 is only a symptom of a larger set of risks that are systemic in nature, which, if not addressed, may lead to more such crises in the future. Hence, there is a need to understand the interconnected and cascading nature of disasters and disaster risk – systemic risk requires systemic action. This, in turn, requires a major shift in risk governance at national and local levels.

The APP-DRR Forum was organized against the backdrop of these challenges and opportunities, as the key event in the lead up to the 2021 Asia-Pacific Ministerial Conference on Disaster Risk Reduction (APMCDRR). To meet the targets of the Agenda for Sustainable Development and the Sendai Framework by 2030, a fundamental transformation must take place to ensure disaster risk is scaled up in every sector, including planning at regional, national and sub-national levels.

The APP-DRR agenda was structured around the main proposed topics of the APMCDRR 2021, starting with an overview of the current state of DRR in the region, followed by a panel discussion on strengthening disaster risk governance in the region. The second day of the APP-DRR saw an introduction of the proposed three main thematic pillars, which are:

1) Resilient Investment and Recovery;
2) Resilient Systems, Services and Infrastructure; and
3) Resilient Communities.

Bolstering these three thematic pillars are the cross-cutting themes of localisation and inclusive DRR. The two cross-cutting themes will help anchor the pillar discussions around their impact on specific groups, particularly women and persons with disabilities.
Following the APP-DRR were three days of facilitated group thematic consultations, where participants were able to deep-dive into specific areas of action. The outcomes of these consultations will form key inputs into a series of sub-regional and stakeholder consultations that will be organized in the lead up to the APMCDRR.

2. Setting the Stage

The APP-DRR Forum opened with a statement from **Ms Mami Mizutori, UN Special Representative of the Secretary-General for Disaster Risk Reduction**. Ms Mizutori highlighted that COVID-19 has underscored the need to view the role of disaster risk reduction beyond the management of a set of recurring hazards. Moreover, she called on participants to take advantage of the opportunity presented by COVID-19 ‘to reinvent how disaster risks are understood, prioritized and acted on.’

Opening remarks were provided by **Ms Rebecca Bryant, Assistant Secretary of the Humanitarian Response, Risk and Recovery Branch in the Australian Department of Foreign Affairs and Trade**. Ms Bryant noted that 2020 had been a very difficult year, not just because of COVID-19 but also due to a range of devastating disasters that had struck the region during the pandemic, placing additional pressures on governments and communities across the Asia-Pacific. These impacts make a strong case for investment in multi-hazard and cross-sectoral approaches to disaster risk reduction, preparedness and resilience building. Ms Bryant confirmed that the APMCDRR would be held virtually between April and June 2021, with exact dates to be announced soon.

To help further set the scene for the introduction of the key themes and topics of the APP-DRR, the **UNDRR Asia-Pacific team** (Animesh Kumar, OIC; Timothy Wilcox, Programme Officer for Sendai Framework Monitoring; and Iria Touzon Calle, Programme Officer for Risk Knowledge) presented an overview of the current state of DRR progress in the region. Globally, while there has been a proportionate decline in disaster-induced mortality and affected population, economic losses and infrastructure damage and losses continue to rise. Gains, however, may be reversed by the impact of COVID-19, wherein Asia-Pacific has borne the brunt from the dual occurrence and compounded impact of the pandemic amid other disasters resulting from natural hazards. This becomes more concerning, as the region has also seen a decelerating or reversing trend in achieving disaster-related SDG targets. The complexity of risk, defined by its systemic nature, has a strong implication on the region’s countries and communities, in particular, on the risk hotspots.

**UNDRR, hence, argued to shift the balance in investment from response to prevention. In other words, to shift from addressing symptoms to causes and from investing in drivers of risk to drivers of resilience. This requires optimizing short- and medium-term DRR solutions to address long-term development and climate challenges and to diversify partnerships beyond national disaster management offices (NDMOS). Public financing mechanisms would also need to be reviewed with risk-informed investments and business resilience enhanced, in particular, for micro, small and medium enterprises.**
Benchmarking against the Asia Regional Plan, UNDRR reported that region had made great strides towards achieving some of the milestones stipulated in 2016 to be achieved by 2020. For example, almost all the countries in the region now have a DRR strategy or plan, and some countries have consistently tried to embed DRR into national development planning.

In addition, two-thirds of the Asia-Pacific countries are reporting on their progress in implementing the Sendai Framework through the Sendai Framework Monitor. But more work is still needed to improve both the quantity and quality of data input. A specific area for strengthening is the collection and reporting of sex, age and disability disaggregated data. This is an area where National Statistical Offices can play a key role in enhancing the ‘data ecosystem’ in countries.

**Keynote Speakers**

The APP-DRR Forum featured two keynote remarks on each day of the Forum:

**Hon. Ifereimi Waqainabete, the Minister of Health and Medical Services of Fiji,** delivered the keynote remarks on Day 1. Minister Waqainabete called on international agencies, scientific entities and governments to collaborate and commit at the most senior levels to construct a global culture of resilience and to equally and equitably assist less developed countries build their capacities in managing disasters and climate risks.

Drawing on the experience of Fiji, including the compounded impact of COVID-19 and tropical cyclones, the Minister highlighted the importance of deliberate decision making to building resilience and reduce disaster impacts. He also called for strengthening the scientific and technological capacities of early warning systems to properly identify, monitor, and prepare for hazards.

The second keynote presentation was made by **Ms Hiroko Oura, Deputy Division Chief, Financial Sector Assessment and Policy, International Monetary Fund.** In her presentation, Ms Hiroko highlighted the challenges associated with loss-based modelling including catastrophe (cat) risk modelling due to data limitations. Risk transfer (e.g. insurance) and contingent financing approaches to risk management, hence, offer limited solutions and need to be complemented by risk mitigation and adaptation actions. Within the adaptation options, she outlined the importance of green investment – while the COVID-19 pandemic has given an impetus for green investment it could be short-lived. Financially constrained firms have weaker environmental performance and hence public support for green investment might be needed.
3. Strengthening Disaster Risk Governance

A panel discussion was held to discuss avenues to strengthen disaster risk governance in the region highlighting experiences around managing COVID-19 and its integration into disaster management systems. It was moderated by Ms Amanda Leck, Executive Director, Australian Institute for Disaster Resilience. Ms Leck warned that increasing national economic losses due to disasters, which are increasing in number, frequency and magnitude, threaten to overshadow progress made elsewhere in reducing disaster risks. To help address this, she said a multi-sectoral and multi-hazard approach to risk governance was needed with increased cooperation between countries and all stakeholders to prevent and respond to complex disaster risks.

Participants heard from four distinguished panellists representing four different sectors. Dr Krishna Vatsa of the National Disaster Management Authority of India outlined how in response to COVID-19 the Indian Government followed a whole-of-government approach, under the leadership of the Ministry of Health with the disaster management system playing an important role in two key ways: 1) the National Disaster Management Act was used to implement necessary measures to prevent the spread of COVID-19; and 2) the financing of response efforts as the Government of India could reallocate up to 50% of public budget allocations, thus strengthening the capacity of state governments to deal with COVID-19. Other lessons learned were the need to strengthen social protection systems to ensure that the needs of the most vulnerable people were addressed.

A local government perspective was presented by Hon. Jerry Treñas, the Mayor of Iloilo City in the Philippines. Mayor Treñas outlined how risks from multiple hazards posed significant challenges to local leaders, but that the analysis of hazard and risk data played a key role in assisting local authorities to reduce risks and better prepare and respond. Iloilo City assessed its preparedness for various hazards using access to real time data, which enabled the government to warn people and preposition supplies. Furthermore, the use of GIS-based systems and the installation of a multi-hazard sensor network provided disaster management authorities with real time data on specific hazards, thus enhancing their situational awareness and ability make to informed decisions. The utilization of such technology was in part credited to the Philippine National Resilience Council, which had provided a framework and a roadmap to resilience for the Iloilo City authorities. Mayor Treñas called for more support to build the capacity of local governments and encouraged local authorities to partner with the private sector to support disaster risk management activities.

A valuable perspective from the persons with disabilities stakeholder group was presented by Ms Nelly Caleb, National Director of the Vanuatu Disability, Promotion and Advocacy Association. Ms Caleb highlighted that ‘Leave No One Behind’ must not just be a catch phrase but a principle to be lived by and that persons with disabilities remain one of the populations most severely impacted by disasters and often excluded from humanitarian response efforts. She further lamented that persons with a disability are often viewed only as a vulnerable group rather than key actors who can help reduce disaster risks. She outlined four key recommendations to make risk governance more inclusive:

- Information about disasters and early warning systems must be accessible for all;
- Demographic data must be disaggregated by disability, so that responders can locate people with disabilities, identify their needs, address barriers, ensure they receive care, and save lives;
• The principle of building back better can be used not only to reduce disaster risks faced by people with disabilities, but also to build more inclusive communities and societies that are accessible for all. She gave the example of evacuation centres often being inaccessible to persons with physical disabilities; and

• Everyone can and must contribute to ensuring the inclusive and effective participation of persons with disabilities in decision making.

**Dr Emily Ying Yang Chan, Professor in the Faculty of Medicine at the Chinese University of Hong Kong**, provided an academic and scientific perspective on risk governance. She said science had a vital role to play in risk governance, particularly in the areas of:

• *Data management* – to assist in the identification, monitoring and analysis of disaster risk.

• *Risk communication* – where better data on at-risk groups can help authorities re-think top-down approaches to warning systems in favour of more people-centred, bottom-up approaches that can ensure the right information reaches the right groups.

• *ICT and innovation* – where digital literacy is essential to managing future risk, but the digital divide creates barriers to accessing this information. People’s accessibility to data must be ensured.

Dr Chan also cautioned that while hazards are non-linear, many response protocols and standard operating procedures were linear in nature. In addition, cascading, sequential, and simultaneous disasters create residual risk and biological hazards, such as COVID-19, remind us all of the opportunity to ‘upgrade risk governance structures, risk management and response plans.’
4. Key priorities to strengthen disaster risk governance

Member States and stakeholder groups provided both written statements and verbal reflections on what they see as key priorities to progress implementation of the Sendai Framework in the Asia-Pacific and highlighted some of their achievements in managing the COVID-19 pandemic.

The need for stronger DRR financing at all levels was seen as key to progressing DRR further in the region. Indonesia requested that it be made a key topic at the next Global Platform for DRR to be held on 23-28 May 2022 in Bali, Indonesia. As part of this need for stronger risk financing were calls for improved national and local budgetary processes that embed climate and disaster risk in core social and economic planning and mainstream DRR across all sectors. This is particularly important given humanitarian funding cannot keep pace with current needs globally. Therefore, countries and partners need to be more anticipatory in their approach to better prepare for disaster shocks and leverage investments to reinforce disaster risk reduction and preparedness. The need for finance and planning sectors to participate in the APMCDRR in 2021 was emphasised.

While resilience must be strengthened at all levels, the need to strengthen capacity and resources at the local and community levels was a strong recurring theme. It was seen that for community recovery and resilience to be successful, it must be locally led with local leadership playing a critical role in designing and implementing DRR efforts. Further work to build local capacity was identified as was the need to institutionalize DRR into local processes, in particular, development plans. In addition, authorities should create an enabling environment for local actors to lead, including revising local systems and laws to provide additional capacities and resources to enable local actors to support those most at risk.

DRR must always be inclusive with people at the centre of our work. Here, resilience building needs to be holistic in its understanding of risk and viewed through gender and social lenses. Failure to do so will reinforce existing vulnerabilities. Persons with disabilities are known to be disproportionately impacted by disasters and the economic stress caused by a disaster can be very high on them. As such, meaningful representation of persons with disabilities and disability-focused organisations must be included in DRR policy development and implementation, particularly in recovery efforts. Engaging with women and disability groups is essential to DRR, particularly the promotion of women’s leadership.

Many of the reflections further highlighted the importance of inclusive social protection measures, particularly in response to COVID-19, as a means of protecting vulnerable groups and the general population in times of disaster. This is particularly important to maintain livelihoods and prevent further poverty and to address gender disparities. Interventions also highlighted the need to adopt anticipatory actions to bolster preparedness.

Despite the achievements made in strengthening risk governance, there were calls to further this work. Three key measures to enhance risk governance were identified: a) governance systems must be risk informed and take into account the full range of hazards experienced, especially public health emergencies; b) the integration of national government risk structures to bring together all horizontal and vertical government structures across health, climate and extreme weather; and c) greater investment must be made in risk governance at all levels.

COVID-19 has highlighted the weakness of many regions and sub-regions when it comes to managing transboundary risks and disasters. Such risks and events can be addressed through integrated regional risk governance measures. The role that regional organisations can play in supporting countries was also recognised and encouraged, particularly in facilitating knowledge sharing and enhancing coordination between countries.
COVID-19 has also exacerbated the stress of **compounded impacts** of the pandemic response and recovery efforts running in parallel to other disasters such as cyclones and wildfires. This has highlighted the need for additional efforts to encourage active, collaborative and multidisciplinary recovery efforts, using existing disaster risk management arrangements to bear and manage compounding disasters.

Historical disaster damage and loss databases have been and are being established by a number of countries in the region and **data management and sharing** is seen as essential for understanding disaster risk. Related to this is the need to use data for hazard forecasting and strengthening early warning systems, which must be made accessible to the public though an understandable and useable format. Following a disaster, this data and proper evidence-based research play an essential role in informing the recovery process.

**Partnerships** between state and non-state actors are essential to progressing implementation of the Sendai Framework in the region. Additional partnership building is still needed, especially with the private sector and the academic and scientific community. Such partnerships can bring much needed innovation to the policy table particularly as the world moves increasingly into a digital realm. The private sector and the academic and scientific community can help countries make the digital shift and utilize digital technologies to make DRR and risk data accessible to the public and stakeholders.

New and innovative ways of managing disaster risk and increasing **institutional capacity** must be encouraged and pursued. Partners should support countries in mobilising support to fast-track actions that improve resilience, support innovation, and find and implement technical solutions. The creation of opportunities to exchange and increase learning between countries and partners is key to this and the APMCDRR can play a crucial role in facilitating this process.

Empowering and strengthening **youth networks** will also be important as the world moves forward into the digital era to spur new and innovative ways of managing disaster risk. At the same time, youth and young professionals need capacity building and professional opportunities to enhance their roles in DRR.
5. APMCDRR Pillars

The 2021 Asia-Pacific Ministerial Conference on Disaster Risk Reduction (APMCDRR) will be structured around three thematic pillars:

1. Resilient investment and recovery;
2. Resilient systems, services and infrastructure; and
3. Resilient communities.

These themes are underscored by the cross-cutting issues of local action and inclusiveness, and the overarching objective of strengthening risk governance.

Following the APP-DRR Forum (1-2 December 2020), which considered and discussed the three thematic pillars, a series of three thematic consultations were organised (8-10 December 2020), each dedicated to one of the APMCDRR thematic pillars. Participants identified key areas that needed to be addressed in order to progress implementation of the Sendai Framework to inform the next Asia-Pacific Action Plan 2021-2024. In addition, key enablers and stakeholders were further identified by the groups to ensure these action areas could be progressed at the regional, national and local levels.

Detailed findings are outlined in Annex 1.

5.1 Resilient Investment and Recovery

Background

There is an urgent need to shift the balance of political attention and resource allocation from investing in response, to investing in prevention, risk reduction, anticipatory approaches and resilience, supported by planning at the local, national and regional levels. Climate change is also triggering global systemic responses, including a transition in the finance sector that is increasingly recognising both the risks and opportunities for governments, communities, and the private sector. While COVID-19 has rolled back development gains, its recovery process offers opportunities to harness co-benefits for climate and disaster resilience.

Driving smarter investment: Building greater resilience to shocks requires investment before a crisis occurs. Embedding disaster and climate risk management into core economic planning and investments will accelerate the changes needed to scale-up investment in risk reduction at national and local levels, and reduce the cost of implementation through technology and innovation. Public financing and fiscal policies need to integrate prevention as a core priority. Investment from the private sector could create a multiplier impact on different sectors of the formal and informal economies.

Innovative Financing: Disaster risk reduction requires a layered financial approach to provide a range of tools in a common framework to address different layers of risk, as no single financial instrument is optimal for all risk scenarios. Financial instruments should seek to incentivize risk reduction and finance ‘building back better’. Public financing should integrate prevention as a core element of disaster risk reduction financing in order to build resilience. This can also be supported by aligning integrated national financing frameworks for sustainable development with disaster risk reduction strategies. New and innovative sources of disaster risk financing, including through climate finance, need to be explored and harnessed.
The ‘new’ Build Back Better: Asia-Pacific countries will be navigating recovery from the socioeconomic impacts of COVID-19 for some time to come. This is an opportunity to build forward for a “new normal” that is more equitable, risk informed and climate sensitive. Smart investment in green growth could support the rebuilding of stronger and more disaster and climate resilient Asia-Pacific communities, whether located in coastal and island communities or large urban centres.

Summary of Discussion
The thematic consultation on Resilient Investment and Recovery focused on the need for strengthened risk-informed development financing. Specifically, impact-based forecasting and insurance, inclusion in recovery to advance building back better, green financing, and risk-informed development financing, particularly at the local level. Key to these are stronger public-private partnerships and the political will to advance building back better.

Disaster risk data and statistics, and the need to improve its quantity and quality, was identified as a key enabler. This can be done through strengthening disaster loss accounting, especially the collection and use of sex, age and disability disaggregated data (SADDD), and
economic losses, which could be used to put an economic case forward for prevention and risk reduction to ministries of finance. With accurate and robust data, and risk information that outline differences in levels of exposure and vulnerabilities, then financing mechanisms such as dedicated funds for resilience building based on these levels of risk can be allocated before a disaster event occurs, particularly at the local level. Other enablers include strengthening governance arrangements for climate and disaster risk reduction to include planning and finance entities.

Disaster risk financing needs to shift the balance to ex-ante financing with an increased focus on the prevention of disasters and the risk of disasters. These include (i) financing mechanisms for integrating risk into development (e.g. resilient infrastructure, land-use planning, building codes, etc.); (ii) financing mechanisms in advance of an event (i.e. anticipatory actions); and (iii) financing mechanisms and planning in advance of recovery (backed by pre-disaster recovery planning). Participants also called for keeping the response and recovery functions as separate and not necessarily housing them in the same entities. This helps ensure the recovery process is risk-informed and enables ‘build back better.’

Development financing, disaster risk reduction and climate adaptation financing and planning currently still occur mostly in parallel streams. While there is agreement on the need for coordinated action, it rarely occurs in practice. Currently, there are few institutional mechanisms for these conversations to happen meaningfully, and national planning institutions as well as DRR and climate financing are not always connected. To help promote better coordination and coherence between them, there is a need to identify good practice and to encourage other countries and partners to follow suit to ensure greater linkages to maximize often limited resources aimed at achieving the common outcome of resilience.

Financing tools for building resilience need innovation at their core, including for multilateral financing tools and risk transfer tools (e.g. insurance and bonds) and, importantly, review of the public financing systems for disaster risk management, starting with budget coding and tracking of investments. A layered financing mechanism is ideal, which may be sequential or applied as a mix.

More discussions need to happen in the domains of legislation and policy to strengthen disaster risk financing. Legislative frameworks can help decentralize decision making and empower local authorities to act quickly and in an agile way to respond to and reduce disaster risk in their communities. Forecast-based financing was identified as having a key role here and is known to work very well because funds are allocated before a disaster. Related to this, cost-benefit analyses are useful in establishing a rationale for preventing actions, and hence appropriate financing instruments, before an event occurs.

At the local level, it is important to have updated and accurate risk information and risk awareness. Furthermore, both the local and national levels need to coordinate closely when it comes to raising risk awareness and generating risk information, as it is essential that risk information reflect the real vulnerabilities on the ground that are unique to each location.

Finally, the greening of economies is imperative for resilience and sustainable development. Nature-based solutions and a hybrid mix of green-blue-grey approaches should inform infrastructure resilience, while financing tools should encourage green investments in risk management. The COVID-19 recovery process offers opportunities for climate-sensitive planning.
5.2 Resilient Systems, Services and Infrastructure

Background

Emerging economies in the Asia-Pacific region are rapidly increasing investment in infrastructure and systems. Much of the region’s population is increasingly urban, and disaster risk concentrates within cities and urban areas of all sizes, and economic characteristics. With so much infrastructure development underway in the Asia-Pacific, there is a need to ensure that future infrastructure construction and systems do not create more risk, are disaster and climate resilient to protect investments, and prevent loss of life. The poor typically bear the worst brunt of infrastructure failures as they often lack adequate resources for coping with disasters. Thus, the downstream effects of the loss and damage to infrastructure may be felt for years following the event.

Resilient systems and infrastructure: The COVID-19 crisis has reinforced the need to ensure that critical infrastructure and services, including health and education, are resilient to disaster impacts. Emerging economies in the Asia-Pacific region are rapidly increasing infrastructure investments, which provides an opportunity to ensure new infrastructure projects and systems are risk-informed, and do not create risks. Resilient infrastructure is more than the protection of ‘hard’ infrastructure, and are dependent on both interconnected and standalone systems and people that support them.

Private sector and small business resilience: In most economies, 70-85 per cent of overall investments are made by the private sector. Within the private sector, the engagement of micro, small and medium enterprises (MSMEs) in building resilience and climate security is of critical importance given the number of people they employ. Compared with corporate businesses, informal sector producers and MSMEs are far less resilient, particularly in low and middle-income countries. Smaller businesses are at risk of recurrent localized and extensive disasters. A single disaster may wipe out all or a large part of businesses’ capital. Hence, developing business resilience is a core element to sustain the economic progress of a country.

Resilient Cities: The cities that we live in now and the cities of the future need to be safe spaces where people prosper and flourish. The Asia-Pacific region contains the highest concentration of megacities in the world and has seen tremendous urban growth over the last decades. However, urban growth has often been coupled with decisions that have increased exposure to hazards and vulnerabilities to them, such as poor land use policies, environmental degradation, lax building regulations, and weak social protection. As a result, cities are now at the forefront of disaster impacts. This has been further demonstrated by the impact of the COVID-19 pandemic, which struck urban areas particular hard. If cities are to become resilient and sustainable, they must integrate disaster risk reduction into their development planning.

Summary of Discussion

The thematic consultation on Resilient Systems, Services and Infrastructure outlined two topics for discussion: resilient cities including key systems and services such as health; and resilient business including the needs of informal as well as small and medium enterprise. The group acknowledged that the COVID-19 pandemic had reinforced the need for resilient infrastructure supporting social service delivery, including health and education. Resilient infrastructure is more than the protection of ‘hard’ infrastructure, but it extends to ‘soft’ infrastructure and support systems. In addition, building resilient businesses means services critical for community recovery can reach those affected.

The importance of reviewing and drafting legislation on disaster risk management, focused on protecting services like public health and the infrastructure that supports it, was considered
as an important action that is needed at the national level. Also identified as an important priority was the development of specific standards and guidelines that promote inclusive and shock-responsive social protection programmes that can improve access to basic social services. These standards should be based on disaster risks, environmental impact assessments and research-based policies. To ensure all relevant sectors were involved, it was recommended that the participation of ministries of land-use planning, urban development and infrastructure, as well as ministries of education and health, be encouraged. These ministries would work in close collaboration to develop, implement and enforce these types of legislation and policies.

A big part of the discussion focused around the importance of enhancing the resilience of soft infrastructure, systems and services, with a focus on people, marking a shift from focusing only on physical infrastructure, systems and services. The need to shift the focus in the domain of infrastructure from assets to services was highlighted. Infrastructure operates as a ‘system of systems’, hence, the cost of resilience can be reduced by working at the network and system level. A systems approach helps prioritize infrastructure components, taking criticality and diversification into account, reducing redundancy. Further, a resilient network can lose many assets without losing much functionality (e.g. power and telecom sectors) – and thus a systems approach to infrastructure helps minimize disruptions.

What are the key factors for cities to have resilient systems, services and infrastructure by 2030?

What key factors ensure that systems, services and infrastructure support resilient business?
It was reiterated that accessibility in infrastructure services is needed to contribute to a resilient community and is an important component of resilient infrastructure. Standards and guidelines that address the needs of different communities should not only be developed but also implemented to support full utilisation. The enablers proposed to guarantee a risk-informed approach are to use infrastructure systems and services vulnerability assessments, gender analysis, and SADDD on access, capacities, vulnerabilities and disaster impact.

A strong emphasis was made on the importance of regional and global cooperation and solidarity to promote inclusive resilient recovery, climate action and DRR. This cooperation should also prioritize and work toward a coherent approach on the implementation of global agendas such as the SDGs, the New Urban Agenda and the Paris Agreement. Coherence should also be promoted in national development agendas by including climate change and urban development. There are also many existing enablers like Making Cities Resilient 2030 (MCR2030) and the Coalition for Disaster Resilient Infrastructure (CDRI) that should be used and promoted to raise awareness on risk-informed development and for capacity development activities.

Partners acknowledged the devastating impact of COVID-19 on the business sector, noting that while some businesses have managed to adjust and rejuvenate their business models to survive the crisis, and even play an integral role in the response and recovery, the majority of business communities in the Asia-Pacific – and overwhelmingly those categorised as MSMEs in particular in the informal sector – have experienced a hugely negative socio-economic impact from the crisis. The year 2020 has shown that it is critical for all businesses to have business continuity plans in place to allow them to better understand their risks and how to adapt their operating models to continue business during and after crises.

The onset of multiple disasters with compounded impacts, involving COVID-19 and cyclones in the region, has emphasized the need to digitize the economy to allow for resources to be transferred more easily between suppliers and consumers, and from development partners to those in need. Currently, there is a lack of digitization in many community-based settings.

### 5.3 Resilient Communities

#### Background

The Asia-Pacific region has made significant progress in reducing disaster risk and loss of life caused by disasters. However, lives are still being impacted in a variety of way by disasters – physically, socially and economically. Moreover, underlying vulnerabilities exacerbate the impacts of cascading and dual disasters for which communities are often unprepared.

**Inclusive and Local Disaster Resilience:** Disaster risk is context specific. Impacts of disasters are most immediately and intensely felt at the local level. Local actors are the first responders when a disaster occurs. COVID-19 has demonstrated that vulnerable groups, in particular, are at a higher risk for a range of hazards, including pandemics. Effective disaster risk reduction strategies should not only focus on the vulnerabilities of different groups, but also engage and empower people with disabilities, women and girls, youth and children in disaster risk reduction planning.

**Risk Knowledge and Communication:** There is an urgent need for better links between evidence, planning, decision-making and communication, to inform disaster resilience policies that build community resilience. Improving the science-policy-practice nexus can help prepare communities for the impacts of disasters now and can help forecast, plan for and communicate the impact of future disasters. People-centred risk communication and a focus on ‘end-user’ perspectives are essential for behavioural change to reduce risk.
Women’s leadership: Women are more likely to be disproportionately affected by disasters than men, yet the indispensable role of women’s leadership in risk reduction efforts is often not acknowledged, and women remain under-represented in decision-making at all levels. The Sendai Framework recognizes the critical role that women must play in effectively managing disaster risk, and in designing, resourcing and implementing gender-sensitive disaster risk reduction policies, plans and programmes. Investing in women’s leadership, and addressing institutional barriers to support gender-sensitive and inclusive DRR, is an efficient and effective way to build resilience.

Summary of Discussion
The third and last thematic consultation on Resilient Communities focused on inclusive DRR and women’s leadership, as well as risk knowledge and communication. The consultation built on the first two consultations. It was noted that data is often seen as a technical issue, and inclusiveness a thematic ('cross-cutting') issue. However, both data and inclusiveness are governance issues. Further, disaggregation of data is a key enabler of inclusiveness and intersectional approaches to building resilience.

A key message received from the group was the essential need for partners at all levels to localise their work and be people-centred. Regional work was highlighted in particular, with
participants highlighting the need to be guided by local actors with a real bottom-up approach required. To help do this, key actors such as international government organisations and regional bodies should include real decision-making power with the community-level actors with genuine local level engagement. In addition, institutions should promote skilled staff at all levels of their organisation, particularly the operational level so they can effectively engage with communities and work with them in their regional work.

As most disasters have localized impact, communities must take a lead in developing their own risk profile and in implementing their local DRR plans. This requires providing them with the appropriate tools and resources and be involving them in decision-making process from the beginning. This localisation is key to successful risk management as it was noted that resilience cannot be averaged across the country or region, as it is location dependent and place-based. In addition, there is a need to explore the nuances of different population groups in different locations and not be limited by just the ‘main’ categories (e.g. women are not a homogenous group and their varying situations would impact their resilience). A continuing need to strengthen women’s leadership at all levels was deemed essential, particularly at the local level. Enablers included scholarships, recruitment quotas, and providing an enabling working environment.

Inclusive and meaningful participation from persons with disabilities, older persons and youth must take place when developing and implementing local risk profiles and plans to ensure inclusive communication on disaster risk management and early warnings.

Effective communication with local communities was seen not only as critical, but as a primary enabler to ensure stronger community resilience. As part of this, consistency was needed in the use of terminology (e.g. "resilience profiles" and "risk profiles"). This was important as it contributed to all stakeholder groups having a shared understanding of risk as a function of hazard, exposure, vulnerability and capacity. The method of communication must also be inclusive of all needs, particularly persons with a disability. Women’s leadership can also help ensure an inclusive approach.

Language translation must also be taken into account. In particular, while some DRR terms may be accurately translated into some languages, others may not be accurately translated. The latter will hinder effective communication. The need to simplify language, particularly key concepts of hazard, vulnerability, risk and its elements was identified as a key enabler for effective communication at all levels.
## Annex 1 – Priorities for Action

### I. Resilient Investment and Recovery

<table>
<thead>
<tr>
<th>Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific</th>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DRR Financing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>a. Regional level</strong></td>
<td>• Greater levels of advocacy</td>
<td>• Regional/ inter-governmental organizations</td>
</tr>
<tr>
<td>• Advocacy for scaling up forecast-based financing and anticipatory actions</td>
<td>• Strengthening disaster loss accounting (disaggregated, including economic losses – economic case for prevention and risk reduction)</td>
<td>• Insurance sector</td>
</tr>
<tr>
<td>• Disaster risk financing and insurance – linking insurance to forecasting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Green financing</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>b. National level</strong></td>
<td>• Governance arrangements for climate &amp; disaster risk reduction to include planning &amp; finance entities</td>
<td>• Planning and financing institutions</td>
</tr>
<tr>
<td>• Risk-informed development financing</td>
<td>• Legal and institutional mechanisms</td>
<td>• Multilateral financing institutions; ministries of finance and planning</td>
</tr>
<tr>
<td>• Risk-informed planning and budgeting process – identify good practice &amp; build awareness capacities</td>
<td>• Strengthening public financing systems – budget coding and tracking of investments</td>
<td>• Ministries of urban and rural development</td>
</tr>
<tr>
<td>• Disaster risk financing and insurance – linking insurance to forecasting</td>
<td>• Accurate and robust data and risk information (differential exposure and vulnerabilities); financing mechanisms (ex-ante dedicated funds)</td>
<td>• Private sector financiers</td>
</tr>
<tr>
<td>• Scaling up forecast-based financing and anticipatory actions</td>
<td>• Cost-benefit analysis on ex-ante investments/anticipatory action- demonstrate the value of anticipatory actions.</td>
<td></td>
</tr>
<tr>
<td>• Public private partnerships</td>
<td>• Information on disaster losses (disaggregated, including economic losses)</td>
<td></td>
</tr>
<tr>
<td>• Green financing</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>c. Local level</strong></td>
<td>• Local and community risk reduction and climate change adaptation action plans</td>
<td>• National and local governments</td>
</tr>
<tr>
<td>• Decentralization of decision-making for local-level investments</td>
<td>• Accurate risk information (including on exposure and vulnerabilities) &amp; awareness.</td>
<td>• Community based enterprises</td>
</tr>
<tr>
<td>• Scaling up forecast-based financing and anticipatory actions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific

<table>
<thead>
<tr>
<th>Key actions needed to advance building back better</th>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Political will to advance building back better</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>a. Regional level</strong></td>
<td>Legal framework</td>
<td>Regional organizations (e.g. ASEAN)</td>
</tr>
<tr>
<td>• Increase awareness and learning from disasters toward a coherent view of building back better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Take a regional approach to the assessment of risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>b. National level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Standardize the total cost accounting of disasters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Demonstrate how prevention, mitigation contributes to development goals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Take a regional (subnational) approach to the assessment of risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Increase the body of data and evidence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Harmonization and coordination and at all levels of government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Private sector engagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>c. Local level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Demonstrate how prevention, mitigation contributes to development goals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Finance for building back better

<table>
<thead>
<tr>
<th>Key actions needed to advance building back better</th>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Finance for building back better</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>a. Regional level</strong></td>
<td>Improve quantity and quality of data</td>
<td></td>
</tr>
<tr>
<td>• Quantify the benefits from building back better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Youth engagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>b. National level</strong></td>
<td>Improve quantity and quality of data</td>
<td></td>
</tr>
<tr>
<td>• Quantify the benefits from building back better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Private sector investment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Financing preparedness to build back better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Youth engagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>c. Local level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Micro credit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---
<table>
<thead>
<tr>
<th>Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific</th>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inclusion in recovery to advance building back better</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>a. Regional level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Youth engagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>b. National level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Collaboration with civil society to ensure that all stakeholders have been consulted, their views considered</td>
<td>• include CSOs and underrepresented groups</td>
<td></td>
</tr>
<tr>
<td>• Invest in inclusion and equitable outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Gender-responsive budgeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Ensure equal participation and leadership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Youth engagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>c. Local level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Collaboration with civil society to ensure that all stakeholders have been consulted and their views considered</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Youth engagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preparedness to build back better in recovery</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>a. Regional level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Regional level risk assessments to understand where investments can be made/will be needed in recovery</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>b. National level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Harmonization and coordination and at all levels of government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Off the shelf-ready building back better recovery plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Effectively bridge from early recovery to building back better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Paradigm shift toward preparedness for recovery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Financing preparedness to build back better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Regional level (subnational) risk assessments to understand where investments can be made/will be needed in recovery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Building back better embedded as a part of a broader strategy for resilience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific</td>
<td>Enablers to make these happen</td>
<td>Key stakeholders</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| **c. Local level**  
- Financing preparedness to build back better  
- Regional level (subnational) risk assessments to understand where investments can be made/will be needed in recovery  
- Building back better embedded as a part of a broader strategy for resilience | | |
## II. Resilient Systems, Services and Infrastructure

<table>
<thead>
<tr>
<th>Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific</th>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resilient Cities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>a. Regional level</strong></td>
<td></td>
<td>MCR2030 Partners (UN agencies, IFRC, UCLG)</td>
</tr>
<tr>
<td>• Nil</td>
<td>• Nil</td>
<td></td>
</tr>
<tr>
<td><strong>b. National level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Review/drafting of legislation on disaster management and public health: improve coordination among NDMAs and Health</td>
<td>• Standards and guidelines for climate and disaster resilient infrastructures</td>
<td>Ministries of land use, urban development and infrastructures</td>
</tr>
<tr>
<td>• Legislation on health infrastructures (including in time of disasters)</td>
<td>• National-local linkages for capacity development at local level</td>
<td>Academics and vocational training</td>
</tr>
<tr>
<td>• Applying Science, Engineering, Technology and Innovation (SETI)'s advancement, design and development of innovative, low-cost technologies and tools</td>
<td>• Research for evidence-based policies</td>
<td>Sciences and technology stakeholder groups participating into national platforms</td>
</tr>
<tr>
<td>• Policies and plans to address issues rural-urban migration</td>
<td>• Engagement of youth professionals for enforcement and implementation of laws and policies (e.g. building codes)</td>
<td>Ministries of education and health and with local departments of education and health</td>
</tr>
<tr>
<td>• Make social protection schemes shock responsive</td>
<td>• Legislation on disaster risk management and public health</td>
<td>Hydro meteorological agencies</td>
</tr>
<tr>
<td>• Improve access to public health systems</td>
<td>• Inclusive social protection schemes</td>
<td></td>
</tr>
<tr>
<td>• Dissemination of science-based risk assessment methodologies</td>
<td>• Awareness raising campaigns – comprehensive school safety</td>
<td></td>
</tr>
<tr>
<td><strong>c. Local level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• People-centred policies for public health emergencies (integrate aspects of livelihoods, displacement)</td>
<td>• Disaster risks and environmental impact assessment guidance &amp; laws</td>
<td></td>
</tr>
<tr>
<td>• City planning enabled by GIS-technology to identify risk area and suitable type of infrastructure considering nature and ecosystem carrying capacities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Anticipatory action</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Green infrastructures/ nature-based solutions for risk reduction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---
# Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific

## Resilient Infrastructure

### a. Regional level
- Promote regional/global cooperation and solidarity for inclusive resilient recovery and climate action and DRR
- Multidisciplinary approach beyond disaster management, including critical infrastructure, land use planning
- Coherence on implementation of global agendas (SDGs, New Urban Agenda, Paris Agreement, etc.)

<table>
<thead>
<tr>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness and capacity development through initiatives such as MCR2030, CDRI (Coalition for Disaster Resilient Infrastructure)</td>
<td>UN agencies, ADB, WB, IFRC with its specific role on localization and community based resilience, MCR2030</td>
</tr>
</tbody>
</table>

### b. National level
- Infrastructures services more accessible and resilient contributing to resilient communities (safeguard rights of all, address needs and enhance access of all groups)
- Minimize risks induced by infrastructure development
- Mandate gender-responsive approaches in city planning
- Multidisciplinary approach beyond DM, including critical infrastructure, land use planning
- Legislation for climate/DRR for land-use, urban planning
- Coherence on national development agendas, including climate change, urban development

<table>
<thead>
<tr>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure systems and services vulnerability assessment and gender analysis</td>
<td>Women groups, Planning &amp; finance ministries, Urban development ministries, NDMAs, Climate change actors (ministries of environment)</td>
</tr>
<tr>
<td>SADDD on access, capacities, vulnerabilities, risk and disaster impact</td>
<td></td>
</tr>
<tr>
<td>Risk assessment including climate projections</td>
<td></td>
</tr>
<tr>
<td>Participatory design / co-design approaches</td>
<td></td>
</tr>
<tr>
<td>Capacity building for gender sensitive urban planning</td>
<td></td>
</tr>
<tr>
<td>Monitoring and evaluation on progress on global agendas (New urban agenda, SDGs, SFDRR)</td>
<td></td>
</tr>
</tbody>
</table>

### c. Local level
- Settlements approach for risk assessment and infrastructure planning
- Universal design for accessible, inclusive, liveable and resilient cities

<table>
<thead>
<tr>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination and financing for inclusive land use and infrastructure planning</td>
<td>Slum dwellers participate on risk assessment</td>
</tr>
<tr>
<td>Vulnerability assessment and gender analysis</td>
<td></td>
</tr>
<tr>
<td>Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific</td>
<td>Enablers to make these happen</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Resilient Businesses</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **a. Regional level** | • Promote a green pathway to recovery for all businesses (MSMEs to big enterprises)  
• More businesses develop business continuity plans incorporating risk awareness and adaptive solutions to staying in business/recovery  
• Development partners, regional organizations and business networks collaborate to establish social security and safety nets to support MSMEs, different livelihood groups, and communities in urban and rural settings  
• Increase disaster insurance coverage of businesses (incl. MSMEs, informal sector) | • Knowledge management and lessons learning around green solutions; green recovery becomes the underlying objective of recovery strategies; promote nature-based solutions  
• Examine value and supply chains and their interlinkages in particular sectors;  
• Incorporate language on soft infrastructure and systems within the DRR action plan for implementation of the Sendai Framework | • IGOs; NGOs; inter-governmental organisations; climate funds;  
• IGOs; NGOs; business groups; development partners  
• UN agencies; WB; ADB, development partners, ARISE network, CSOs etc. |
| **b. National level** | • Businesses engage as key partners in resilient recovery and develop an integrated and mainstreamed approach to business resilience  
• Promote a green pathway to recovery for all businesses (MSMEs to big enterprises)  
• More businesses develop business continuity plans incorporating risk awareness and adaptive solutions to staying in business/recovery  
• National governments and business networks collaborate to establish social security and safety nets to support MSMEs, different livelihood groups, and communities in urban and rural settings  
• Digitization of the economy allows for resources to be transferred more easily between suppliers and consumers, and from development partners to those in need.  
• Increase disaster insurance coverage of businesses (incl. MSMEs, informal sector) | • Collaborative leadership built between businesses, government, development partners and other stakeholders; build the capacity of new generation of young professionals around understanding risk; take a bottom-up approach involving the formal sector and MSMEs  
• Knowledge management and lessons learning around green solutions; green recovery becomes the underlying objective for all business recovery plans; promote nature-based solutions;  
• Utilising tools, including Pacific Business Continuity Toolkit; examining value and supply chains and their interlinkages in particular sectors;  
• Establishing social protection and safety nets to improve small business resilience; providing better access to finance, including easy saving and credit facilities to vulnerable and marginalized | • Formalised businesses; business associations; chambers of commerce; MSMEs; government ministries and agencies; women’s groups; and CSOs.  
• Development agencies; climate funds; academia; think-tanks  
• Chambers of commerce; business associations; development partners  
• Government; business associations; chambers of commerce; women’s organisations; grassroots CSOs;  
• Government, community leaders, business associations, chambers of commerce, development partners. |
<table>
<thead>
<tr>
<th>Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific</th>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>groups; and supporting enterprise and supply chain development as well as marketing practices that empower women. CSOs, women’s groups etc. need to act as catalysts to push for business leadership in this area.</td>
<td>Formalised businesses, business associations, chambers of commerce, MSMEs, informal sector, local governments, interest groups and CSOs.</td>
</tr>
<tr>
<td></td>
<td>• Data gathering; investments in digital infrastructure; capacity building.</td>
<td>Development partners, business associations, chambers of commerce.</td>
</tr>
<tr>
<td></td>
<td>• Data gathering; investments in digital infrastructure.</td>
<td>MSMEs, informal business; CSOs; development agencies; formal sector businesses/representatives.</td>
</tr>
</tbody>
</table>
| | **c. Local level**
| • Businesses engage as key partners in resilient recovery and develop an integrated and mainstreamed approach to business resilience | • Collaborative leadership between businesses; building the capacity of new generation of young professionals around understanding risk; a bottom-up approach involving the informal sector and MSMEs |
| | • Promote a green pathway to recovery for all businesses | • Knowledge management and lessons learning around green solution; local leadership and traditional knowledge; promote nature-based solutions; |
| | • More businesses develop business continuity plans incorporating risk awareness and adaptive solutions to staying in business/recovery | • Utilise tools, including Pacific Business Continuity Toolkit; examine value and supply chains and their interlinkages in particular sectors; collaboration amongst businesses |
| | • Local governments and business networks collaborate to establish social security and safety nets to support MSMEs, different livelihood groups, and communities in urban and rural settings | • establishing social protection and safety nets to improve small business resilience; providing better access to finance, including easy saving and credit facilities to vulnerable and marginalized groups; and supporting enterprise and supply chain development as well as marketing practices that empower women. CSOs, women’s groups etc. need to act as catalysts to push for business leadership in this area. |
| | • Digitization of the economy allows for resources to be transferred more easily between suppliers and consumers, and from development partners to those in need. | • Data gathering; investments in digital infrastructure. |
| | • Increase disaster insurance coverage of businesses (incl. MSMEs, informal sector) | • Formalised businesses, business associations, chambers of commerce, MSMEs, informal sector, local governments, interest groups and CSOs. |
| | | Development partners, business associations, chambers of commerce. |
| | | MSMEs, informal business; CSOs; development agencies; formal sector businesses/representatives. |
| | | Government; business associations; chambers of commerce; women’s organisations; grassroots CSOs; |
| | | Local government, community leaders, business associations, chambers of commerce, development partners. |
### III. Resilient Communities

<table>
<thead>
<tr>
<th>Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific</th>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Disaggregation</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **a. Regional level**  
- Increase support from Sub-Regional IGOs to countries (e.g. ASEAN, SPC, SAARC, ECO, and North-East) | Involve and include specific action points for the sub-region | Sub-Regional IGOs to countries (e.g. ASEAN, SPC, SAARC, ECO, and North-East) |
| **b. National level**  
- Increase the number of disaster laws which mandate data collection, and strengthen collaboration with different agencies (governments, NGOs, CSOs)  
- Minimize loss of disaggregated data when it moves up to national level from the local level  
- Need financial data to identify gaps and ensure meaningful engagement of vulnerable groups  
- Engage local gender offices and Gender Bureau and Statistics offices at the national level  
- Approaches to data disaggregation should Need approach in line with CEDAW General Recommendation No.37 | Increased advocacy  
- Strengthen legislation on data collection  
- Increased research on women’s concerns and case studies  
- Use qualitative data to complement the statistics when disaggregated data is not available  
- Ensure women’s accessibility to communication technologies  
- Include SMART indicators with three columns in the next Asia Action Plan: (i) who is responsible for implementing the action, (ii) who will monitor the Progress, and (iii) Means of Verification | Governments, INGOs and CSOs |
| **c. Local level**  
- Understand different needs of different categories of women (e.g. migrants, informal economy, landless etc.)  
- Focus on women’s leadership and voices  
- Involve youth and young professionals in communities, promote Science, Engineering, Technology and Innovation (SETI) advancement | Enhanced stakeholder engagement | Women leaders and Local communities |
### Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific

<table>
<thead>
<tr>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. <strong>National level</strong></td>
<td></td>
</tr>
<tr>
<td>• Meaningfully engage people with disabilities in a proactive manner at all stages of DRR policy and activity development</td>
<td></td>
</tr>
<tr>
<td>• Need more attention to the issue of disability inclusion</td>
<td></td>
</tr>
<tr>
<td>• Ensure universal design principles (many early warning signals are audio based and exclude people with hearing impairment)</td>
<td></td>
</tr>
<tr>
<td>• Make use of Washington Group questions on Disability</td>
<td>• Ministers and government leaders</td>
</tr>
<tr>
<td>• Higher level advocacy from within countries and from partners</td>
<td></td>
</tr>
<tr>
<td>c. <strong>Local level</strong></td>
<td></td>
</tr>
<tr>
<td>• As above for national level</td>
<td></td>
</tr>
</tbody>
</table>

### Intersectionality

<table>
<thead>
<tr>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. <strong>National level</strong></td>
<td></td>
</tr>
<tr>
<td>• Raise awareness of inclusion, intersection of gender, age, socio-cultural context</td>
<td></td>
</tr>
<tr>
<td>• Prioritize more gender-responsive budgeting</td>
<td></td>
</tr>
<tr>
<td>• Invest more in social protection</td>
<td></td>
</tr>
<tr>
<td>• Youth</td>
<td></td>
</tr>
<tr>
<td>o Strengthen training and capacity building, networks and affiliations,</td>
<td></td>
</tr>
<tr>
<td>o Provide an enabling environment so that youth can advocate,</td>
<td></td>
</tr>
<tr>
<td>o Strengthen communication using social media to reach youth,</td>
<td></td>
</tr>
<tr>
<td>o Provide an active space to youth for planning,</td>
<td></td>
</tr>
<tr>
<td>o Create online space for youth during APMCDRR</td>
<td></td>
</tr>
<tr>
<td>o Provide psycho-social support after disasters</td>
<td></td>
</tr>
<tr>
<td>• Actively involve all stakeholders in existing national platforms</td>
<td>• Ministries of Finance and Planning</td>
</tr>
<tr>
<td>• Stronger legislation around social protection</td>
<td>• In-country development partners and NGOs</td>
</tr>
<tr>
<td>• National budgets are gender inclusive and gender is mainstreamed across all government departments</td>
<td></td>
</tr>
<tr>
<td>c. <strong>Local level</strong></td>
<td></td>
</tr>
<tr>
<td>• Include local informal leaders before, during and after disasters</td>
<td></td>
</tr>
<tr>
<td>• Plan more budgets for accessibility, involve community groups in financing</td>
<td>• Development partners and NGOs</td>
</tr>
<tr>
<td>• Strengthen disaster management and humanitarian policies and procedures to ensure local leaders are engaged with.</td>
<td></td>
</tr>
</tbody>
</table>
### Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific

<table>
<thead>
<tr>
<th>Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific</th>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication - Easy to Understand</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>b. National level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• <strong>Need to simplify language</strong>, particularly key concepts of hazard, vulnerability, risk and its elements.</td>
<td><strong>Revisit language used</strong> to communicate with people (e.g. use words such as ‘protecting’, which may be better understood by the people and better translated to another language).</td>
<td>• National disaster management authorities and partners</td>
</tr>
<tr>
<td>• <strong>Impact-based information</strong> is essential to guide on protective actions and behaviours. Communicating not what the hazard will be (what weather will be, wind speed, precipitation levels) but what the weather can do to you (different peoples, different houses and structures, different livelihoods).</td>
<td><strong>Revisit how messages are formulated</strong> (e.g. use impact based information).</td>
<td>• Meteorological agencies</td>
</tr>
<tr>
<td>• The <strong>influence of translations of terminology</strong> from one language to another must be taken into account. Particularly, some terms may be accurately translated into some languages, while may not be translated into other language. The latter will hinder effective communication with people speaking such language.</td>
<td><strong>Must establish stronger partnerships with the media and provide training in DRR for media</strong></td>
<td></td>
</tr>
<tr>
<td>• Need to communicate effectively is critical.</td>
<td><strong>Training for partners to tailor messages</strong></td>
<td>• Media</td>
</tr>
<tr>
<td>• Explore how can the private sector be a more influencing factor in improving communication? Stakeholders’ made the following recommendations:</td>
<td>• <strong>Increased monitoring of messaging to ensure EWS and other messages are reaching the last mile</strong> (e.g. through the Sendai Framework Monitor).</td>
<td>• Scientific community</td>
</tr>
<tr>
<td>o Must have a strong partnership with the media.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Engage the media so that they can better understand risk. Consequently, they will be able to better communicate the issues/factors of risk to the public.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Communication must be geared to different age-groups.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o The message in communications must be clear and simple.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Private sector could be involved in the pre-disaster phases to develop the capacity of the community. They could own certain areas/villages for developing the capacity against perceived disasters.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific

#### c. Local level
- **If knowledge and methodology is clearly communicated to the public, then the community-level can also adopt and implement ‘best practices’.**
- **The use of data is being increasingly used. But is not sufficient. The communities face difficulties in masking sense of data and applying it. Knowledge products are needed that are usable. Hence, it is essential that data be communicated in a manner that is understandable.**
- **Communication and messages need to be impact-based and actionable by households and communities.**
- **Last mile connectivity is very important to ensure that timely action is taken by those who are required to do so. Community radios are key to communicate in the local language in the same assent.**

#### Enablers to make these happen
- **Training for local leaders in DRR and EWS messaging**
- **Revisit language used to communicate with people (e.g. use words such as ‘protecting’, which may be better understood by the people and better translated to another language).**
- **Revisit how messages are formulated (e.g. use impact based information).**
- **Must establish stronger partnerships with the media and provide training in DRR for media**

#### Key stakeholders
- Local Leaders
- Women and Persons with disability
- Private sector
- NGOs

### Local Leadership

#### a. Regional level
- **Regional work should be guided by local/community level actors and a real bottom-up approach should be adopted.**
- **National and local level actors should not be bombarded with information/resources alone. It is essential that national and local actors be approached and their opinions sought**

#### Enablers to make these happen
- **Must share ‘real’ decision-making power with the community-level actors. There must be genuine local level engagement at the risk profiling stage.**
- **Institutions must have skilled staff at all levels so they can effectively engage communities and work with them.**
- **Regional promotion of CBDRM for the communities located in geographically isolated areas**
- **Regional organisations hold active, regular and meaningful consultation with local level on all relevant issues**
- **Increase in local level representation at regional fora**

#### Key stakeholders
- IGOs (e.g. ASEAN, SPC and SAARC) and other Regional Organisations
<table>
<thead>
<tr>
<th>Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific</th>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>b. National level</strong>&lt;br&gt;• Effort should be made to achieve centralization of leadership for risk management within Finance/Planning agencies&lt;br&gt;• National authorities must be cognizant of issues raised by localizations; specifically, people isolated by geographical areas. Cooperation and collaboration must be promoted with those around the fringes of society and in isolated communities.</td>
<td>• Ensure high-level engagement with Finance and Planning authorities in DRR fora and inclusion in DRR decision making and planning</td>
<td>• Finance/Planning agencies&lt;br&gt;• National disaster management authorities and partners&lt;br&gt;• NGOs and INGOs in-country</td>
</tr>
<tr>
<td><strong>c. Local level</strong>&lt;br&gt;• Implementation must be up to the community&lt;br&gt;• Traditional practices must be taken into consideration. There is a concern that traditional knowledge is being lost&lt;br&gt;• “All disasters are local”: the community must take a lead and give them tools so that they can be involved in decision-making process. Additionally, when developing risk knowledge and communication materials, the following should be taken into consideration: local geography, local wisdom and culture context, especially in small island, rural and remote areas.&lt;br&gt;• The following localization-related aspects must also be fostered: local leadership, local wisdom knowledge, participatory and two-way communication with national authorities.</td>
<td>• Implementation of DRR activities must be done in full consultation with local communities, who are given a lead role in implementation and decision making to increase ownership.&lt;br&gt;• Build capacity of local leaders in DRR&lt;br&gt;• Facilitate networking, sharing of knowledge and experiences between local communities.</td>
<td>• Community leaders - especially women, elderly, youth and persons with a disability&lt;br&gt;• NGOs&lt;br&gt;• National disaster management authorities and partners&lt;br&gt;• Development partners</td>
</tr>
</tbody>
</table>

**Women’s Leadership**

| a. Regional level<br>• Increase women and youth participation in DRR | • Endorsing Youth, Young Professional & Women in DRR Leader programs, scholarship and seed-funding, for example continue IRDR program, collaborating with WB and UN YPP programs, UNESCO women in science with specific theme | • IGOs and other regional organisations<br>• Development partners |
Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific | Enablers to make these happen | Key stakeholders
--- | --- | ---
|  | of Disaster Science, or other global and regional program. |  |

b. National level  
- More actions are needed to increase women leadership, such as through the introduction of recruitment quotas. For example:  
  o Example from the Philippines: “In most of our partner local governments, the Gender and Development sector is actively involved. They have a seat at the local resilience council. NRC also engages the youth in our resilient leadership program.”  
  o Example from India: “In India there is a provision that at Panchayat level (lowest administrative level) woman have been given 50 percent representation.”  
- Increase women and youth participation in DRR  
- To increase women’s leadership (e.g. need to implement quotas for recruitment such as providing a minimum quota that should be kept aside for women)  
- Providing scholarship/funding to engage youth and women particularly in DRR science  
- An enabling working environment must be created to increase women-participation (e.g. facilitating day-care facilities in work environment, providing paid leave during childbirth)  
- Ministry of internal affairs, ministry for women  
- Development Partners  
- NGOs  
- National disaster management authorities

c. Local level  
- Increase women’s access to communication particularly at local levels.  
- Increase women and youth participation in DRR  
- An enabling working environment must be created to increase women’s participation. (e.g. women in the Nepal rural communities did not feel comfortable working/being deployed alone to emergency response. Deploying them in pairs with other women would address that barrier).  
- Provide space for youth and young professionals and women in CBDRR (e.g. ASEAN Youth Volunteer Program in DRR, DRR thematic internships in Universities).  
- Engaging YYPs and women in applying SETI’s advancement for local actions: application development, UAV and participatory risk mapping with communities.  
- Media  
- Private sector  
- Local Leaders  
- NGOs  
- National disaster management authorities
<table>
<thead>
<tr>
<th>Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific</th>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resilience Profiles</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| a. Regional level | - **Consistency of measurement** is needed in the designing and implementation of resilience index across regional levels (e.g. what and how it should be measured). | - **A shared responsibility for transboundary hazards and resilience** (e.g. air pollution and GHG emissions could be more concrete that referring to "regional resilience profiles" even for neighbouring countries. | - IGOs and other Regional Organisations  
- Development partners |
| b. National level | - Consistency is needed in terminology (e.g. "resilience profiles" and "risk profiles"). It is important for all stakeholder groups to have a **shared understanding of risk** as a function of hazard, exposure, vulnerability and capacity.  
- When risk profiling at the local level, there is a need to explore the nuances and not be limited by just the ‘main’ categories; **women are not homogenous**, and there is a need to capture the peculiarities of the contexts of these 'sub sections'. To elaborate, **women and the different situations they are in must be taken into consideration**. Their varying situations would impact their resilience.  
- **Existing risk profiles should be utilized**, while addressing limitations/weaknesses in the profiles. The wheel should not be needlessly reinvented.  
- **Early testing of risk profiles should be encouraged to make sure it works**. Determining whether the profiles work before investing substantial time and financial/personnel resources.  
- **Vulnerabilities are dynamic** (e.g. population dynamics – growth, displacement, migration), hazards are also changing (frequency and intensity changes driven by climate change) and therefore **risk assessment capabilities need to allow for more agile process** not having a one-time off risk assessment | - **Acknowledge that resilience cannot be averaged, as resilience is place-based and location dependent**  
- **Test risk profiles after established**  
- **Ensure risk profiles are updated and that resources are allocated beforehand to ensure this**  
- **Ensure risk analytics being used for risk profiles are up to date and are real-time** | - Ministries of Finance and Planning  
- Development Partners  
- NGOs  
- National disaster management authorities |
<table>
<thead>
<tr>
<th>Key actions needed to accelerate the implementation of the Sendai Framework in Asia-Pacific</th>
<th>Enablers to make these happen</th>
<th>Key stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>exercise but having risk analytics capacities in real or close-to-near real time</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>c. Local level</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| • **Risk profiles must be locally led and understood**  
  • **Diversity must be taken into account**: profile may not suit all situations in the same manner.  
  • **Include planning for future updates** - with appropriate resources, capacities and processes to optimise quality.  
  • Communication with **indigenous populations** should be strengthened on risk profiling and their involvement and input ensured  
  • **Risk profiling must be participatory**, two-way communication with locals, in the local language and targeted to serve the risk profile audience  
  • **Ensure involvement of youth**. Youth can be particularly valuable for the their technical and scientific knowledge; and ability to creatively communicate. The youth are often hindered by lack of funding and networking opportunities/having limited professional networks. These issues need to be addressed to increase their participation in resilience building.  
  • **Example of good risk profiles** Specific example from Australia discussed: Australian Disaster Resilience Index: [https://adri.bnhcrc.com.au/#/](https://adri.bnhcrc.com.au/#/) | • Ensure local leaders are leading the risk profile work being undertaken, particularly any indigenous leaders  
  • Build capacity of local leaders to understand disaster risk and to lead risk profile work  
  • Mainstream risk profile work into annual planning and ensure budgets are allocated for risk profile updates  
  • Build capacity of risk profile experts to ensure they understand how to engage with local leaders in a participatory approach to the work. | • Ministries of Finance and Planning  
  • Local Leaders  
  • NGOs  
  • National disaster management authorities |
Annex 2 – Participants

Governments
1. Afghanistan
2. Australia
3. Bangladesh
4. China
5. Cook Islands
6. Fiji
7. India
8. Indonesia
9. Japan
10. Democratic People’s Republic of Korea
11. Kiribati
12. Republic of Korea
13. Lao PDR
14. Malaysia
15. Maldives
16. Federal States of Micronesia
17. Mongolia
18. Myanmar
19. Nauru
20. Nepal
21. New Zealand
22. Pakistan
23. Palau
24. Philippines
25. Singapore
26. Solomon Islands
27. Sri Lanka
28. Thailand
29. Tonga
30. Tuvalu
31. Vanuatu
32. Vietnam

Intergovernmental Organisations
1. Asian Development Bank (ADB)
2. Asian Disaster Preparedness Center (ADPC)
3. Asian Disaster Reduction Center (ADRC)
4. Association of Southeast Asian Nations (ASEAN)
5. Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)
6. Economic Cooperation Organization (ECO)
7. International Federation of Red Cross and Red Crescent Societies (IFRC)
8. International Union for Conservation of Nature (IUCN)
9. Pacific Islands Forum Secretariat (PIFS)
10. Pacific Resilience Partnership (PRP)
11. South Asian Association for Regional Cooperation (SAARC) Disaster Management Centre – Interim Unit (SDMC-IU)
12. The Pacific Community (SPC)

Donors / Development Partners
1. Directorate-General for European Civil Protection and Humanitarian Aid Operations (ECHO)
2. European Union (EU) Delegation to Thailand
3. The Deutsche Gesellschaft für Internationale Zusammenarbeit – Global Initiative on Disaster Risk Management (GIZ/GIDRM)
4. Japan International Cooperation Agency (JICA)
5. The Swedish International Development Cooperation Agency (SIDA)
6. The Swiss Agency for Development and Cooperation (SDC)
7. The United States Agency for International Development (USAID)

**UN agencies**

1. Food and Agriculture Organisation of the UN (FAO)
2. International Telecommunication Union (ITU)
3. United Nations Development Coordination Office (UNDCO)
4. United Nations Development Programme (UNDP)
5. United Nations Office for Disaster Risk Reduction (UNDRR)
6. United Nations Environment Programme (UNEP)
7. United Nations Economic Commission for Asia and the Pacific (UNESCAP)
9. United Nations Human Settlement Programme (UNHABITAT)
11. United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA)
12. United Nations Office for Outer Space Affairs (UNOOSA)
13. United Nations Entity for Gender Equality and the Empowerment of Women (UN WOMEN)
14. World Food Programme (WFP)
15. World Health Organisation (WHO)
16. World Meteorological Organisation (WMO)

**Stakeholder Representatives**

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Representatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 NGOs/Civil Society Organisations</td>
<td>Asian Disaster Reduction and Response Network (ADRRN)</td>
</tr>
<tr>
<td>2 Women and Gender</td>
<td>Duryog Nivaran, Japan Women’s Network for DRR</td>
</tr>
<tr>
<td>3 Science &amp; Technology</td>
<td>The Asia-Pacific Science Technology and Academia Advisory Group (APSTAAG)</td>
</tr>
<tr>
<td></td>
<td>[Beijing Normal University (BNU), Keio University, Universiti Kebangsaan Malaysia (UKM)]</td>
</tr>
<tr>
<td></td>
<td>U-INSPIRE Alliance (the youth and young professionals platform in Science, Engineering, Technology &amp; Innovation)</td>
</tr>
<tr>
<td>4 Private Sector</td>
<td>The Private Sector Alliance for Disaster Resilient Societies (ARISE) [India, Japan, Philippines]; Pacific Business Resilience Network</td>
</tr>
<tr>
<td>5 Local Authorities</td>
<td>The United Cities and Local Governments Asia Pacific (UCLG ASPAC)</td>
</tr>
<tr>
<td>6 Persons with Disabilities</td>
<td>Disability-inclusive Disaster Risk Reduction Network (DiDRRN) [Arbeiter-Samariter-Bund (ASB), Christian Blind Mission International Australia (CBM)]</td>
</tr>
<tr>
<td>7 Red Cross &amp; Red Crescent Societies</td>
<td>International Federation of Red Cross and Red Crescent Societies (IFRC); Australian Red Cross</td>
</tr>
<tr>
<td>8 Children &amp; Youth</td>
<td>United Nations Major Group for Children and Youth (UNMGCY)</td>
</tr>
<tr>
<td>9 Parliamentarians</td>
<td>Parliamentarian</td>
</tr>
<tr>
<td>10 Older Persons</td>
<td>HelpAge Asia</td>
</tr>
</tbody>
</table>

**Other Organisations**

1. Australian Institute for Disaster Resilience
2. Australian Strategic Policy Institute
3. Bushfire and Natural Hazards Cooperative Research Centre
4. EPI Australia
5. Humanitarian Advisory Group
6. Iloilo City Local Government
7. National Resilience Council (NRC), Philippines
8. Oxfam
9. Plan International
10. Save the Children
11. World Vision Australia / World Vision International
### Number of Participants

**APP-DRR Forum [1-2 Dec 2020]**

<table>
<thead>
<tr>
<th>Category</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>63</td>
<td>51</td>
<td>114</td>
</tr>
<tr>
<td>Intergovernmental Organisations</td>
<td>19</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>UN and international organisations</td>
<td>25</td>
<td>20</td>
<td>45</td>
</tr>
<tr>
<td>NGOs/Civil Society Organizations</td>
<td>9</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Women and Gender</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Science &amp; Technology</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Private Sector</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Local Authorities</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Persons with Disabilities</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Red Cross &amp; Red Crescent Societies</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Parliamentarians</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Older Persons</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>132</td>
<td>103</td>
<td>235</td>
</tr>
</tbody>
</table>

**Thematic Consultation 1: Resilient Investment and Recovery [8 Dec 2020]**

<table>
<thead>
<tr>
<th>Category</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>6</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>Intergovernmental Organisations</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>UN and international organisations</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>NGOs/Civil Society Organizations</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Women and Gender</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Science &amp; Technology</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Private Sector</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Persons with Disabilities</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Red Cross &amp; Red Crescent Societies</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>26</td>
<td>23</td>
<td>49</td>
</tr>
</tbody>
</table>

**Thematic Consultation 2: Resilient Systems, Services and Infrastructure [9 Dec 2020]**

<table>
<thead>
<tr>
<th>Category</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>6</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Intergovernmental Organisations</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>UN and international organisations</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>NGOs/Civil Society Organizations</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Women and Gender</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Science &amp; Technology</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Private Sector</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Persons with Disabilities</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Red Cross &amp; Red Crescent Societies</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>21</td>
<td>26</td>
<td>47</td>
</tr>
</tbody>
</table>

**Thematic Consultation 3: Resilient communities [10 Dec 2020]**

<table>
<thead>
<tr>
<th>Category</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Intergovernmental Organisations</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>UN and international organisations</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>NGOs/Civil Society Organizations</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Women and Gender</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Science &amp; Technology</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Private Sector</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Persons with Disabilities</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Red Cross &amp; Red Crescent Societies</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Children &amp; Youth</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>22</td>
<td>33</td>
<td>55</td>
</tr>
</tbody>
</table>
# Annex 3 – Programme

## Day 1: Tuesday, 1 December

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:45 – 10:00</td>
<td><strong>Sign-in to the meeting</strong></td>
</tr>
<tr>
<td>10:00 – 10:30</td>
<td><strong>Opening Session</strong></td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Statement</strong> Mami Mizutori, UN Special Representative of the Secretary-General for Disaster Risk Reduction</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Opening Remarks</strong> Rebecca Bryant, Assistant Secretary, Humanitarian Response Risk &amp; Recovery Branch, Department of Foreign Affairs and Trade, Australia</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Keynote Remarks</strong> Hon. Ifereimi Waqainabete, Minister, Ministry of Health and Medical Services, Fiji</td>
</tr>
<tr>
<td>10:30 – 11:00</td>
<td><strong>Session 1: Setting the Stage</strong></td>
</tr>
<tr>
<td></td>
<td>Status of implementation of the Sendai Framework and Action Plan 2018-2021</td>
</tr>
<tr>
<td></td>
<td><strong>UNDRR Regional Office for Asia and the Pacific</strong></td>
</tr>
<tr>
<td>11:00 – 12:00</td>
<td><strong>Session 2: Panel Discussion: Strengthening Disaster Risk Governance</strong></td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Moderator:</strong> Amanda Leck, Executive Director, Australian Institute for Disaster Resilience</td>
</tr>
<tr>
<td></td>
<td>◦ Krishna Vatsa, Member, National Disaster Management Authority, India</td>
</tr>
<tr>
<td></td>
<td>◦ Jerry Treñas, Mayor, Iloilo City, Philippines</td>
</tr>
<tr>
<td></td>
<td>◦ Nelly Caleb, National Director, Vanuatu Disability, Promotion and Advocacy Association</td>
</tr>
<tr>
<td></td>
<td>◦ Emily Ying Yang Chan, Professor, Faculty of Medicine, The Chinese University of Hong Kong</td>
</tr>
<tr>
<td></td>
<td><strong>Q&amp;A / Discussion</strong></td>
</tr>
</tbody>
</table>

## Day 2: Wednesday, 2 December

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:45 – 10:00</td>
<td><strong>Sign-in to the meeting</strong></td>
</tr>
<tr>
<td>10:00 – 10:30</td>
<td><strong>Session 3:</strong></td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Keynote Remarks</strong> Hiroko Oura, Deputy Division Chief, Financial Sector Assessment and Policy, IMF</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Overview presentation on the high-level themes of the APMCDRR</strong> Presentation: Government of Australia and UNDRR</td>
</tr>
<tr>
<td></td>
<td><strong>Discussion</strong></td>
</tr>
<tr>
<td>10:30 – 11:45</td>
<td><strong>Session 4: Reflections from the Governments and Stakeholders [2 mins each]</strong></td>
</tr>
<tr>
<td></td>
<td>Key priorities of action to strengthen disaster risk governance</td>
</tr>
<tr>
<td>11:45 – 12:00</td>
<td><strong>Closing and Way Forward</strong></td>
</tr>
<tr>
<td></td>
<td>◦ Closing Remarks: Government of Australia and UNDRR</td>
</tr>
</tbody>
</table>