Chapter 10: Regional support and national enabling environments for integrated risk reduction

10.1

Regional support for integrated risk reduction

The Sendai Framework calls on Member States to establish common platforms to exchange good practices and experiences relating to common and transboundary disaster risk, emphasizing the importance of regional and subregional DRR strategies and mechanisms for cooperation. In this way, regional cooperation is recognized as an important element in creating the enabling environment for effective DRR at national level, especially for small States and developing economies.

While recognizing that Member States have the primary role in implementing the Sendai Framework, regional organizations are able to support efforts with regionally focused strategies and frameworks, tailored risk information, risk-sharing mechanisms, tools and capacity-building on DRR. They do this through pooling regional capacity and resources and also by accessing international funding and technical assistance. Regional organizations are especially important for smaller developing States, which do not individually have the economic means to invest in such a range of tools, but are more able to bring their voices and experience to regional processes in developing the systems and capacity most useful to them.

In most regions with high exposure to natural hazards there are already intergovernmental

organizations and mechanisms in place for coordination on DRM. Therefore, the regional focus for supporting Sendai Framework implementation has been ensuring existing organizations have updated DRR mandates to align with its goal and priorities. Specifically, regional intergovernmental organizations can play a practical role in national compliance with Target E, by building capacity and supporting the development and implementation of national and local DRR strategies and plans. They can also lead and support their Member States to integrate DRR into risk-informed development planning, CCA and risk financing, as well as agree on approaches and coordinate action on shared regional and transboundary risks.

In addition to treaty-based regional organizations, the regional platforms on DRR facilitated by UNDRR to consult with and support Member States are another important mechanism for information sharing and capacity-building to implement the Sendai Framework. Regional platforms became an established mechanism during the HFA years 2005–2015, and these continue under the Sendai Framework. They have already produced or approved important regional strategies and plans on Sendai Framework implementation, also engaging at the political level with regional intergovernmental organizations.

Regional platforms for DRR are not fixed in the breadth or narrowness of focus or who can be involved. For example, an innovation in 2018 was the first combined Africa-Arab Platform on Disaster Risk Reduction. This provided these two very large regions, which face significant drought, aridity, refugee and migration issues, with opportunities to share knowledge, experiences and best practices in advancing DRR in the context of the Sendai Framework.[26] In contrast, the second Central Asia and South Caucasus (CASC) Sub Regional Platform also held in 2018 is an example of a subregional focus, with an emphasis on DRR integrated with development planning.[27]

Regional strategies and plans are not intended to supersede or substitute for national strategies and plans. Instead, they support and complement them

by providing guidance and coherence, promoting collaboration and exchange, or addressing issues that cross national borders, for which a joint approach can create synergies, comparative advantages or economies of scale. For example, the Treaty of Lisbon (2009) mandates the EU "to foster cooperation, effectiveness, and consistency in disaster risk management among member countries."[28] In line with the African Union (AU) Africa Regional Strategy for Disaster Risk Reduction,[29] the Programme of Action for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in Africa[30] calls for integration of DRM into policies of the member countries, but leaves the responsibility of implementation with national governments.[31] There are also other types of regional partnerships that go beyond governmental arrangements, such as the ISDR Asia Partnership (IAP), which is an informal multi-stakeholder forum of Asian governments and stakeholders to facilitate DRR. IAP has been the main consultation forum for the Asia Ministerial Conferences, which operate as the Regional Platform in Asia, and is made up of regional intergovernmental organizations, governments, civil society organizations, United Nations and international organizations, and bilateral and multilateral donors.[32] Similarly innovative is the Pacific Resilience Partnership, a multi-stakeholder partnership established by Pacific leaders in 2017 for an initial trial period of two years, to support implementation of the 2016 Framework for Resilient Development in the Pacific: An Integrated Approach to Address Climate Change and Disaster Risk Management 2017–2030 (FRDP).[33] This is discussed further in section 13.5.1 on the Pacific region approach to integrated DRR development and action on climate change.

In addition to such broad-spectrum regional cooperation on risk reduction and integration with development planning and climate change, there are also many instances of regional action within sectors, on particular issues or even for smaller climatic or geological subregions. For example, the Mekong River Commission for Transboundary Development allows the four member countries of Cambodia, Lao People's Democratic Republic, Thailand and Viet Nam to cooperate on sustainable development and

hydrological/climate risks in the transboundary river basin.[34] An example of sectoral coordination is the Central American Council for Agriculture concerning disaster risk in rural development,[35] based around the Central American Strategy for Rural Development, which aims for stronger relationships with other risk management instruments, highlighting the issues associated with integrated water resource management and climate change. It dovetails with the Central American Policy on Comprehensive Disaster Risk Management (PCGIR)[36] and the Central American Forestry Strategy.[37] Some cooperation relies on the regional level to magnify and complement national efforts, such as risk

Media winners at the Africa and Arab States Regional Platform, 2018
(Source: UNDRR)

reduction, warning systems and management of regional and transboundary hazards. Following the 2004 Indian Ocean tsunami, networks of national, regional and eventually global seismic and observational monitoring systems were set up to allow early warnings to reduce the impacts of tsunamis (as discussed in Chapter 3). The Indian Ocean Tsunami Warning and Mitigation System is an example,[38] as is the Indian Ocean Tsunami Information Center, which is not part of a warning system but shares

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26 (AU 2018)
27 (UNISDR 2018a)
28 (Morsut 2019)
29 (AU and UNISDR 2018)
30 (AU 2016)
31 (Omoyo Nyandiko and Omondi Rakama 2019)
32 (AMCDRR 2016)
33 (SPC 2016)

34 (Mekong River Commission for Sustainable Development 2018)
35 (Central American Council for Agriculture 2010)
36 (Coordination Center for the Prevention of Disasters in Central America 2010)
37 (Central American Council for Agriculture 2010)
38 (Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System 2019)

knowledge and builds capacity.[39] National meteorological and hydrological services are also cooperating to provide earlier warning and more complete data for regional extreme weather warnings,[40] while other initiatives take a regional multi-hazard approach.[41]

Disaster risk financing was noted in section 8.4 as a growth area in international development cooperation requiring more detailed analysis for future monitoring of Sendai Framework Target F. It is also an area where regional mechanisms are being established in addition to global mechanisms, especially in highly exposed regions. Examples include: the Caribbean Catastrophe Risk Insurance Facility established in 2007 as a parametric insurance facility;[42] the African Risk Capacity, a specialized agency of AU established in 2012, and the related African Risk Capacity Insurance Company;[43] the Pacific Catastrophe Risk Insurance Company, which was set up as a multinational sovereign risk pool in 2012;[44] and a new ASEAN facility, the Southeast Asia Disaster Risk Insurance Facility currently being piloted.[45] ESCAP has recently identified significant areas for regional cooperation in the Asia−Pacific region on risk financing.[46] The importance of disaster risk financing for national- and local-level implementation of the Sendai Framework is also considered in Chapter 12, which describes how financing can be an entry point for mainstreaming DRR into development (see section 12.3.5).

There are many types of partnerships and mechanisms for regional cooperation and planning for DRR. The Sendai Frameworks encourages new partnerships and networks, as well as reliance on more traditional intergovernmental processes. New models may be needed to work across sectoral silos and different geographic areas and timescales, to step outside "business as usual" and apply systems thinking to address immediate and long-term risk.

The following overview of key regional mechanisms and the roles they play in supporting Member States in implementation of the Sendai Framework in each global region, focuses on: (a) regions that have high exposure to natural hazards and significant numbers of smaller and/or lower-income States and (b) innovation in regional support for integrated risk governance across the post-2015 frameworks. For these reasons, developments in Africa, South-East Asia, Central America, the Caribbean and the Pacific are given more attention.

10.1.1

Africa

Natural and human-made hazards in Africa, such as drought, floods, cyclones, earthquakes, epidemics, environmental degradation and technological hazards are a springboard for disasters. Although efforts to reduce exposure and vulnerability, underpinned by accountability at all levels, are predicted to reduce disaster risks, economic losses are mounting and disasters have become a barrier to sustainable development.[47]

One of the two declarations adopted at the Africa-Arab Platform on Disaster Risk Reduction 2018 was the Tunis Declaration on Accelerating the Implementation of the Sendai Framework and the Africa Regional Strategy for Disaster Risk Reduction. This reaffirmed the urgency of implementing the strategy first adopted in 2004,[48] and supported the 2016 Programme of Action for the implementation of the Sendai Framework in Africa. The Programme of Action had already received support at the political level.[49] The Programme of Action's objectives are to: (a) increase political commitment to DRR; (b) improve identification and assessment of disaster risks; (c) enhance knowledge management for DRR; (d) increase public awareness of DRR; (e) improve governance of DRR institutions; and (f) integrate DRR in emergency response management. It builds on the intergovernmental work on DRR of AU and the Regional Economic Communities in Africa.

The Programme of Action is specifically linked to reporting under the Sendai Framework, with the monitoring and reporting system validated through formal agreement with AU member States. The AU Commission monitors progress of Regional Economic Communities towards the Programme of

Action goals. The Regional Economic Communities then guide its implementation at the subregional level, in cooperation with their respective member States. Progress will be reviewed using existing global and regional monitoring systems and mechanisms, with each member State and Regional Economic Community expected to submit a biennial report through SFM. The reports generated will support the monitoring of progress under the Sendai Framework and the Programme of Action.[50] The monitoring information also supports DRR ministerial meetings, the Africa Regional Platform, the Africa Working Group on Disaster Risk Reduction, and review processes and DRR programming at all levels. It is thus a multilevel regional mechanism that supports Member States with information and tools for implementation, facilitates subregional and regional cooperation through Regional Economic Communities and AU Commission roles and regional platforms, and also supports reporting under the Sendai Framework.

The AU regional approach has created an enabling environment for Regional Economic Communities and member States to pursue DRR policies and strategies with a focus on regional risks and using existing institutional structures. Each Regional Economic Community therefore has its own methods and mechanisms.

SADC already had a strategic plan aligned to HFA and the 2004 Africa Regional Strategy. Then in 2016, the SADC Council of Ministers approved the Sendai Framework aligned SADC Regional Disaster Preparedness and Response Strategy 2017–2030.

An SADC draft DRR strategic plan 2017–2030, and a regional DRR and CCA study are pending SADC Council approval.[51] In 2018, the SADC Regional Disaster Risk Reduction Conference recognized the importance of regional strategies, plans and frameworks, but also urged SADC to move beyond these to help accelerate implementation of the Sendai Framework, along with SDGs and the other key post-2015 framework agendas.[52]

In the Horn of Africa, IGAD has had a regional focus on drought risk through the IGAD Drought Disaster and Resilience Initiative since 2011,[53] and ECOWAS has had in place its Policy for Disaster Risk Reduction since 2006.[54] Neither of these Regional Economic Communities has yet adopted new subregional policies based on the Sendai Framework, although the IGAD drought initiative is an ongoing approach that seeks to address the effects of drought and related shocks in the IGAD region in a sustainable and holistic manner. The initiative still serves as a common framework for developing national and subregional programmes designed to enhance drought resilience through building sustainability in the region. IGAD also engages at a practical level, for example through the project Building Resilience to Disasters through Risk Management and Climate Change Adaptation, implemented with GFDRR and the National Meteorological and Hydro Metrological Services.[55] This is evidence of an integrated approach to climate and disaster risk, in line with the broader post-2015 frameworks.

ECOWAS has also focused on practical implementation of the Sendai Framework, including

39 (International Oceanographic Commission and UNESCO 2019)
40 (WMO 2018)
41 (Regional Integrated Multi-Hazard Early Warning System 2019)
42 (CCRIF 2019)
43 (African Risk Capacity 2019)
44 (Pacific Catastrophe Risk Assessment and Financing Initiative 2019)
45 (ASEAN Finance Ministers' Meeting 2018)
46 (ESCAP 2018)
47 (AU 2004); (International Institute for Sustainable Development 2016)

48 (AU 2004)
49 (AU 2016); (Mauritius 2016)
50 (AU 2016)
51 (SADC 2018b)
52 (SADC 2018a)
53 (IGAD 2019); (IDDRSI 2014)
54 (Communauté économique des États de l'Afrique de l'Ouest and ECOWAS 2006)
55 (World Bank 2019)

capacity-building towards meeting Sendai Target E,[56] and advocating for improved hydrometeorological services to address the risks of flood and drought in West Africa.[57]

This small sample of regional and subregional mechanisms in Africa illustrates how they are linked into global monitoring but also have a specific geographic focus based on the shared risk of Member States in the subregions. They are thus part of the enabling environment for Sendai Framework implementation at international, regional and subregional levels, where they provide direct support and capacity-building to Member States through sharing regional expertise and accessing international resources, as well as through regional strategies.

10.1.2

Americas and the Caribbean

The Americas and the Caribbean region is highly exposed to a range of natural hazards, including drought, earthquakes, floods, forest fires, hurricanes, landslides, tsunamis and volcanoes. The El Niño and La Niña phenomena occur periodically, exacerbating the impacts of hydrometeorological events.

The sixth Regional Platform for Disaster Risk Reduction in the Americas, held in June 2018, approved the Regional Action Plan for the Implementation of the Sendai Framework.[58] It is a non-binding plan that marks a step towards wider regional efforts to support countries build community resilience and reduce disaster risk and its impacts.[59] The action plan helps further the implementation of the Sendai Framework in the Americas and the Caribbean through the identification of regional initiatives that contribute to one or more of the Sendai Framework priorities for action,[60] and it respects the whole-of-society approach that features prominently within the Sendai Framework. The initiatives it includes can be advanced collectively by Member States, civil society organizations, volunteers and other relevant actors.

Held as part of the same Regional Platform in 2018, the high-level ministerial meeting issued the Cartagena Declaration, which affirmed the region's political commitment to the Sendai Framework, including an integrated approach to the post-2015 agreements, and noted the importance of the Regional Action Plan.[61]

Caribbean

The Caribbean States were early adopters of coordinated intergovernmental approaches to managing disaster risk, faced as they are with a shared, high exposure to natural hazards and comprising mainly smaller developing economies with relatively limited resources to manage the risk.

Within the Caribbean Community institutions, the Caribbean Disaster Emergency Management Agency (CDEMA) serves 18 States, most of them lower-income countries and/or SIDS. CDEMA has supported the region since the 1990s, with tools such as its Model Comprehensive Disaster Management Legislation and Regulations 2013.[62] In the Caribbean region, the comprehensive disaster management (CDM) concept includes DRR and sustainable development, and CDEMA has operated under a CDM framework since 2001. The current CDM Strategy 2014–2024, endorsed by Member States, is in alignment with the Sendai Framework.[63]

The CDM Strategy 2014–2024 has four priority areas: (a) strengthened institutional arrangements for CDM; (b) increased and sustained knowledge management and learning for CDM; (c) improved integration of CDM at sectoral levels; and (d) strengthened and sustained community resilience. CDEMA member States report directly to CDEMA on CDM Strategy implementation through their country audits and the Performance Management Framework with a basket of indicators aligned to the indicators of the Sendai Framework's seven global targets. To support the implementation of the strategy, there is a corresponding CDEMA Corporate Plan and a CDM Monitoring Evaluation and Reporting Policy, along with country audits to identify gaps and needs at the national level, the Country Work

Programming and the overarching Performance Management Framework.

CDEMA is an example of a long-standing regional mechanism that is well adapted to meeting the needs of a group of broadly similar member States that face common regional hazards. It had already pioneered integration of DRR and sustainable development through the regional concept of CDM. CDEMA has therefore been readily able to support member States implement the Sendai Framework's integrated approach to risk governance based on the new Sendai Framework compliant regional strategy, but using existing mechanisms.

Central America

The Central American States also have long-standing mechanisms for regional cooperation and coordination in managing disaster risk. They continue to be active and innovative on Sendai Framework implementation.

PCGIR[64] was approved in December 2017 by the Heads of State of the Central American Integration System (SICA).[65] It is entirely aligned with the Sendai Framework as well as SDGs and the Paris Agreement, and serves to guide DRM at the regional and national levels, especially for the Member States that are already part of SICA specialized agency, the Coordination Centre for the Prevention of Disasters in Central America and the Dominican Republic (CEPREDENAC). First established decades ago, CEPREDENAC is the coordination mechanism among the national DRM agencies of SICA Member States.[66]

PCGIR is the main Central American regional public policy instrument for DRM within SICA, and involves five main pillars: (a) DRR in public and private investment for sustainable economic development, linked to Sendai Framework Priorities 1 and 3; (b) development and social compensation to reduce vulnerability, linked to Sendai Priorities 1, 2 and 3; (c) DRM related to climate change, linked to Sendai Framework Priorities 1 and 2; (d) land-use management and governance (linked to Sendai Framework Priorities 2 and 3); and (e) disaster management and recovery, linked to Sendai Framework Priority 4. Subsequently, a Central American Regional Disaster Reduction Plan 2019–2023[67] made under PCGIR seeks to contribute to the integration of disaster reduction into sustainable development of SICA member States, complementing such integration at the global level among the Sendai Framework and SDGs.

The Central American policy framework for DRR under the Sendai Framework has thus built upon long-standing cooperation among SICA member States, but has also extended this to support integration of the post-2015 agendas. Another source of integration is that, in addition to CEPREDENAC, SICA also has regional organizations working on environment and climate change, and water and climate. The three intergovernmental bodies that form the environmental subsystem of SICA have established a functioning mechanism with the purpose of avoiding competition and pursuing joint advocacy.

CEPREDENAC is financed by annual contributions from member States, as well as significant resources via international cooperation. It is thus also an example of a regional focus for international

56 (ECOWAS and UNISDR 2018)
57 (ECOWAS 2018)
58 (Unidad Nacional para la Gestión del Riesgo de Desastres and UNISDR 2018)
59 (UNISDR 2017c)
60 (UNISDR 2017c)
61 (VI Regional Platform for DRR in the Americas, Third High-level Meeting of Ministers and Authorities 2018); (UNISDR 2016)

62 (CDEMA 2013)
63 (CDEMA 2014)
64 (Coordination Center for the Prevention of Disasters in Central America 2010)
65 (Sistema de la Integración Centroamericana 2019)
66 (CEPREDENAC 2019)
67 (Coordination Center for the Prevention of Disasters in Central America and World Bank 2014)

investment that can be utilized efficiently by an active regional organization to better support member States. This is especially important in a region where countries face high levels of common risk, and most are developing economies with relatively small populations that would not have the national resources to develop such tools and resources independently.

South America

In South America, the four Andean Community member States of the Colombia, Ecuador, Peru and the Plurinational State of Bolivia have already adopted the Andean Strategy for Disaster Risk Management 2017–2030, which is in alignment with the Sendai Framework. It builds on the previous 2005 strategy. The new strategy seeks to strengthen institutional capacities in its member States, to enhance DRM, reduction and prevention, and to support the alignment of disaster risk information systems. It is supported by the Andean Committee for Disaster Prevention and Response. It is also intended to support the formulation and implementation of policies; including national, regional and sectoral strategies and plans on DRM that promote sustainable development and social inclusion among Andean countries, as exemplified by the Andean Disaster Risk Management Strategy's Implementation Plan 2019–2030 and its associated indicators. It thus addresses the broader 2015 agenda, while providing guidance and enhancing the capacity of its members States to implement the Sendai Framework priorities and goal as well as to meet Target E.

Within the Southern Common Market (MERCOSUR), the technical intergovernmental DRR entity is the Meeting of Ministers and High Authorities on Comprehensive Disaster Risk Management. At the time of the development of this GAR, MERCOSUR was developing its five-year risk reduction strategy.

The two long-established subregional mechanisms in Central America and the Caribbean have adapted their cooperation and capacity-building to support Sendai Framework implementation. Within South America, the Andean member States have

established a new mechanism. These are very positive developments, including as they do the member States in the region that are most exposed to hazards and disaster risk.

10.1.3
Arab States

Historically, the Arab region has been exposed to seismic activity.[68] More recently, it has faced challenges stemming from secondary risks linked to the displacement of people and migration trends, the spread of epidemics, food insecurity, conflict and civil unrest, rapid urbanization, environmental degradation and water scarcity.[69]

The Arab Strategy for Disaster Risk Reduction 2030 was adopted in January and subsequently endorsed by Heads of State in April 2018 at the Arab League Summit.[70] The strategy is in alignment with the Sendai Framework and SDGs, and focuses on a multisectoral approach to substantially reduce disaster risk in the Arab region by 2030.[71] It is essentially a framework to foster progress in core agreed areas of implementation, and to produce a detailed programme of work across three phases until 2030. These will be implemented with various levels of cooperation with humanitarian and development partners.[72] An Extraordinary Session of the Arab Coordination Mechanism for Disaster Risk Reduction adopted the Phase I programme of work in January 2018.

A biennial matrix for 2019–2020 defining a road map of time-bound regional targets was also finalized and adopted as an outcome document of the 2018 Africa-Arab Platform. That platform also adopted the Tunis Declaration on Disaster Risk Reduction.[73]

The League of Arab States (LAS) coordinates further action on implementation of the regional strategy. Together with its technical organizations, LAS mainstreams DRR measures into projects and technical assistance programmes across the Arab States.

The Prime Minister of Mongolia, Khurelsukh Ukhnaa, at the Asian Ministerial Conference for Disaster Risk Reduction
(Source: UNDRR)

10.1.4

Asia and the Pacific

The Asia–Pacific region is highly exposed to hydrometeorological hazards as well as geophysical and human-made hazards. Although economically mixed, it has a high proportion of lower-income and developing economies. Located within the "Pacific Ring of Fire", many Asia–Pacific countries are confronted with persistent earthquake, tsunami and volcano risks.[74] Hydrometeorological hazards, heightened by climate change, adversely affect social and economic development. The Asia–Pacific region tops the table in terms of frequency of occurrence and notwithstanding significant progress made in DRR, still accounts for half of the global disaster impacts with respect to mortality and affected people.[75] It is therefore imperative to integrate DRR measures across development programmes and sectors, as well as in CCA.

68 (Arab Strategy for Disaster Risk Reduction 2030 2018)
69 (Arab Strategy for Disaster Risk Reduction 2030 2018)
70 (LAS 2018)
71 (Arab Strategy for Disaster Risk Reduction 2030 2018)
72 (Arab Strategy for Disaster Risk Reduction 2030 2018)
73 (AU 2018)
74 (APEC 2016)
75 (AMCDRR 2018)

Asia

In June 2014, the sixth AMCDRR and IAP agreed to develop a regional plan for the post-2015 framework. The Asia Regional Plan for Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 was then finalized and approved at the 2016 AMCDRR in India.

The Asia Regional Plan aims to provide: (a) broad policy direction to guide implementation of the Sendai Framework in the context of the 2030 sustainable development agendas in the region; (b) a long-term road map, spanning the 15-year horizon of the Sendai Framework outlining a chronological pathway for implementation of priorities to achieve seven global targets; and (c) a two-year action plan with specific activities that are prioritized based on the long-term road map and in line with the policy direction.[76] The plan emphasizes that it seeks to guide and support the national implementation of the Sendai Framework, not to replace national plans, and so it identifies priority regional activities "to support national and local actions, enhance exchange of good practice, knowledge and information among governments and stakeholders, in addition to strengthening regional cooperation to support the implementation of the Sendai Framework."

The first occasion to assess the implementation of the Asia Regional Plan came at the July 2018 AMCDRR in Mongolia. A key outcome of that meeting was the current Action Plan 2018−2020. It highlights the main milestones to be realized as the creation of national platforms and national coordination mechanisms for DRR, and the assimilation of DRR in development plans. The action plan suggests enhancing the role of the Asia−Pacific Regional Coordination Mechanism to support countries in advancing implementation of the Sendai Framework.[77]

Focusing on the economic development dimension, in 2015, APEC leaders formally adopted the APEC Disaster Risk Reduction Framework, centred on the phenomena of the "new normal", which demonstrates the rising frequency, scale and range of disasters and the ensuing disruption of interlinked production and supply chains.[78] The framework is a blueprint for scaling up disaster-resilient economies focused on inclusive and sustainable development. From this, the APEC Disaster Risk Reduction Action Plan was made to operationalize the APEC Framework, and was pledged in a 2015 Joint Ministerial Statement. Its purpose is to enhance cooperation on DRR and it will be operationalized through APEC.[79] The action plan comprises four DRR pillars, with specific areas for cooperation and activities, responsible partners, timelines and indicators.

The key Asian subregional intergovernmental organizations have long-standing mechanisms for regional cooperation on "disaster management". While inconsistent with the terminology agreed by the OIEWG and endorsed by the United Nations General Assembly, disaster management is the preferred term in the region; it also encompasses elements of DRR, more often described as mitigation.

The ASEAN Agreement on Disaster and Emergency Management (AADMER) entered into force in 2009. Its ongoing workplans emphasize disaster preparedness and response and also mitigation, but are not specifically aligned with the Sendai Framework.[80] However, the new ASEAN agreement on economic cooperation, ASEAN 2025: Forging Ahead Together, has a key objective to establish, "a resilient community with enhanced capacity and capability to adapt and respond to social and economic vulnerabilities, disasters, climate change as well as emerging threats and challenges (12.4)."[81] ASEAN and the United Nations have developed the ASEAN-United Nations Joint Strategic Plan of Action on Disaster Management 2016−2020, the third iteration of this action plan.[82] Together, these three ASEAN plans take a highly integrated approach to regional development planning and disaster management. However, while Sendai Framework implementation is noted in the AADMER Workplan and the Joint Strategic Plan of Action as an area for cooperation in disaster prevention and mitigation, it is not a central part of these plans, which are largely focused on disaster preparedness and response, and economic development.

The South Asian Association for Regional Cooperation (SAARC) also has a long-standing regional framework on disaster management,[83] but so far has not agreed a specific mechanism to support member States' implementation of the Sendai Framework.

Pacific

The Pacific Islands Forum Leaders meeting in 2012 agreed to develop a joint regional framework on climate change and DRM. This would supersede the two existing but distinct regional frameworks, namely the Pacific Islands Framework for Action on Climate Change and the Pacific Disaster Risk Reduction and Disaster Management Framework for Action, both of which concluded in 2015.

As noted above, FRDP was then developed, and endorsed at the Pacific Islands Forum Leaders meeting in 2016.[84] This is the first regional framework of its kind. It provides high-level strategic guidance to Member States and a range of different stakeholder groups on how to enhance resilience to climate change and disasters, in ways that also contribute to sustainable development.

FRDP envisions a developed and sustainable future for the Pacific region's people, societies, economies, cultures and natural environments. It calls for significant collaborative efforts from local and regional stakeholders to reduce carbon-based economic development, unplanned urbanization, destruction of ecosystems, poverty, inequality, institutional and capacity constraints, and fragmented action to strengthen resilience and sustainability and protect development gains.

FRDP is not prescriptive; rather, it suggests a set of priority actions to be used as appropriate by multi-stakeholder groups. Specific actions lean towards regional implementation, while others require further articulation at national level to ensure that context-specific priorities and needs are met.[85]

In 2018, at their meeting in Nauru, the Pacific Islands Forum Leaders reaffirmed their commitment to FRDP, recognizing "the value and importance of a multisectoral approach to addressing climate change and its impacts. Leaders acknowledged the establishment of a regional risk governance arrangement through the Pacific Resilience Partnership and the Pacific Resilience Partnership Taskforce."[86]

To support implementation of FRDP and the overall integration of risk governance agenda, the Pacific Resilience Partnership was established by Pacific leaders in 2017 for an initial trial period of two years. The partnership works to strengthen coordination and collaboration and has four main components that make up its governance structure: (a) a task force made up of 15 constituent groups (five positions for countries and territories, five for civil society and private sector, and five for regional organizations and development partners); (b) a support unit to support effective functioning of the task force; (c) a technical working group to support implementation of the three goals of FRDP; and (d) a Pacific resilience meeting that consolidates existing regional meetings focused on climate change, disaster response, preparedness and risk reduction and opens the door to stronger engagement with the wider development community.

76 (AMCDRR 2016)
77 (United Nations General Assembly 2018a)
78 (APEC 2016)
79 (APEC 2016)
80 (ASEAN 2005); (ASEAN 2016a)
81 (ASEAN Secreteriat 2015)
82 (ASEAN 2016b)
83 (SAARC 2007); (SAARC Environment Ministers 2006)
84 (SPC 2016)
85 (SPC 2016)
86 (DFAT 2018)

10.1.5

Europe and Central Asia

Much like other regions, Europe is exposed to a broad range of natural hazards such as earthquakes, drought, floods, storms, wildfire, avalanches and landslides, which persistently result in economic and human losses, as well as a range of technological hazards. In contradiction to its regional capacity, awareness of natural hazards and the existing knowledge base on DRR, data indicates that vulnerability to region-specific hazards is mounting.

EU DRM policies have laid the groundwork to implement some of the Sendai Framework recommendations, including those on ongoing civil protection, development cooperation and humanitarian aid action.[87] For DRR within its civil protection system: "The EU's modus operandi in the field of DRR is very much the EU's footprint: it gathers its member States around a common policy, shows challenges that are shared by all the member States, points out that there is the need to solve these challenges together, and provides a set of answers in the form of guidelines, financial support, exchange of knowledge and experiences at national level."[88]

The European Forum for Disaster Risk Reduction Roadmap 2015–2020 was developed to guide Europe's implementation of the four priorities of action and seven global targets of the Sendai Framework, with the two identified priority areas of: (a) development or review of national- and local-level strategies for DRR, in line with Target E of the Sendai Framework, based on the building blocks of risk assessments and disaster loss databases and (b) integration of DRR into different sectors, especially climate change and the environment.[89]

For its part, the EC has adopted the "Sendai Framework for Disaster Risk Reduction Action Plan [2016–2020]: A disaster risk-informed approach for all EU policies" to foster implementation of the Sendai Framework and other international agreements by supporting inclusion in EU policies. The action plan identifies, under each key area, a set of measures that could underpin a more integrated risk-informed policy landscape in the EU.[90] The key action plan implementation areas include: (a) building risk knowledge in EU policies, (b) using an all-of-society approach in DRM, (c) promoting EU risk-informed investments and (d) supporting the development of a holistic DRM approach.

The second CASC Sub Regional Platform held in 2018 had a subregional focus on DRR integrated with development planning.[91] The platform approved a Plan of Action,[92] a Roadmap for Cities[93] and the Yerevan Declaration containing political commitments to implement the Sendai Framework. The declaration has a focus on reaching Target E by 2020, but aims to do so "in coherence with the 2030 Development Agenda including the Paris Agreement on climate change, NUA and other relevant instruments, and to recognize the importance of engaging with local governments to implement and invest in DRR."[94]

10.2

National enabling environments for integrated risk reduction

The subsequent chapters of this part focus on Member State practice in developing and implementing risk reduction strategies and plans at national and local levels, how these are established, how they interact with planning for development and CCA, and how they operate in urban settings and fragile contexts. This approach, and the extensive use of national and local case studies, recognizes that Member States have the primary role in implementing the Sendai Framework, the 2030 Agenda and the other post-2015 agreements. Before addressing the plans and strategies, it is useful to highlight some aspects of national systems of government, law, culture and risk perception that can either enable or hinder risk reduction, and therefore the development and effective implementation of such plans. It is not possible to discuss these with any specificity at a global level, given the unique character of each country's sociopolitical and physical environment and risk profile. However, some key national factors are identified in the Sendai Framework, as they were also in HFA, that are larger than the specific targets and indicators and yet are also necessary enablers to achieve those targets.

The targets and priorities of the Sendai Framework emphasize the importance of understanding risk better, by improving risk information through monitoring, assessing, mapping and sharing (para. 14).[95]

Priority for action 1 on understanding disaster risk brings this into focus as a fundamental aspect of reducing risk and preventing risk creation (paras. 21–25). Also reiterated throughout the Sendai Framework, continuing strongly from HFA, is the importance of "strengthening disaster risk governance and coordination across relevant institutions and sectors and the full and meaningful participation of relevant stakeholders at appropriate levels" (para. 14). This is a concept captured more fully under Priority for action 2 on strengthening disaster risk governance to manage disaster risk (paras. 26–28). These two aspects of the Sendai Framework require constant interaction between the creation of information and its use to reduce risk across all of society, including that which accrues to the most vulnerable, and with the participation of relevant stakeholders. These are the aspects of the Sendai Framework most relevant to enabling the development of well-informed national and local DRR strategies and plans as required by Target E, and to implementing them effectively.

Two other principles that run through the Sendai Framework need a mention in this context. The first is the issue of integration with the other post-2015 global agendas. This is not for the sake of conceptual neatness, but because the international community expressed through this and the other global agreements, the realization that integrated risk reduction and management, or a systems-based approach, is the only way to attain sustainable development in the face of disaster risk and climate change. The second is the issue of gender equality, more specifically empowering women in DRR, along with the broader notion of inclusiveness of people of all ages and abilities, as essential to understanding risk, risk perceptions and involving the whole community in deciding how to manage and reduce risk effectively. Youth and women

87 (EC 2016)
88 (Morsut 2019)
89 (EFDRR 2016)
90 (EC 2016)
91 (UNISDR 2018a)

92 (Plan of Action Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in Central Asia and South Caucasus Region 2016)
93 (UNISDR 2015a)
94 (Yerevan Declaration 2018)
95 (United Nations 2015a)

become more of a focus when considering the Sendai Framework in light of the other agendas and the issues they address – SDG 5 on gender equality and women's empowerment for instance – and a heightened awareness of the need for intergenerational equity in responding to climate change and preventing the types of shocks that can have such a damaging and long-lasting impact on the health and well-being, education and employment opportunities of young people.

10.2.1

Legal and institutional frameworks for disaster risk reduction and development

Risk reduction strategies and plans, reduction of risk in development planning and governmental support for CCA do not occur in a vacuum. Institutional responsibility for developing, resourcing, implementing and being accountable for the
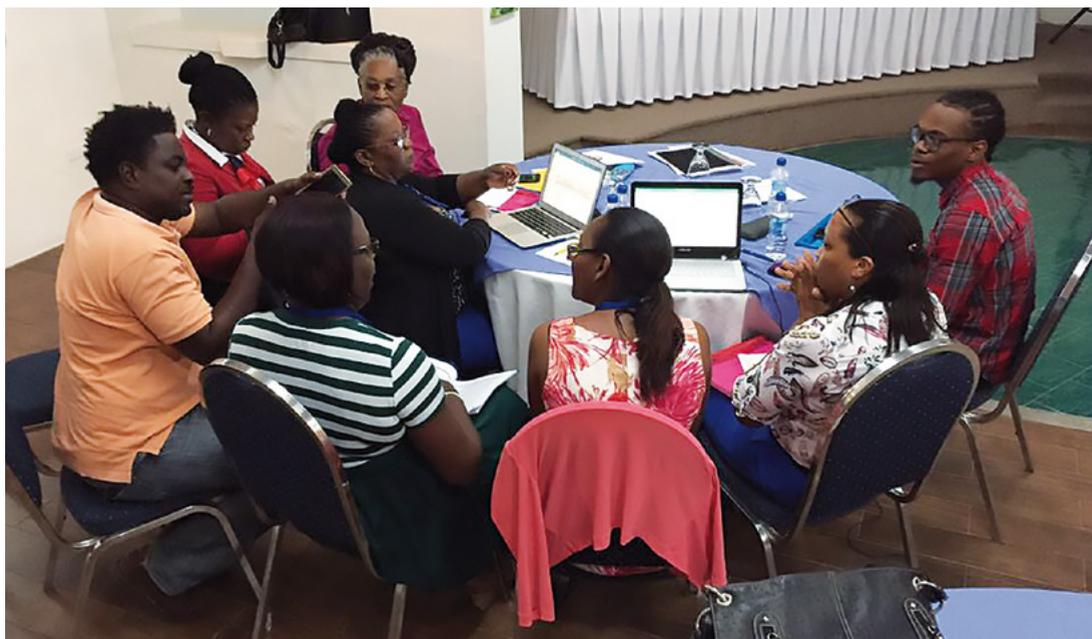
Workshop in Antigua and Barbuda
(Source: UNDRR)

effectiveness of such strategies and plans is almost invariably set out in government laws, decrees and rules at national and local levels. Indeed, the specialist institutions for DRM and CCA are often created by legislation, or where they are part of ministerial mandates, they are subject to rules and policies made under the relevant legislation.[96]

Member States do not generally establish legislation for DRR alone, and such an initiative would now run counter to the Sendai Framework's approach

to integrated risk reduction, as well as to the emerging understanding of systemic risk elucidated in Chapter 2 of this GAR. DRR mandates are embedded within broader frameworks for DRR and management, and, importantly, in a range of sectoral laws that are not widely understood as risk management frameworks. These include: land zoning and land-use planning; building codes; environmental protection and anti-pollution laws, including environmental impact assessments of development projects; water resource management;

solid and liquid waste management; and fisheries, wildlife and forests. In other words, relevant legal frameworks exist for almost all elements of the wider risk scope of the Sendai Framework. The nature of these mandates, the institutions they establish, the resources allocated, and the way they communicate and work together as a system, are the essential infrastructure for effective risk governance to address systemic risk.[97]

Research shows that there are few cross-sectoral linkages, and often few opportunities for non-governmental stakeholders to participate in risk governance through public institutions. Yet, these are fundamental to either enabling or creating barriers to effective and participatory risk management strategies at national and local levels. There is extensive research and practical tools available to Member States wishing to undertake assessments of their legal frameworks for effective DRR,[98] including many specific country case studies.[99] Further analysis is available for particular focus areas, such as the legal and institutional enabling environment for SME disaster resilience in Asia, which considers the existing and additional needs for integration in the areas of DRM, CCA and business development.[100]

10.2.2

Inclusion and equality

The Sendai Framework calls for a people-centred, inclusive and non-discriminatory approach to DRR that pays special attention to people disproportionately affected by disasters. It specifically notes the importance of involving "women, children and youth, persons with disabilities, poor people, migrants, indigenous peoples … and older persons in the design and implementation of policies, plans and standards." (Para. 7).

It is well established that through direct and indirect losses to infrastructure, livelihoods and opportunities, disasters compromise the capabilities of communities to lead a dignified life and realize their aspirations. They undermine sustainable opportunities for development. Inclusion of all relevant stakeholders and principles of equality are therefore essential to understand the way these systemic risks affect different groups within the population, and what to do about it. DRR needs to take account of a range of socioeconomic sources of vulnerability, including age (children, youth and older persons), disability, ethnicity, poverty, and in circumstances of gender inequality, women as a group.

Gender equality and empowerment

Women as a group are not intrinsically vulnerable, but differentiated gender roles and gender inequality have shown that disasters often have greater socioeconomic impacts on women than on men,[101] as well as higher risk of GBV.[102] In some contexts, women have higher rates of death and injury,[103] as observed in some populations affected by the 2004 Asian tsunami.[104] This can however be very culturally and context specific (e.g. in Hurricane Maria in Puerto Rico, men over the age of 65 had the highest mortality).[105] An essential step in ensuring effective risk reduction is to engage women so that their experience of risk is a default input to global, regional, national and local strategies for risk reduction, sustainable development and climate change. This is recognized in the Sendai Framework, and in greater detail in the 2030 Agenda through SDG 5 on gender equality and women's empowerment. These goals are to be realized through increasing women's participation and decision-making roles in the relevant institutions and processes.

96 (IFRC and UNDP 2014b)
97 (IFRC and UNDP 2014b)
98 (IFRC and UNDP 2014a)
99 (IFRC 2016a)
100 (ADPC 2017b)

101 (IFRC 2017)
102 (IFRC 2015); (IFRC 2016b)
103 (Neumayer and Plumper 2007)
104 (Nishikiori et al. 2006)
105 (Santos-Burgoa et al. 2018)

SDG 5 aims to "to achieve gender equality and empower all women and girls."[106] Target 5.5 of SDG 5 is to "Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life." Its achievement will be measured by the quantitative indicators of: the proportion of seats held by women in national parliaments and local governments, and the proportion of women in managerial positions.[107] National governments and legislatures are, of course, free to set higher targets; indeed, many do set targets on women's participation in government administration through their national development plans, but they also need to develop ways to implement them.

In light of SDG 5, the Regional Asia-Pacific Conference on Gender and Disaster Risk Reduction issued clear recommendations – the Ha Noi Recommendations – on implementing the Sendai Framework to promote gender equality.[108] Of particular relevance to risk governance, law and policy, the conference recommended that governments:

- Seek to understand risk, including by mandating up-to-date national and local statistics disaggregated by sex, age and disability, as well as developing socioeconomic baselines to inform gender-responsive DRR;

- Conduct gender analysis of disaster risk to inform national and local policies, strategies and plans;

- Implement strong laws that mandate women's participation and leadership in decision-making and also create accountability for their implementation;

- Invest in social protection and social services that reduce gender inequality and other inequalities and enable at-risk groups of women and men to mitigate disaster risks and adapt to climate change;

- Implement security and protection interventions led by women to reduce current risks and prevent creation of new risks arising from gender-based discrimination and violence.

Finally, the recommendations emphasize the need to "institutionalize" the leadership of women and diverse groups in disaster preparedness, response, recovery and reconstruction, and propose that at least 40% of the composition of national and local mechanisms responsible for developing disaster preparedness, response and recovery decisions must be made up of "women and diverse groups".[109]

The careful analysis of the Sendai Framework by the Ha Noi Recommendations applying the lens of SDG 5, gives Member States some practical options to address representation of women in developing national and local risk reduction strategies, and to engage women in needs assessments. Both these elements can provide a fuller picture of the systemic risks faced by women due to gender inequality. Recognition of the differentiated impact of disasters and targeted actions is a prerequisite for an inclusive approach.

Protection of children and participation of young people

As discussed in Chapter 3 of this GAR, disasters affect individuals in different ways at different stages of their life cycle with compounding effects. While being a child does not define vulnerability, the ability of children and young people to cope when risk is realized can often be surpassed. Children are at increased risk of being separated from their parents, family members or carers during disasters; the cause of deep distress, such separation can have a severe and long-lasting negative effects on mental health and development. Unaccompanied and separated children may face greater risks to certain threats; threats that may include abduction, trafficking, sale, illegal adoption, sexual and GBV (including child prostitution and child marriage), physical violence and neglect have all been observed in the aftermath of disasters.[110] Having risk reduction strategies that incorporate aspects of child protection can help to prevent and mitigate some of these impacts on children.

Children's vulnerability profiles in the aftermath of a disaster are often correlated with increased

risk of disease and malnutrition, which may trigger interruption of schooling trajectories, ill-developed social and cognitive skills. These are highly likely to affect their capabilities to attain the skills necessary to achieve their full earning potential, and in turn send their children to school, etc. Worldwide evidence highlights that persistence of inequity in enrolment, attendance, learning outcomes and achievement based on gender, poverty, exposure to natural hazards, etc., are all determining factors in defining which children attend what kind of school and for how long.[111] In addition, malnutrition in early childhood is likely to impair cognition; children who do not complete primary school are likely to earn less money in their first job than those with higher levels of education. In essence, children who are forced to drop out of school at an early stage, or who never enrol in school, will likely never attain the skills required for them to achieve their full earning potential.

The needs and interest of young adults are also of concern in the broader post-2015 agendas, particularly considering the potential impacts of climate change.[112] Climate change, sustainable development and disaster risk all raise the compelling issue of how to ensure intergenerational equity. Engagement with young adults and ensuring they are represented in planning and decision-making processes on risk reduction are important elements in ensuring their futures.

Groups with limited mobility and access to information

Very young children, older persons with limited mobility[113] and people with disabilities and their carers (most of whom are women) can be at a significant disadvantage in disaster situations.[114] Physical mobility issues can reduce their capacity to evacuate. Invisible disabilities such as hearing or sight impairment and intellectual disabilities can reduce people's capacity to receive and understand risk reduction education, participate in drills, early warning and evacuation instructions, as well as to move around in chaotic circumstances.[115] Prior planning, preparedness and risk reduction for these groups should be undertaken in a participatory fashion with the persons concerned or their advocates, to ensure that their needs are considered in advance, and that plans and strategies are effectively inclusive.

Access for the poorest and most marginalized groups

Other groups – that are commonly marginalized in community DRR, as well as during disasters – also have diverse skills and knowledge to contribute in planning for risk reduction. These include: migrants, who may have limited knowledge of local hazards, institutions and services and may not have social and family support networks, but may also bring new knowledge and skills from previous experiences;[116] indigenous peoples, who may be socially or economically marginalized, but also hold traditional knowledge of relevance to risk reduction;[117] and the very poorest people, who may be housed in poor quality dwellings or informal settlements, but may also have developed numerous individual and communal survival and organizing skills.

The central message from the Sendai Framework on these issues is that equality and effectiveness in risk reduction is reached through inclusion of all stakeholders. When certain groups are omitted, the

106 (United Nations General Assembly 2015a)
107 (United Nations Economic and Social Council 2017a)
108 (UN Women and Viet Nam Central Steering Committee for Natural Disaster Prevention Control 2016)
109 (IFRC 2017); (UN Women and Viet Nam Central Steering Committee for Natural Disaster Prevention Control 2016)
110 (Uppard and Birnbaum 2017)

111 (UNICEF 2017)
112 (UNICEF 2015)
113 (HelpAge International 2012)
114 (Matsuzaki, n.d.)
115 (Handicap International 2015)
116 (Guadagno 2017)
117 (United Nations General Assembly 2014a)

strategies and plans that ensue are often less effective. Ignoring or omitting the acquired experience of risk and disaster impacts of such groups, can result in impacts that are unequal, even discriminatory.

Inclusion and empowerment of women, vulnerable groups, people with disabilities and socially marginalized people within national frameworks of law, policy and institutions underpin effective risk reduction and uphold the all-of-society tenets of the Sendai Framework and "leave no one behind" principle of the 2030 Agenda.

10.3

Conclusions

Regional and national frameworks are important aspects of the enabling environment for successful risk reduction by Member States.

Regional intergovernmental organizations, regional platforms on DRR and new forms of partnership within global regions allow Member States and other stakeholders to pool resources and capacities to support national and local risk reduction. They also provide mechanisms to focus on specific regional risks. The foregoing account indicates a high degree of engagement and activity at regional level to support implementation of the Sendai Framework. These processes are now at the stage, with strategies and mechanisms in place, where the focus can shift to practical support to Member States' efforts in implementation, supplemented by regional and cross-border risk reduction efforts.

The primary responsibility for Sendai Framework implementation lies with the Member States. The broader national framework of laws, policies and institutions for risk reduction, development and action on climate change have a significant impact on States' ability to formulate and implement national and local strategies and plans on DRR, development and CCA. Such overarching

frameworks are key in empowering and including all stakeholders, establishing the basis for gender equality, and for including people and groups more exposed and more vulnerable to disaster impacts than the wider population.

The legislative, policy and institutional structures and processes that include the views and experiences of women and girls, people with disabilities, older persons, and for example, people from different ethnic or religious backgrounds, and which include protection measures for children, result in measures at national and local levels that allow a more equal and more effective reduction of risk.

These enabling frameworks can be understood as central components of national and local plans for DRR, development, CCA and the emerging integrated approaches to risk reduction, which are discussed in the following chapters.