

ZERO DRAFT

**Global Capacity Development Strategy to Support
Implementation of the Sendai Framework for
Disaster Risk Reduction**

An Approach for All Partners and Stakeholders

23 February 2018

Revised 07032018

Comments may be submitted in writing until 31 March 2018 to isdr-incheon@un.org

Prepared by:



Contents

Executive Summary.....	v
Introduction	1
Audience, Purpose, and Scope.....	3
How the Strategy Relates to the Sendai Framework and Associated Resources	3
The Consultative Process	4
Section 1: Understanding Capacity Development Obstacles & Challenges.....	7
Understanding the need for implementation of disaster risk reduction.....	7
Impact of capacity shortfalls on disaster risk reduction progress	8
Why the Strategy is Needed	9
Linking Disaster Risk Reduction Capacity Development to Agenda 2030, The Paris Agreement, and Other Closely-Related Initiatives	10
Obstacles and Challenges to Effective Capacity Development for Disaster Risk Reduction	11
Section 2: Capacity Development in the Disaster Risk Reduction Context	16
Capacity Development in the DRR Context	16
Capacity and Capacity Development Defined	17
Types and Levels of Capacity	18
The Building Blocks of Effective Capacity Development Efforts	22
Driving Principles of Effective Capacity Development.....	22
Foundational Elements of Effective Capacity Development.....	26
The Capacity Development Process – a ‘Theory of Change’.....	27
Section 3: Action Areas for Capacity Development for DRR.....	36
1. Developing and Strengthening Disaster Risk Reduction Fundamentals.....	36
1.1 Ensuring Use of Loss and Risk Information	36
1.2 Disaster Risk-Informed Development Plans.....	37
1.3 Funding and Resource Mobilization for DRR	38
1.4 Monitoring of Sendai Framework Implementation	39
2. Institutionalizing Disaster Risk Reduction Capacity.....	39
2.1 Understanding Links Between Disaster Risk Reduction and Sustainable Development	40
2.2 Understanding Climate Risk Across Sectors.....	41

2.3 High-Level Awareness and Cross-Sectoral Understanding of DRR	41
3. Sharing and Using Risk Information Before and After Disasters	42
3.1 Conducting Effective Risk Communication and Knowledge Management.....	42
3.2 Enhancing Disaster Preparedness and Planning for “Build Back Better”	43
3.3 Understanding the Economics of DRR	44
4. Establishing Collaborative Action for Disaster Risk Reduction at the National and Local Levels	45
4.1 Establishing an ‘All-of-Society’ Approach	45
4.2 DRR at Local Government Level.....	46
4.3 DRR at Community Level.....	48
5. Strengthening External Support Mechanisms	49
5.1 South-South and Peer-to-Peer Mechanisms	49
5.2 UN Country Teams	49
5.3 Humanitarian Development Nexus.....	51
6. Advancing and Expanding Disaster Risk Reduction Capabilities.....	51
6.1 Education for Disaster Risk Reduction	52
6.2 Innovation and Use of Technology for DRR	53
Section 4: Stakeholders and Partners	55
National Government (including elected leaders, parliamentarians, and line ministries).....	55
Local and Sub-national Government	56
Private Sector	57
Nongovernmental and Civil Society Organizations (NGOs and CSOs).....	57
Academia	58
Individuals and Households	59
Regional Organizations including IGOs	59
The United Nations, International Organizations, and International Financial Institutions.....	59
Section 5: Implementation of the Strategy.....	61
Promoting awareness of the need for capacity development at all levels and by all stakeholders, and supporting the development of national and local strategic plans.....	61
Establishing nationally-based and Sendai Framework-relevant evaluation indicators that enable measurement of capacity development outputs, outcomes, and impacts.....	63
Expanding South-South, Triangular, and other partnership and cooperation opportunities through the creation of a global capacity development provider marketplace.....	66

Demystifying Capacity Needs by Providing Nationally- and Locally-Relevant, Sendai Framework-Focused Target Capability Standards.....	67
Strengthening advancement and professionalization of disaster risk reduction capacities and capabilities by establishing regional and national capacity development institutes	68
Implementation and roll out.....	68
Appendices.....	72
Appendix 1: List of consultations	72
Appendix 2: Select Capacity Development Planning Tools.....	75
Appendix 3: Capacity Development Planning Questionnaire	76
Appendix 4: Checklist of Capacity Development for Disaster Risk Reduction Principles	77
Appendix 5: Checklist of Common Capacity Development for Disaster Risk Reduction Obstacles	80
Appendix 6: Proposed Indicators for Monitoring and Evaluation of Capacity Development for Disaster Risk Reduction.....	85
References and Key Resources	92

Executive Summary

The Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework) recognizes the Member States' primary role in facilitating the achievement of its disaster risk reduction (DRR) goal and priorities and highlights the criticality of sharing these responsibilities with other stakeholders and realizing an all-of-society approach.

UN Member States have identified a need for implementation support and enhancement of the capacity of institutions and individuals dealing with DRR, and in implementation of the technical support requirements of the Sendai Framework itself. Without adequate capacity and mechanisms for its implementation, it will be impossible to achieve the Sendai Framework targets. The pursuit of more collaborative and coordinated efforts to deal with increasingly limited resources¹ is required as global progress towards meeting disaster risk reduction targets advances.

As the UN entity mandated by the Sendai Framework and the UN General Assembly to support implementation, monitoring and review of the Sendai Framework, UNISDR has taken the lead to develop a Global Capacity Development Strategy in collaboration with other UN entities, partners and DRR stakeholders².

Since July 2017, the UNISDR Global Education and Training Institute (GETI), in collaboration with UNISDR regional offices³, convened a series of regional, online, and one-on-one consultations involving over 200 participants. The outcome of these consultations and a concurrent literature review is strategic guidance crafted to improve the effectiveness of capacity development programs and actions. The Strategy is not a plan of action but rather a presentation of key principles, elements, and issues to which capacity development for disaster risk reduction may be more successfully planned and implemented, and a set of recommended implementation approaches. The goal of the Strategy is: A Vision of Risk-Informed Sustainable Development by 2030.

The strategy establishes a baseline understanding of capacity development within the DRR context and characterizes outstanding capacity development needs in light of common obstacles and constraints. A process⁴ by which partners and stakeholders may better identify and address capacity development is also provided.

¹ UNISDR, 2014. Pp. 6-17.

² The Sendai Framework encourages the participation of each of the following stakeholders: national governments, sub-national governments, local governments, civil society organizations (including volunteers, organized voluntary work organizations, and community-based organizations), academia, scientific and research entities and networks, businesses, professional associations, private sector financial institutions, philanthropic foundations, and the media.

³ Information on UNISDR Regional Offices may be found at <http://bit.ly/2F08bsQ>.

⁴ The six steps of this process are: 1) Stakeholder engagement; 2) Capacity needs assessment; 3) Defining a response; 4) Building partnerships for implementation of capacity development; 5) Implementation of capacity development efforts; and 6) Monitoring and evaluation.

In addition to generalized advice on the capacity development roles and responsibilities of various DRR stakeholders, the strategy provides high-level guidance in six areas of need identified through consultation with stakeholder representatives:

1. Developing and Strengthening Disaster Risk Reduction Fundamentals
2. Institutionalizing Disaster Risk Reduction Capacity
3. Sharing and Using Risk Information Before and After Disasters
4. Establishing Collaborative Action for Disaster Risk Reduction at the National and Local Levels
5. Strengthening External Support Mechanisms
6. Advancing and Expanding Disaster Risk Reduction Capabilities

The strategy recommends a series of implementation guidelines and resources to improve coordination and quality of capacity development efforts. These include:

1. Promoting awareness of the need for capacity development at all levels and by all stakeholders, and supporting the development of national and local strategic plans
2. Establishing nationally-based and Sendai Framework-relevant evaluation indicators that enable measurement of capacity development outputs, outcomes, and impacts
3. Expanding South-South, Triangular, and other partnership and cooperation opportunities through the creation of a global capacity development provider marketplace
4. Demystifying Capacity Needs by Providing Nationally- and Locally-Relevant, Sendai Framework-Focused Target Capability Standards
5. Strengthening advancement and professionalization of disaster risk reduction capacities and capabilities by leveraging on existing and/or establishing regional and national capacity development institutes

Recognizing that implementation of a global capacity development strategy requires appropriate coordinating mechanisms, accepted by partners, several options for coordination are provided as dictated by the nature of the partnerships that exist. These include:

1. United Nations Development Assistance Framework (UNDAF) and other UN strategic partnership frameworks
2. United Nations Plan of Action on Disaster Risk Reduction for Resilience: Towards a Risk-Informed and Integrated Approach to Sustainable Development (UNPoA)
3. Capacity Development for DRR Platform (Marketplace)
4. The Sendai Monitor (capacity development plan)

Finally, the implementation checklists are provided where appropriate to provide further illustration of important planning considerations faced by stakeholders (and are thus not intended to serve as specific guidelines for action.)

Introduction

A Vision of Risk-Informed Sustainable Development by 2030

The Sendai Framework for Disaster Risk Reduction 2015-2030⁵ (Sendai Framework) was adopted by 187 countries in March of 2015 to effectively promote and guide progress towards a substantial reduction in disaster risk and losses in lives, livelihoods, and health, and in the economic, physical, social, cultural, and environmental assets of persons, businesses, communities, and countries. In doing so, ambitious targets were established for both 2020 and 2030.⁶ The Sendai Framework was subsequently endorsed by the UN General Assembly through resolution A/RES/69/283 on 23 June 2015.

The Sendai Framework recognizes the State's primary role in facilitating the achievement of its disaster risk reduction (DRR) goal and priorities but highlights the criticality of sharing these responsibilities with other stakeholders including local governments, the private sector, civil society organizations, academia, and individuals. In fact, success per the Sendai Framework is stated to be contingent on nations realizing an all-of-society approach.⁷

UN Member States, particularly the least developed nations, small Island developing states, landlocked countries, and middle-income countries facing conditions that exacerbate vulnerability, have identified a need for continued support as efforts to implement the Sendai Framework and to pursue its target of preventing new and reducing existing disaster risk and to strengthen resilience progress. Development of the capacity of institutions and individuals dealing with disaster risk reduction and of implementation of the Sendai Framework itself (at the national and local levels) is one area where technical support requirements are particularly acute.⁸

A paradigm shift is needed to more effectively meet and manage capacity development needs as countries pursue the implementation of the Sendai Framework's disaster risk reduction goal and targets. Coordinated and collaborative efforts on the part of each and every disaster risk reduction stakeholder, whether organizations or individuals, and from the global to the most local levels, is required to meet the challenge.

In evaluating global capacity development needs under the Hyogo Framework for Action⁹ (2005-2015), the Capacity for Disaster Reduction Initiative (CADRI)¹⁰ highlighted that capacity development for

⁵ The Sendai Framework for Disaster Risk Reduction 2015-2030 outlines seven clear targets and four priorities for action to prevent new and reduce existing disaster risks: (i) Understanding disaster risk; (ii) Strengthening disaster risk governance to manage disaster risk; (iii) Investing in disaster reduction for resilience and; (iv) Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation and reconstruction. <http://bit.ly/2BI4Da3>.

⁶ Illustration of Sendai Framework for Disaster Risk Reduction Targets may be found at: <http://bit.ly/2iOozDA>.

⁷ UNISDR, 2015b. Paragraphs 19a-f.

⁸ Hagelsteen and Burke, 2016. P. 43.

⁹ The *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (HFA)* was the first plan to explain, describe and detail the work required from all different sectors and actors to reduce disaster losses. It outlines five priorities for action and offers guiding principles and practical means for achieving disaster resilience. <http://bit.ly/2zOfTjL>.

¹⁰ The Capacity for Disaster Reduction Initiative (CADRI) was established in 2007 to address a need for a coordinated and coherent UN-wide effort to support Governments develop their capacities to prevent, manage

disaster risk reduction had emerged as a persistent challenge, stressing that, “[i]ndeed, none of the five [HFA] priorities for action¹¹ can be achieved unless capacity development issues and measures are made an integral part of the action agenda.”¹² These same challenges remain as the transition to action under the Sendai Framework advances.

Despite an expanding body of knowledge to support capacity development, and a deep well of practical experience, global efforts to address persistent gaps in disaster risk reduction capacity continue to fall short in the face of persistent, shifting, and increasing risk drivers. Whether directed towards the enhancement of individuals’ knowledge and skills, the strengthening of organizational and institutional structures, or the fostering of a more conducive risk reduction environment, there remains much room for improvement in both mindsets and modalities of disaster risk reduction capacity development efforts.

The Sendai Framework has called on the UN system to support its implementation in a manner that is coordinated among its entities and in coherence with other relevant frameworks.¹³ In light of this need, organizational silos are being shattered to enhance system-wide action towards resilience and disaster risk reduction. Member States’ and stakeholders’ disaster risk reduction capacity development efforts have been prioritized, and innovative solutions are needed to ensure their longer-term sustainability. Moreover, clarification of each stakeholder’s roles and responsibilities, and elaboration on the need for a leveraging and strengthening of partnerships to support the Member States, have emerged as critical to ensuring complementarity of actions and coherence with other global and regional frameworks.

As the UN organization mandated by the Sendai Framework and the UN General Assembly to support implementation, monitoring and review of the Sendai Framework in support of UN Member States, UNISDR has taken the lead to develop this Global Capacity Development Strategy in collaboration with partners and affiliated organizations. As global progress towards meeting disaster risk reduction targets advances, it makes sense to pursue more collaborative and coordinated efforts, inclusive of partnerships, to deal with increasingly limited resources. The Strategy helps stakeholders to focus their innovation and actions where they matter most, enabling them to increase the impact of their efforts despite trends indicative of decreasing resources. The goal of the Strategy is: A Vision of Risk-Informed

and recover from the impacts of disasters, in line with the Sendai Framework for Disaster Risk Reduction (2015-2030).

¹¹ Priority 1: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation; Priority 2: Identify, assess and monitor disaster risks and enhance early warning; Priority 3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels; Priority 4: Reduce the underlying risk factors; and Priority 5: Strengthen disaster preparedness for effective response at all levels.

¹² CADRI, 2011. P. 6.

¹³ The UN Chief Executives Board has endorsed the UN Plan of Action on Disaster Risk Reduction for Resilience, which is a UN system-wide flagship initiative for coordinated UN actions and programme delivery with greater impact to support countries for implementation of the Sendai Framework within the context of sustainable development. During the first session of the UN Senior Leadership Group (SLG) for Disaster Risk Reduction (DRR) held in April 2017, UNISDR proposed to coordinate and facilitate a Global Capacity Development Strategy for the implementation of the Sendai Framework. With that aim, an initial discussion was carried out at the 2017 Global Platform in Cancun.

Sustainable Development by 2030.

Audience, Purpose, and Scope

The purpose of the *Capacity Development Strategy to Support Implementation of the Sendai Framework for Disaster Risk Reduction* (The Strategy) is to provide UN Member States, and other stakeholders, with a common and comprehensive approach for developing the capabilities and competencies required to address disaster risk reduction goals and increase resilience.

The Strategy addresses a longstanding lack of guidance for capacity development for disaster risk reduction^{14,15}. It is not focused solely on how the United Nations or any development partner supports countries' disaster risk reduction capacity development efforts, but rather encourages all stakeholders to understand the greater capacity development needs that exist within their country or community, and to consider their role within that frame of reference.

The Strategy is designed to inform the actions of any capacity development partner, regardless of whether public, private, or non-profit, and whether based locally, nationally, or at the international level. In keeping with the spirit of the Sendai Framework, the information and advice provided in this Strategy are contextualized for and directed at the national government level. The strategy addresses stakeholders that contribute to and/or are influenced by capacity development efforts within this administrative structuring, from the local to global levels.

The Strategy does not seek to tell the user exactly what to do, but rather attempts to inform them of how to approach the problem, and why they might consider approaching it that way. An overview of the various types and levels of capacity is presented, as is a six-step capacity development process according to which the disaster risk reduction capacity development needs of programmes and projects may be assessed and addressed.

Finally, and most importantly, planning and programming advice organized according to areas of critical need (as identified by participants in a consultative process) is provided. The Strategy aims to support the achievement of the goal by stakeholders, by determining the actions required to achieve the goal (Section 3), and suggesting steps to help mobilize the resources required to achieve the goal (sections 4 & 5)

How the Strategy Relates to the Sendai Framework and Associated Resources

This Strategy was developed in complementarity with the existing library of disaster risk reduction and capacity development products, programmes, and resources, and both refers to and draws upon their guidance and best practices where applicable. The guidance contained in this Strategy pertains to both disaster risk reduction and capacity development needs, expressly tailored to address the confluence of these needs as they apply in the implementation of the Sendai Framework implementation (most notably in several priority areas identified through consultation with stakeholder representatives).

¹⁴Becker and Abrahamsson, 2012. P1.

¹⁵ Hagelsteen, 2014. P1.

Direct and significant linkages exist between national and global disaster risk reduction requirements, prevailing knowledge and practice in capacity development, and ongoing efforts to address sustainable development and climate change adaptation. To improve familiarity with the most relevant of these and to further clarify the Strategy's purpose and scope, the following relationships are highlighted:

- **Relationship to Sendai Framework for Disaster Risk Reduction (DRR)**
The Sendai Framework for Disaster Risk Reduction establishes one main goal, four priorities for action to address global disaster risk, and identifies seven global targets with indicators to measure success along those lines. These broad-sweeping objectives give rise to several actions and activities for which a broad array of capacity needs has arisen. The Strategy is structured around meeting these DRR-specific capacity development needs, most notably those that have been identified by stakeholders involved in the consultative process as being most critical to impacting implementation progress.
- **Relationship to Sendai Framework “Words into Action” Guides (WIA)**
The Words into Action¹⁶ Guides aim to provide practical guidance on implementing the Sendai Framework across a number of topics, with advice on and useful strategies for implementing the actions required to meet stated objectives. Whereas Words into Action tells stakeholders what they can do to implement the Sendai Framework, the Strategy guides them in their efforts to identify and address the resources, capabilities, and competencies.
- **Relationship to the Sendai Framework Monitor**
The Sendai Framework Monitor is an accountability tool to assist countries in monitoring, assessing, and evaluating progress and challenges in the implementation of disaster risk reduction at the global and national levels. The Strategy supports UN Member States' progress towards the meeting of implementation indicators captured by the Sendai Monitor by helping the relevant stakeholders to identify and address required capacity (capability, competency, and resource) gaps.

The Consultative Process

An initial discussion towards the development of this Strategy was facilitated by UNISDR during the 2017 Global Platform for Disaster Risk Reduction in Cancun, Mexico. The discussion was attended by over thirty disaster risk reduction stakeholders from national and local government, national training institutes and academia, nongovernmental organizations, UN and other relevant actors and experts.

The participants acknowledged the great demand for capacity development for implementation of the Sendai Framework, and identified gaps in the existing initiatives. The discussion was open and focused on all areas of capacity development for implementation of the Sendai Framework, including possible areas of priorities such as the use of risk information, risk-informed development plans and strategies, Sendai Framework monitoring, understanding the links between disaster risk reduction and

¹⁶Words Into Action Implementation Guides for Sendai Framework build upon the experience of the development and use of the similar “Words into Action” guide created during the Hyogo Framework for Action decade, which ran from 2005 to 2015. <http://bit.ly/2Ch6SRi>

development, among others. Participants called for regional consultations to further identify capacity development needs as well as to understand existing strengths and capacities.

Between July and November 2017, regional consultations were convened by the UNISDR Global Education and Training Institute (GETI) in collaboration with the UNISDR regional offices. The consultations brought together over 150 representatives of 38 Member States, 14 local government authorities and city networks, 14 UN and international organizations including from country teams, 12 nongovernmental organizations, 10 intergovernmental organizations, 7 academic and scientific organizations, and 4 private sector entities.

The two-day in-person consultations sought to understand the most urgent capacity development needs for Sendai Framework implementation and disaster risk sensitive development planning among countries. The consultation was designed to highlight gaps and opportunities, consult on the most appropriate solutions to address the evolving needs, and establish a way forward to support disaster risk reduction capacity development programming.

An instrument developed by UNISDR GETI for the consultation purpose included indicators selected from draft custom nationally determined indicators of the Sendai Framework Monitor to stimulate understanding of implementation requirements. In groups, participants discussed the capacity needs and obstacles to implementing the actions required to achieve the aspirations of the Sendai Framework. Through this process, participants understood the magnitude and scale of the task ahead of them to implement and report progress on the Sendai Framework.

The first day provided a facilitated understanding of the full dimensions of capacity development and identified critical or priority needs of UN Member States, as well as obstacles. The second day validated common principles, identified existing approaches, and proposed solutions and partners for sustainable capacity development. The outcomes of the consultation have been used as the basis for this Strategy.

The in-person consultations were complemented by online consultations undertaken primarily in November 2017 which sought additional national government, expert and stakeholder views on the obstacles, most urgent needs, principles, proposed approaches and partnerships for sustainable capacity development. The online consultations further validated and elaborated the priority areas identified during the in-person consultations.

Online consultations occurred in two formats: (i) a short online survey sent to targeted stakeholder groups such as the UNISDR Science and Technology Advisory Group (STAG), the Private Sector Alliance for Disaster Resilient Societies (ARISE) and the Global Network of Civil Society Organisations for Disaster Reduction (GNDR); (ii) a longer survey sent to additional national government representatives, capacity development experts and stakeholders involved with the capacity development needs of countries with whom follow-up calls for individual interviews were made.

The outcomes of the regional and online consultations have contributed to this Strategy, which will be presented and discussed in a global expert consultation in Geneva on 14-15 March 2018 with the participation of UN Member States, regional intergovernmental organizations involved in capacity development, members of the UN DRR focal point group, CADRI, STAG, the ARISE Board, the Global Risk Assessment Framework experts, and other relevant stakeholders including members of the Making

Cities Resilient Campaign Steering Committee and invited representatives from academia and national training institutes.

The global consultation on the strategy will bring together partners involved in drafting of the strategy, identify key potential partners for Strategy implementation and suggest a mechanism to manage the existing and potential future partnerships for coordinated action. In addition, the consultation will map-out Strategy implementation and monitoring and will aim to garner commitment for common action in order to determine next steps, including the establishment of mechanisms for partnership coordination.

Section 1: Understanding Capacity Development Obstacles & Challenges

The purpose of this section is to establish a context for the Strategy by highlighting existing challenges in achieving adequate reductions in global disaster risk vis-a-vis global disaster risk reduction efforts, explaining how gaps in capacity result in unmet potential, and identifying the most common and influential obstacles and constraints to national DRR capacity. This section helps to underscore the need for capacity development solutions that follow in subsequent sections.

Understanding the need for implementation of disaster risk reduction

Data reveals that the economic impacts of disaster events average between US\$250 and US\$300 billion per year.¹⁷ An average of 65,000 people killed by disasters each year, totalling over 1.6 million since 1990 and representing an annual average of 42 million ‘life years’ lost.¹⁸ And most importantly, we know that many - if not most - of these impacts can be addressed through concerted action at the global, regional, national, and local levels to understand and address the root causes of vulnerability and risk.

Testament to this final claim is the significant reduction in average annual mortality (global) from major disaster events that has been achieved during the past two decades. Progress made towards disaster risk reduction objectives set by the Hyogo Framework for Action (HFA, 2005-2015) and its predecessors, the Yokohama Strategy for a Safer World and the International Decade for Natural Disaster Reduction (IDNDR), have saved countless lives and billions of dollars in property, protected livelihoods and economies, and otherwise reduced suffering across the globe.¹⁹

Despite these achievements, significant disaster risk remains in all regions and all countries of the world, most acutely in those that are low- and middle-income.²⁰ Coupled with the exacerbating effects of climate change, increasing shifts towards urban living, social and economic inequality, and continued investment in hazard-prone areas, many countries are even finding that their progress towards controlling or reducing hazard risk has stagnated and even reversed despite their ongoing and concerted efforts to address it.

International mechanisms for strategic advice, coordination and partnership development for disaster risk reduction, such as the Global and Regional Platforms for Disaster Risk Reduction, and relevant international and regional and national forums for cooperation have been instrumental in the development of policies and strategies and the advancement of knowledge and mutual learning. Overall, the Hyogo Framework for Action has been an important instrument for raising public and institutional awareness, generating political commitment and focusing and catalysing actions by a wide range of stakeholders at all levels.²¹ The private sector and an increasing number of civil society

¹⁷ UNISDR. 2015. P. 40.

¹⁸ Ibid, P. 40.

¹⁹ UNISDR. 2015b. Paragraph 3.

²⁰ “Twenty-five years after UN Member States adopted the International Decade for Natural Disaster Reduction (IDNDR) and ten years after the adoption of the HFA, global disaster risk has not been reduced significantly. While improvements in disaster management have led to dramatic reductions in mortality in some countries, economic losses are now reaching an average of US\$250 billion to US\$300 billion each year.” UNISDR, 2015. P. 44.

²¹ UNISDR. 2015b. Paragraph 2.

organizations, as well as government ministries and offices that are not traditionally involved in disaster risk management activities, have recognized and acted to address global and national risk. The Sendai Framework for Disaster Risk Reduction gives each of these partners in the effort a clear understanding of where we need to go to achieve meaningful, lasting disaster resilience. The question that remains is: *Do we have the capacity – the knowledge, skills, and resources - to make that happen?*

Impact of capacity shortfalls on disaster risk reduction progress

We know that disaster risk reduction capacity is short of what is required, and without adequate capacity in place and ongoing mechanisms to ensure its development, it will be impossible to achieve targets set by international agreements like the Sendai Framework and those that preceded it.²² The HFA Words into Action prominently highlights the importance of capacity development by stating in its third paragraph that:

“Capacity-development is a central strategy for reducing disaster risk. Capacity development is needed to build and maintain the ability of people, organizations and societies to manage their risks successfully themselves. This requires not only training and specialized technical assistance, but also the strengthening of the capacities of communities and individuals to recognize and reduce risks in their localities. It includes sustainable technology transfer, information exchange, network development, management skills, professional linkages and other resources. Capacity development needs to be sustained through institutions that support capacity-building and capacity maintenance as permanent ongoing objectives.”²³

The Sendai Framework for Disaster Risk Reduction challenges all stakeholders, not just governments and development partners, to focus on establishing and increasing their capacity to manage their country’s disaster risk. Not one of the stated priorities or targets can be achieved unless capacity development issues and measures are made an integral part of the action agenda.²⁴

Evidence of what has resulted from nations’ and societies’ capacity shortfalls has emerged from the stories and statistics gathered over the ten years of analysis under the Hyogo Framework for Action (2005-2015). During this time, disasters continued to affect people, societies, and economies, killing over 700-thousand people and injuring over 1.4 million more. Over 23 million people lost their homes, and hundreds of millions were displaced at least temporarily. It is estimated that over 1.5 billion people were affected by disasters during this time, with those who are especially vulnerable (including women, children, the elderly, and others) to a disproportionate degree. Economic losses topped US\$1.4 trillion.²⁵

The management of disaster risk is a challenge not only for national offices of disaster management, offices of civil protection, or local and regional offices of emergency management. Disaster risk management – including its reduction – is the responsibility of each person, household, office, agency,

²² UNDP, 2010. P.1.

²³ UNISDR, 2007. P. 4.

²⁴ CADRI, 2011. P.6.

²⁵ UN News Service, 2015.

entity, and organization. While this point has been made clear in both policy and literature and is to a growing degree being accepted by individuals and organizations across all sectors, the associated challenge of developing the capacity required of each one of these individuals and organizations in order that they may perform the tasks and responsibilities expected of them, remains steadfast. As such, there can be no expectation of meaningful progress towards the Sendai Framework goals, or those of any disaster risk reduction effort, until nations and societies understand what capacity is needed to perform the actions required, what gaps there are between existing and required capacity, and what needs to be done to close those gaps.

Why the Strategy is Needed

Capacity development is a field that while stunted in relation to other aspects of international development²⁶ is nonetheless advancing in both its practice and professionalism. Most countries and a significant number of stakeholders are therefore beginning to better understand the dynamics and processes of capacity development, whether as a recipient, a provider, or a mix of both. However, although there exists widespread recognition that enhanced capacity development is needed to address Sendai Framework implementation, and for disaster risk reduction pursuits in general, measurable increases in stakeholder capacity are not occurring as quickly as hoped or intended.

There are multiple explanations behind progress shortfalls that range from a lack of understanding of what capacity is needed (to address the required tasks), to knowing how and having the resources available to implement necessary capacity development activities once requirements are known. Confounding these problems is the fact that the division of roles, responsibilities, and ownership of capacity development programmes are typically vague and may even be differently understood by various stakeholders, and when programmes do exist they are seldom coordinated with ongoing capacity development within the disaster risk reduction context and with other interrelated pursuits (e.g., Sustainable Development Goals and adaptation to climate change).²⁷ So pervasive is this problem, in fact, that capacity development efforts focused on disaster risk reduction are oftentimes not even classified as or considered as such even by those most directly associated with them.²⁸

Nations and societies require a means to improve the quantity, quality, and overall impact of capacity development conducted in support of implementation of disaster risk reduction programmes, whether to achieve the Sendai Framework targets or otherwise. There is a need for direction on a range of topics – from standardizing terminologies, principles, and concepts, to identifying approaches and best practices, and finally to enabling coordination, collaboration, and the sharing of information and lessons learned. Research on capacity development found that efforts are “more likely to be effective when [capacity development is] identified as a goal in the planning state and based on reviews of existing capacity and capacity needs and a consideration of the institutional and external contexts.”²⁹ This applies whether the project is focused on capacity development or some other pursuit (e.g., seismic

²⁶ Morgan, 2006. P.4.

²⁷ Hagelsteen and Becker, 2014. P. 94.

²⁸ GFDRR, 2016. P.8.

²⁹ GFDRR, 2016. P.9.

retrofit of buildings or construction of an emergency shelter). Capacity development activities need to be included in project design and budget, such as identifying which components should be marked as capacity development activities including any informal capacity development that is expected such as continual learning through implementation.

The Sendai Framework identifies the need for a more strategic approach to disaster risk reduction, which is highlighted in Paragraph 9:

“The gaps indicate a need to develop an action-oriented framework that Governments and relevant stakeholders can implement in a supportive and complementary manner, and which helps to identify disaster risks to be managed and guides investment to improve resilience.”

The development of capacity must align seamlessly with those efforts. The World Bank Global Facility for Disaster Reduction and Recovery (GFDRR) noted that this is not typically the case, however. A 2016 report describing World Bank risk-related activities found that, “despite the level of investment (on boosting the capacity of developing countries to better understand emerging disaster risks, reduce their vulnerabilities to natural hazards, and adapt to climate change), capacity building is often considered secondary to larger activities;” and that, “there is little systemic knowledge about the effectiveness and long-term impact of capacity building activities [...] within the broader disaster risk management (DRM) community.”³⁰

Linking Disaster Risk Reduction Capacity Development to Agenda 2030, The Paris Agreement, and Other Closely-Related Initiatives

Just as there are strong and direct linkages between the occurrence of major disasters, the existence of a changing global climate, and the challenges to sustainable development gains,^{31,32} there are strong and direct linkages between Disaster Risk Reduction (DRR), Climate Change Adaptation (CCA), and the Sustainable Development Goals (SDGs) efforts. Each of these policy goals aims to minimize human, structural, economic, and environmental harm through reductions in risk and vulnerability, and to establish long-term resilience. At the conceptual and theoretical levels, the associations, influences, and interdependencies that characterize the interrelationship between DRR, CCA, and SDGs are well-defined and documented.

It is therefore neither possible nor practical to approach capacity development in the disaster risk reduction context in any manner that fails to consider the parallels and influences that exist between such efforts and similar ones in pursuit of CCA and SDGs. The claims that “effective disaster risk management contributes to sustainable development,”³³ and that, “ensuring credible links, as

³⁰ GFDRR, 2016. P. 1.

³¹ “Ten years after the adoption of the Hyogo Framework for Action, disasters continue to undermine efforts to achieve sustainable development.” UNISDR, 2015b. Paragraph 10.

³² “Capacity development for disaster risk reduction is an important process to substantially reduce disaster losses, which threaten sustainable development and the achievement of the Millennium Development Goals.” Hagelsteen and Becker, 2014. P. 94.

³³ UNISDR, 2015b. Paragraph 3.

appropriate, between [DRR, CCA, and SDGs] will contribute to building resilience and achieving the global goal of eradicating poverty,”³⁴ are supported by the following statement drawn from the CADRI guide *Basics of Capacity Development for Disaster Risk Reduction*:³⁵

“The emphasis now given to capacity development for disaster risk reduction reflects broader recognition of its link to sustainable development. A capable and accountable state supported by an effective civil society and engaged private sector is recognized to be indispensable for achieving national development objectives. Without capable and viable local institutions, there is little that external resources can do alone to tackle poverty, reduce risk or to reduce country dependency on aid.”

Considerable progress has been made in achieving coordinated action to address these three broad policy goals, and where possible efforts have been made to initiate their integration across government and among other sectors to varying degrees. At the same time, because these three disciplines have until recently evolved largely independent of each other, in practice they are not often well-integrated despite the many synergistic benefits that stand to be gained. The resulting redundancies, gaps, inefficiencies, and at the most basic level, confusion, can significantly impact a country or community’s ability to achieve progress on any or all the three pursuits. Because policies and investments typically support DRR, CCA, or SDGs independently of each other, extensively-siloed structures exist, and this stands in stark contrast to the breadth of their interrelationships and the commonality of their outcomes.

To enhance progress and efficiency in all three areas, there remains an acute need to integrate DRR, CCA, and SDGs programmes and activities where possible and practicable, including in the development of technical and functional capacities. Capacity development for DRR must to the extent possible align, and if possible integrate, with those occurring in pursuit of CCA and SDGs. Stakeholders must understand the links that exist, as well as the influence their actions have on these parallel goals.

Obstacles and Challenges to Effective Capacity Development for Disaster Risk Reduction³⁶

Impact assessments following the 10-year period of global disaster risk reduction activities as guided by the Hyogo Framework for Action have indicated that nations’ efforts to establish requisite capabilities and capacities continue to fall short. These findings, which correspond to unrelenting and in many cases rising global hazard risk, have served as impetus for many of the Sendai Framework targets.

While the source of capacity gaps varies significantly by country and circumstance, participants involved in the consultative process identified a set of common yet significant obstacles and challenges they have encountered while pursuing enhanced DRR capacity. While many of the factors identified are consistent across all types of capacity development irrespective of sector or activity as indicated in the literature review, there are several that have particularly strong influence when considered in respect to disaster

³⁴ UNISDR, 2015b. Paragraph 11.

³⁵ CADRI, 2011. P. 7.

³⁶ For further details see Appendix 5

risk reduction. Awareness of each and all of these was considered a critical step in addressing capacity gaps and likewise drafting capacity development plans.

The following obstacles and challenges were identified:^{37,38}

- **Insufficient understanding or appreciation of DRR-specific capacity development needs**
The initial challenge many stakeholders confront, and likewise one of the principal drivers behind the drafting of this Strategy, is the fact that there exists insufficient understanding and appreciation of the capacities required to bring about disaster risk reduction and the methods that exist to build them. In other words, it is often the case that DRR capacity development does not occur because stakeholders don't know what to do, or they don't believe it to be necessary. A large part of the problem stems from the fact that most capacity development research focuses on general economic and social development needs and not on disaster risk management or risk reduction, and that there exists a continuing lack of understanding regarding the definition and scope of capacity development as a field and as an approach.³⁹ This has collectively led to a shortage of "robust, evidence-based guidance on how capacity for DRM can be generated at the national and local levels effectively".⁴⁰ At the same time, a lack of appreciation for the importance of disaster risk reduction capacity development activities has translated to insufficient dedication of dedicating human, financial, and other resources to such efforts, and has stymied efforts to develop concerted and coordinated capacity development plans.
- **Over-reliance on training and education**
Where capacity development for disaster risk reduction is occurring, there is an overwhelming emphasis on providing individuals with training and education while neglecting the organization-level and enabling environment needs and structures.^{41,42} Training and education are critical component of capacity development efforts in that they can help to raise awareness of key issues, impart the knowledge required to act appropriately and effectively, and enable appropriate technical and administrative skills. They are generally easy to design, develop, and conduct, recipients are typically willing and oftentimes highly motivated to participate, and positive results can be quickly achieved. However, excessive focus on the capacity of individuals impacts sustainability when staff turnover and attrition results in an immediate loss of institutional knowledge.
- **A lack of access to or existence of facilities, programmes, or resources to support awareness, knowledge, and skills**
While the research shows that most of disaster risk reduction capacity development efforts are focused on providing training and education, there is also a scarcity of facilities, programmes, or

³⁷ Also see Appendix 5

³⁸ For further details refer to Appendix 5

³⁹ Morgan, 2006. P.2.

⁴⁰ Few, 2015. P.9.

⁴¹ Hagelsteen and Becker, 2014. P.94.

⁴² Morgan, 2006. P.4.

resources equipped to support development of the awareness, knowledge, and skills required to achieve disaster risk reduction objectives. Without such facilities and programmes in place, DRR-relevant staff and stakeholders are unable to easily address their knowledge and skills gaps. This results in persistent and increasing reliance on international development organizations and donors for such needs, and likewise the extent to which end users can influence or direct their own education and training remains limited. Although a major source of these challenges is the shortage of accredited and quality-assured training programmes in the DRR Sector,⁴³ it is at times just a lack of materials in a language understood by stakeholders. It is also the case that capacity development project reports are not often published, and those that are commonly have the results omitted (thereby preventing peers from identifying good practices and lessons learned to incorporate them into their own efforts.)⁴⁴

- **Failing to provide access to or support for disaster risk reduction capacity development opportunities for staff that are not traditionally involved in Disaster Risk Management (DRM)**
Even where disaster risk reduction capacity development activities are being pursued, they are typically concentrated within and on the needs of those departments and agencies most closely affiliated with, responsible for, or focal point for governmental disaster risk management (e.g., national or local offices of emergency management). Other individuals, agencies, or organizations that do not play as obvious a role but are nonetheless critical, such as elected officials, other line ministries (e.g., finance, agriculture, education, national statistics) planning agencies or departments, humanitarian organizations, private sector entities, and others, are excluded from crucial capacity and capability gains. The same is often true of DRR policy and legislation that is too closely focused on the needs of the DRM system and on disaster response and recovery activities in lieu of approaching disaster risk reduction from a more comprehensive, integrated, and all-of-society vantage.
- **Insufficient availability of resources (Human, technical, financial, other)**
Competition for both financial and human resources is a persistent challenge in almost all disaster risk management matters, and the resourcing of capacity development efforts is no exception. Insufficient resources also extend to technologies, tools, equipment, information, data, and other resources. Without proper incentives or recognition of some future returns, there is little appetite to motivate investment in such resources by private sector entities and academic institutions.
- **Little or no local ownership of capacity development programmes and projects**
One of the most commonly-cited obstacles to disaster risk reduction capacity development is a lack of local ownership in the programmes themselves. It is a common criticism of all capacity development programmes that external partners and donors dominate program design, methods selection, identification of targets, and other aspects. When recipient community stakeholders are not involved throughout the entire project cycle, or do not feel that they are

⁴³ Hemstock, et.al., 2016. P. 16.

⁴⁴ USAID, 2010. P. 10.

influential or able to contribute to the process, acceptance and motivation both suffer. From an effectiveness standpoint, ownership is also important because efforts are less likely to target needs accurately and in fact often do no more than alleviate the inadequacies and constraints perceived by the donor or partner.⁴⁵

- **Insufficient focus on sub-national capacity**

An International Red Cross and Red Crescent Movement (IFRC) assessment of DRR capacity development needs found that efforts have largely ignored the sub-national levels of government (states, provinces, etc.) even as local government levels have seen an increase in attention. This “missing middle”⁴⁶ as it is called is found to be problematic given the leadership and coordination value of subnational government in driving a policy agenda like that of DRR and considering opportunities to integrate local and subnational programmes. Also, there are lost opportunities where capacities, policies, and procedures at the national and local level do not coincide or coordinate with those at the sub-national level.

- **A lack of standardized indicators for the evaluation of disaster risk reduction capacity development efforts**

Progress in the improvement and expansion of disaster risk reduction capacity development efforts is challenged by the fact that there are few tools by which programmes and practices may be assessed according to their impacts. As is often true with all capacity development projects, especially those funded or performed by external partners, reporting systems are much more likely to consider whether project goals have been met than whether the project had an impact on disaster risk reduction capacity. Another common problem is that reporting systems often limit the scope of their measures in such a way as to reinforce a very narrow view of capacity development.

- **Lack of general awareness and knowledge of risk drivers and the role stakeholders play in societal disaster risk reduction (including at the local level and among the public)**

A large component of capacity development efforts are guided by a common awareness of the need for such efforts, as well as their own awareness of how stakeholders’ own activities and the activities of others contribute to risk. For instance, if there exists insufficient public awareness of the importance of environmental buffers (e.g., coastal mangroves to absorb storm surges), there will not be a strong public call on government and other stakeholders to acquire the human and other resources to promote and protect such resources. There will also be a lack of outrage against those who act, legal or otherwise, that damages or destroys those DRR resources.⁴⁷ As is true in many respects, public funding and other public and private investment

⁴⁵ Oxford Policy management, 2010. P. 3.

⁴⁶ Few, 2015. P. 10.

⁴⁷ This issue was described by Raymond Burby in *Cooperating with Nature: Confronting Natural Hazards with Land Use Planning for Sustainable Communities* (1998) (<http://bit.ly/2BKLNPN>) where it was stated that, “local governments are responsible for approving development projects and building plans and they are the front-line of risk reduction in planning and building. However, many local governments, especially in smaller towns or poor districts, do not have adequate staff with the adequate technical capacity [to do so].”

on capacity development will closely track the public sentiment and the public and policy agendas. Citizens and stakeholders alike need to understand and appreciate the risks that exist and the opportunities that exist to address them to react appropriate to information on capacity development needs.

- **A focus on non-conflict areas**

Post-conflict areas and the people that live within them are highly vulnerable to the effects of natural hazards. The conflict is likely to have reduced or eliminated institutional knowledge on DRR practices, diverted funding for mitigation programmes, and severely weakened the vital enabling environment within which DRR efforts become possible. These areas are thus where disaster risk reduction capacity development needs are most comprehensive and most urgent. However, the focus of DRR capacity development efforts have thus far been on non-conflict areas⁴⁸. Even when efforts do focus on post-conflict areas, the fragility of the communities targeted and the institutions and organizations within them are typically less capable of taking a lead role in program planning, design, and conduct. This leads to an ongoing cycle of vulnerability and disaster that stand in the way of post-conflict recovery and development.⁴⁹

⁴⁸ Lucas, 2013. P. 10.; UNDG, 2017.

⁴⁹ Few, 2015. P. 10.

Section 2: Capacity Development in the Disaster Risk Reduction Context

The purpose of this section is to lay a common foundational basis for the concepts and methods that follow and to explain the actions that can support effective capacity development gains. Prevailing knowledge, research, and practical applications in capacity development as they pertain to disaster risk reduction (vis-à-vis the Sendai Framework) are presented, as are the foundational requirements of successful disaster risk reduction capacity development efforts (as identified and validated through the consultative process) and the six steps of a cyclical capacity development process. (What does an ideal capacity development intervention look like?)

Capacity Development in the DRR Context

Capacity development for disaster risk reduction as defined by the United Nations Development Programme (UNDP) is:

“a process through which the abilities of individuals, organizations, and societies to minimize vulnerabilities to disaster risks, to avoid (prevent) or to limit (mitigation and prepare for) the adverse impacts of hazards are obtained, strengthened, adapted, and maintained over time.”⁵⁰

Efforts have been expended to better understand and continually improve on the methods and processes through which organizations, nations, and whole societies achieve their social and economic goals. Capacity-focused efforts remain a central component of sustainable development including those provided or otherwise supported by the international development community⁵¹. While many of the basic tenets of capacity development activities ring true irrespective of subject or skill, there are aspects of practice that are unique to the disaster risk reduction context.

To begin, the need for development of disaster risk reduction capacity is by no means limited to mid- and lower-income countries, or to countries with unique economic or hazard vulnerabilities. All countries face ongoing challenges related to hazard risk and vulnerability, and likewise all countries stand to benefit from the guidance provided in this Strategy.

Another important distinction stems from the peculiarities of each nation’s risk profile, which serves to define the country’s capacity needs. Coupled with the differences that exist in how local and national governments organize to address hazard risk and disaster response and recovery, and the experience of civil society and the private sector in relation to those roles, there exist limits on the degree to which one country or community can copy the structures and success of another (‘isomorphic mimicry’)⁵². Risk is so closely tied to cultural, economic, and social factors and thus plans and programmes to address the capacity needs of disaster risk reduction efforts must be created in a manner that is cognizant and considerate of those conditions.

In recognition of these and other differentiating factors, it is important that a comprehensive and coordinated process be utilized in the planning, organization, and operationalization of capacity

⁵⁰ UNDP, 2011. P. 4.

⁵¹ United Nations Sustainable Development Knowledge Platform, 2017.

⁵² Krause, 2013. P.1.

development efforts – and that these efforts be tied as closely as possible to the processes and stakeholder arrangements that exist within the greater disaster risk reduction context. Capacity development for disaster risk reduction is required throughout the development continuum. At every juncture where disaster risk reduction solutions are posited, the capacity requirements and associated gaps must also be identified and addressed as an integral part of those processes. At the heart of this strategy is a recognition and understanding that these two processes are inseparable.

The stakeholders involved in capacity development for disaster risk reduction are a diverse group that spans from the most local to the global international level. All of society is affected by disaster risk and any person, organization, or entity may therefore be impacted by the consequences of disaster. The roles of each as provider and as recipient of capacity development stakeholder may differ, but involvement in the process is universal. Capacity development efforts must also be cognizant of this to ensure adequate coordination across communities of action and likewise to maximize the return on risk reduction investments and efforts to the greatest extent possible.

Capacity and Capacity Development Defined

The first step in building a capacity development strategy is establishing a common understanding of the foundational terminology. The Sendai Framework called for the update of the publication entitled “2009 UNISDR Terminology on Disaster Risk Reduction” by December 2016, and that the outcome of its work be submitted to the Assembly for its consideration and adoption.⁵³ The UN General Assembly Resolution A/RES/71/276 endorsed the recommendations on 2 February 2017 and updated the terminology as follows:

- **Capacity**
Capacity is defined in the DRR context to be, “the combination of all the strengths, attributes and resources available within an organization, community or society to manage and reduce disaster risks and strengthen resilience.”⁵⁴ What is considered in this context to be capacity is broad-reaching, and may include infrastructure, institutions, human knowledge and skills, and collective attributes such as social relationships, leadership and management. A report by Oxford Policy Management found that, in practice, many development stakeholders narrowly-define what is considered to be capacity, adding that, “capacity was seen mainly in terms of the skills, attitudes, knowledge, and competencies of individuals [...] this approach ignored the body of knowledge about the importance of institutions generally (both formal and informal) and of organizations in particular, in influencing the thinking and behaviour of individuals.”⁵⁵
- **Capacity Development**
Capacity Development is defined in the DRR context to be, “the process by which people, organizations and society systematically stimulate and develop their capacities over time to

⁵³ Sendai Framework, Paragraph 50.

⁵⁴ The UN General Assembly Resolution A/RES/71/276 endorsed the recommendations of the Open-ended Intergovernmental Expert Working Group on Indicators and Terminology Relating to Disaster Risk Reduction on 2 February 2017. United Nations General Assembly, 2017. Report of the Open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction.

⁵⁵ Oxford Policy Management, 2010. P. 1.

achieve social and economic goals.”⁵⁶ Capacity development differs from the more limited concept of capacity building in that it “extends the term of capacity-building to encompass all aspects of creating and sustaining capacity growth over time,” and it “involves learning and various types of training, but also continuous efforts to develop institutions, political awareness, financial resources, technology systems and the wider enabling environment.”⁵⁷ Capacity development attempts to identify and assess existing capacity and improve upon it rather than starting anew and thus efforts tend to be more inclusive in their management and likewise foster a higher degree of ownership.

- **Capacity Assessment**

Related to capacity development is capacity assessment, which is the process by which the capacity of a group, organization or society is reviewed against desired goals, where existing capacities are identified for maintenance or strengthening and capacity gaps are identified for further action.⁵⁸ It is pursuit of a better understanding of what capacities are needed, why they are needed, and who they are for.⁵⁹ This represents a major step in the capacity development process as discussed later in this chapter. Successful assessment of capacity is contingent on understanding the obstacles that inhibit people, governments, NGOs, IGOs, and other stakeholders from realizing their goals, and identifying those areas where enhancement of capacity will have the greatest potential to enable them to achieve measurable and sustainable results.

- **Disaster Risk Reduction**

“Disaster risk reduction is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development. [It] is the policy objective of disaster risk management, and its goals and objectives are defined in disaster risk reduction strategies and plans.”⁶⁰

Types and Levels of Capacity

Capacity development efforts generally target one or more of the following four capacity ‘domains’. The nature of the interventions themselves may be categorized as being functional or technical in their foci, and as being either soft or hard. Knowledge of these differentiations is key to being able to plan a suite of interventions that address capacity needs in a multifaceted and holistic manner, which has been identified as a driver for effectiveness. Finally, there are designations that characterize the span and

⁵⁶ United Nations General Assembly, 2017. P. 12.

⁵⁷ Oxford Policy Management, 2010. P. 1

⁵⁸ United Nations General Assembly, 2017. P. 12.

⁵⁹ CADRI, 2011. P. 12.

⁶⁰ United Nations General Assembly, 2017. P. 16

nature of influence that the capacity intervention has on the capacity development process, termed 'levels' of capacity. Each of these designations is listed and described⁶¹:

- **Institutional Strengthening and Development**

This refers to policies, systems, and processes that are established or exist to organize and manage development objectives, including disaster risk reduction. Interventions often include strategic planning or reform; policy dialogue; establishment of disaster risk reduction platforms, offices or strategies; legislative actions; decentralization initiatives; development of a national capacity development strategy or facility; organizational effectiveness measures; and others.

- **Leadership**

An expanded concept of leadership is used in the context of capacity development. While traditional leadership roles (as held by individuals or organizations) are a central and vital component, the establishment of leadership also refers to visioning and the building of competence and integrity. Leadership development programmes, partnership and coalition building, and identifying and supporting champions of change are all measures that support leadership capacity.

- **Knowledge**

Many (if not most) education- and training-based capacity development efforts focus on the building and enhancement of individuals' awareness and knowledge. Knowledge-focused capacity development efforts can also exist at the organizational level. Development of knowledge at the individual level can be supported through a combination of different methods and channels including formal classroom-based education and more informal methods such as social marketing, on-the-job learning, coaching, and mentoring. Actions at the organizational level typically support information gathering, sharing, and dissemination, such as with the creation of knowledge platforms, networks, and communities of practice, or the design and implementation knowledge management systems.

- **Accountability**

Accountability is an important component of a community's, country's, or society's disaster risk reduction capacity. By building accountability into systems, structures, and processes, stakeholders are individually and collectively able to establish and act on expectations, to monitor progress towards goals and objectives, and to learn from and adjust according to outcomes. Capacity development interventions focused on accountability include the creation or strengthening of public sector oversight and arbitration bodies, the creation of coalitions and networks, and the conduct of public information campaigns and town hall meetings.

A nation's or a society's capacity is made up of multiple "elements". To enable understanding of capacity needs and resources, and to support capacity development planning efforts, these elements have been grouped according to type and by the level or levels at which engagement exists. Consultation partners strongly recommended that capacity development planning seek a diverse range

⁶¹ CADRI, 2011. P.13-14.

of capacity elements⁶², which are generally characterized as *Functional or Technical*⁶³, and likewise *Hard or Soft*.

- **Functional Capacity**

Functional capacities are those that support planning, leadership, resource management, implementation, and monitoring and evaluation (to name a few) for disaster risk reduction measures. Functional capacities tend to be cross-cutting in this regard and exist irrespective of any associated sector or theme. This could support activities such as the development of disaster risk reduction policies, the mainstreaming of disaster risk reduction in development plans, or the establishment of coordination mechanisms to guide both disaster risk reduction activities and the capacity development needs to support them. UNDP identified five general categories of functional capacity that support disaster risk reduction, which include⁶⁴:

- The capacity to engage with stakeholders
- The capacity to assess a situation and define a vision and mandate
- The capacity to formulate policies and strategies
- The capacity to budget, manage, and implement
- The capacity to monitor and evaluate

- **Technical Capacity**

Unlike functional capacities, technical capacities are typically associated with a subject matter or professional expertise. Training to support technical capacity is cited as the most common form of capacity development,⁶⁵ and likewise most funding identified as directly supporting capacity development activities has pertained to technical training. Examples of technical capacities include *engineering, cartography and geographic information systems (GIS), and urban and regional planning*.

Capacity elements are also distinguished as ‘hard’ or ‘soft’, and oftentimes functional and technical capacities possess both hard and soft aspects.⁶⁶ :

- **Hard Capacities**

Hard capacities are those that are tangible and visible, and are therefore the easiest to conceptualize, to identify, and to measure and assess. Hard capacities may draw from both the technical and functional groupings, and may include hard skills, explicit and tacit knowledge and methodologies, organizational structures, systems, procedures, or policies,⁶⁷ to name a few.

⁶² Oxford Policy Management, 2010. P. 1.; Few, 2015. P. 11.

⁶³ The World Bank Global Facility for Disaster Reduction and Recovery (GFDRR) applies a slightly different categorization scheme, which includes: Technical (tools and infrastructures); Financial (investments); and Human (knowledge and skills).

⁶⁴ UNDP, 2009. P. 8-9.

⁶⁵ Few, 2015. P. 34.

⁶⁶ Morgan, 2006. P. 8.

⁶⁷ Lucas, 2013. P. 7.

- **Soft capacities**

Soft capacities are generally intangible and invisible, and are therefore more difficult to conceptualize, to identify, and to measure and assess. These include elements that are social or relational, including (for example): organizational culture, commitment, and values; leadership qualities; political aptitude; implicit knowledge and experience; learning; analysis; organizational adaptability and flexibility; commitment; and accountability.

There are three levels within an organization, a community, or a society where capacity exists, and likewise capacity development efforts target changes within one or more of these levels, which include:

- **The individual level**

This level focuses on the capacity of people, including their skills, knowledge, experience, and performance. The goal is to increase or improve personal performance. Capacity development occurs through training, education, performing (doing), coaching, mentoring, networking, and observation. It is promoted through incentives and by other means of motivating capacity development participants⁶⁸.

- **The organizational level**

This level includes the internal structures, policies, budgets, strategies, frameworks, arrangements, procedures, and other factors that dictate or otherwise influence an organization's ability to operate and achieve its objectives⁶⁹. It is where those at the individual level can put their collective skills and abilities together to achieve objectives. It is also where organizational leadership and engagement capabilities are developed.

- **The enabling environment**

The enabling environment is the "broad social system within which people and organizations function, [and includes] all the rules, laws, policies, power relations and social norms that govern civic engagement."⁷⁰ It is what makes disaster risk reduction activities, and the efforts to build capacity in support of them, accessible, acceptable, and accountable⁷¹, and is therefore essential. It is at the level of the enabling environment, sometimes referred to as the *systemic level*, that the "rules of the game"⁷² are determined, and where the overall scope of capacity development is established. It has been described as "a context that provides the prioritization and motivation to turn development of [disaster risk reduction] structures and skills into effective action."⁷³ Despite the perceived importance of a strong enabling environment, many capacity development efforts fail to address the associated needs.⁷⁴ Examples of actions that target this level include improvements to the policy frameworks that govern economic growth, financing, labour markets, the political context, policy, and legislative environment, class

⁶⁸ UNDG, 2017; UNDP, 2011; CADRI, 2011.

⁶⁹ UNDP, 2011. P.10.

⁷⁰ UNDP, 2011. P.10.

⁷¹ Güllkan, 2010.

⁷² CADRI, 2011. P.9.

⁷³ Few, 2015. P. 14

⁷⁴ Few, 2015. P. 11.

structures, and cultural aspects,⁷⁵ as well as to the support networks and culture through which stakeholder engagement occurs.

The Building Blocks of Effective Capacity Development Efforts

Capacity development efforts must be approached in a manner that is cognizant of and compliant with generally-accepted capacity development principles and is comprehensive and complete in its design. The literature review and consultative process uncovered several key guiding principles and foundational elements whose existence stakeholders consider to be highly correlated to successful outcomes of capacity development efforts. It was felt that each of the principles were important both individually and collectively,⁷⁶ and that evidence of all elements was required.

Driving Principles of Effective Capacity Development⁷⁷

- **Efforts are Guided by a Common Understanding**
The research, development, and practical application of capacity development for disaster risk reduction remain relatively new endeavours.^{78,79} As such, there exists only partial coherence between practitioners and programs, and acceptance of a common set of terms and concepts has yet to occur. Because professionalization in any field is time-intensive, emergence of a common global consensus is unlikely in the near term. Even in the absence of a common doctrine, however, individuals and organizations working together in pursuit of disaster risk reduction capacity development can improve their coordination and cooperation by identifying, agreeing upon, and adopting a common understanding and consistent use of terms and practices. In doing so, conceptual discrepancies and miscommunication will be minimized.
- **Efforts are Coherent Within and Between Levels (National, Sub-national, and Local)**
In order to avoid wasting of resources, duplication of efforts, and conflicting priorities, it is important that national-, sub-national, and local-level actors and processes are cognizant of programs and activities that are being planned and conducted in pursuit of disaster risk reduction capacity development. In this manner, it is possible to bridge capacity and communication gaps that commonly exist between national and local levels.⁸⁰
- **Efforts Pursue an “All-of-Society” Approach**
The development of disaster risk reduction is the concern of an entire society, and the interactions between the capacity development efforts of different individuals, entities, organizations, institutions, and sectors can drastically influence how risk reduction occurs and what successes may be achieved. Programming efforts should consider how their efforts may apply broadly across multiple stakeholders (whether populations, agencies or organizations, professional disciplines, or levels of government), and should consider how cross-sectoral

⁷⁵ UNDG, 2017.

⁷⁶ Principles need to be applied in all situations, and all principles need to be applied.

⁷⁷ Also see Appendix 4

⁷⁸ Hagelsteen and Burke, 2016. Pp. 43 and 44.

⁷⁹ Morgan, 2006. P.2.

⁸⁰ Few, 2015. P. 15.

combinations may result in synergistic movement towards common goals. The perspectives of both those with expertise or resources to provide capacity development and those who are vulnerable and affected by disasters are valuable not only in planning but also in terms of the longer-term relationships created. All stakeholders, including government, national partners, UN agencies, nongovernmental organizations and private sector entities, should be considered, and programming should seek ways to improve stakeholders' capacity to interact with each other.

- **Efforts are Goal-Driven, Impact-Focused, and Transformative**

Capacity development programming must identify clear objectives and expected outcomes that can be judged to make a lasting impact on coherent implementation of national DRR plans and policy, including the Sendai Framework and the 2030 Agenda. Goals need to address both the capacities themselves and the impact of their existence. Identification of effective assessment indicators through which progress and impact may be measured will be contingent on the existence and clarity of these targets. Stakeholders should consider both the outcome-level objectives (Capacity for why? Capacity for whom? Capacity for what) and the output level objectives (Capacity for how well to do what?) in their planning.⁸¹ Because capacity development is a process of change, goals and impacts must address a greater overall transformation wherein disaster risk reduction is improved or becomes possible over time rather than as a one-off intervention.

- **Efforts are Demand-driven and Needs-based**

Capacity development programming must align not just with what capacity assessments identify to be gaps or shortfalls, but also with what stakeholders and target audience desire. There are oftentimes many ways to achieve capacity, and the most effective of these will typically be that which is familiar to and preferred by the individuals and organizations for which change is sought. Capacity development programming must also consider what is needed in light of existing capacities and ongoing programmes. Neglecting to address needs according to these two factors will at best waste limited resources, but at worst result in the creation of parallel structures and counterproductive outcomes. Conformance with this standard requires both the knowledge of and adaptation to local conditions, beginning with identification of the requirements and performance expectations of the individuals or organizations supported.⁸² This includes consideration of cross-sector issues including gender, marginalization, and economic inequality. A well-planned capacity assessment that enables identification of both demands and needs is a critical tool.

- **Efforts are Strategic and Sustainable**

Capacity development programming must support the strategic implementation of national and

⁸¹ UNDG, 2017. P.10.

⁸² CADRI, 2011.

sub-regional policy and programming,⁸³ and do so in a manner that promotes long-term sustainable results. Rather than presenting as an afterthought of disaster risk management policy pursuits, or as a stand-alone measure, it is most effective when embedded in strategy formulation.⁸⁴ It should be integrated systematically in programming, starting from the analysis of needs through implementation, operations, and monitoring and evaluation, avoiding insofar as possible the emergence of parallel structures and mechanisms. Where integration of disaster risk reduction, sustainable development, and climate change adaptation has been achieved, capacity development programming should conform to those efforts, and speak to those partners, to the extent possible. While short-term results are recognized for their importance both in terms of improving lives and building motivation, it is important that efforts seek longer-term results that enable lives to be improved long after any program or project has ended. Interventions may be scheduled in such a way as to alleviate pressure to show visible results without undermining longer-term capacity gains.⁸⁵

- **Efforts are Nationally-Owned and Led**

Development partners and international organizations have committed to promoting national ownership for development programmes, and this extends to the capacity development function. Programming for such efforts must aim to be convened, organized or co-organized, funded or cost-shared, and directed by internal governmental or community institutions if they are to be relevant, effective, and sustainable. Management control should exist at the level that is most appropriate for the impacts that are sought, whether national, sub-national, or local. Assurance at every juncture along the capacity development cycle that efforts will remain stakeholder-informed and, to the extent possible, managed, is central to the concept of national ownership. This should be apparent even where such processes are heavily-supported by the international development community. Such commitments cannot be imposed from the outside but must occur organically. As such, deliberate design that ensures programming is needs-based and demand driven is critical.

- **Efforts are Value-Added**

Capacity development programming should add value, avoid duplication and aim for coherent implementation. Value should be measured both in terms of sustainable capacity that is created and disaster risk reduction that is achieved. This requires a more “holistic DRR-influenced approach to [disaster risk management] capacity” that requires attention be given to “understanding and planning for long-term changes in risk; moving beyond a focus on short-term emergency management to capacity in disaster prevention, mitigation and long-term recovery; prioritizing the reduction of vulnerability; targeting the needs of vulnerable groups;

⁸³ E.g., implementation of national and local disaster risk reduction plans and policies, Sustainable Development Goals, the Sendai Framework for Disaster Risk Reduction, the Paris Agreement on climate change, sustainable economic development)

⁸⁴ CADRI, 2011.

⁸⁵ Few, 2015. P15.

and addressing gender inequalities in both vulnerability and capacity.”⁸⁶

- **Efforts are Practical, Replicable, and Localized**

Planners may wish to pursue an ideal level of capacity that, if attained, could drastically reduce or even eliminate risk. However, if such targets do not account for the motivations, resources, and capabilities of the stakeholders involved (both recipients and providers), such goals will not be practical, including in terms of project timeframes. Capacity development programming must also consider whether their interventions are understood and relevant in local languages and the local context, and whether it is possible for governmental and other affiliated partners to replicate, adapt, and adopt the methods to meet their needs. Approaches should truly aim to develop sustainable individual, organizational, and enabling environment capacity, rather than typifying “fly-in, fly-out” approaches.

- **Efforts Foster Partnerships**

Capacity development programming must be conducted in a manner that enables the identification and engagement of appropriate and viable partners drawn from all appropriate sectors (public, private, and civil society organizations) and levels. Methods and practices that are employed should be based on partners’ existing capabilities, identified needs, and organizational objectives, with the aim of enhancing in-country ownership and sustainability. It is important that partners have a clear and significant role in not only program implementation but also design to increase the likelihood that measures are appropriate and effective.

- **Efforts are Standard-Conformant or Standard-Setting**

Without standards, it is difficult for those involved in disaster risk reduction to understand that capacity development is needed. Where standards exist, whether based on competencies or other measures, capacity development programming should assess needs accordingly and aid in a manner that addresses gaps. Where required, programming partners should identify or develop and apply quality standards for projects or interventions that enable the measurement of the quality of progress and results prior to implementation and not the other way around.

- **Efforts Employ a Mix of Activities across Multiple Levels and Timeframes**

Traditional capacity development has favoured classroom-based approaches, and while these are effective they alone limit potential gains. Capacity development can achieve much greater and more sustainable impacts when efforts are varied, do not focus solely on one level (individual, organizational, and enabling environment), and address a range of timeframes. They should be appreciative of the interrelationships that exist between the individual, organizational, and enabling environment levels, and ensure a complementarity of actions that fosters change. Planning needs to have a strategic basis and employ a combination of complementary activities beyond the provision of training and education. Targeted activities can enable engagement across the short, medium, and longer-term timeframes, which ensures both rapid results and sustainable impacts, which together help to keep partners engaged and

⁸⁶ Few, 2015. P15.

motivated. The key to all of this is assurance that efforts are not fully-independent projects but rather components of a single, coordinated process.⁸⁷

- **Efforts Strengthen Knowledge Frameworks**

Capacity development programming should provide opportunities to capture, assess, translate, transfer, and broker knowledge to foster innovation.

Foundational Elements of Effective Capacity Development

Several elements that are vital to any disaster risk reduction capacity development effort have been identified through the literature review and consultative process. While most of these are indicative of a strong supportive environment, they are influential at the individual and organizational levels as well.

- **Financial Resources**

Leaders must commit to supporting capacity development not only through their leadership and authority, but also through their willingness to provide or encourage dedicated funding. Without the expectation of financial support, capacity development is not possible.

- **Political Support**

Capacity is most likely to be both developed and effectively utilized where there exists strong political ownership and commitment at the highest levels of authority. Organizations and societies are both driven by policy, rules, and norms, and individuals are likely to follow the example of their leaders. Support provided by elected officials and other community leaders sets the tone and establishes the culture. On the other hand, a lack of support can have a detrimental impact on the ability to identify and recruit project champions and likewise to encourage participation.

- **Incentives**

All stakeholders, whether traditional recipients or providers of capacity development efforts (or both) need to be motivated by a desire to effect positive outcomes through change. This requires an accurate understanding of what is required and on what basis. Where motivation is weak or does not exist, incentives can be used. Incentives can be used to increase motivation factors that are either intrinsic (e.g., a desire to: feel safe, gain acceptance, address corruption, provide a sense of order, achieve independence) or extrinsic (e.g., a desire to receive: financial compensation, qualification for employment, a promotion, an award).

- **A Supportive Culture**

Capacity development efforts cannot succeed unless they are being provided within an environment that understands and supports their value. This is addressed in the enabling environment, but it is also in and of itself a critical element without which success and

⁸⁷ GFDRR, 2016.

sustainability of any effort at any level is unlikely.

- **Existing Structures and Mechanisms**

Capacity development initiatives should not only account for but should also be based on countries' national development policies, strategies, governance structures and mechanisms. Programs and projects that are donor-supported should therefore coincide with primary development processes and reinforce the existing policy framework and reform processes.

- **Relevant and Valid Information**

Planning and implementation of capacity development relies on the accurate input and analysis of contextual and operational information. It must remain up-to-date, relevant, and accessible to support informed decision-making.

- **Flexibility and Adaptability**

Capacity development planning and design efforts need to ensure there exists a high degree of flexibility to accommodate a shifting operational context (e.g., political, organizational), changing needs, and differences that exist between stakeholders. Rigid processes and strategies will pose a challenge to programmes that aspire to be both demand-driven and responsive to beneficiaries' needs.

- **Complementarity**

Efforts need to be knowledgeable of existing and previous activities and likewise must build upon those issues wherever possible. Those involved in programming need to establish whether stakeholders have participated in activities that are relevant to what is planned and incorporate that information into project design.

- **Innovation**

Business as usual cannot sustain capacity development efforts. Staying abreast of human and technological innovations and opportunities to innovate approaches to capacity development should be considered and explored. Innovations may also include new use of existing or traditional knowledge.

The Capacity Development Process – a 'Theory of Change'

A *Theory of Change* is a method of planning that helps to explain why a desired change is needed, and how the change should be expected to occur in a particular context. It is structured such that desired targets and goals are established early in the planning process, thereby allowing meaningful targets, including outputs, outcomes, and impacts, to be set. In the absence of a common and effective system, which is not only widely accepted by stakeholders, but also integrated into their planning processes, coordinated action will be difficult to achieve.

The Capacity Development Strategy to Support Implementation of the Sendai Framework Disaster Risk Reduction provides one such avenue for change, namely *improvement from an existing level of*

inadequate capacity to one which is adequate and effective. It allows stakeholders to answer the following questions:⁸⁸

- *Whose capacities do we need to develop?*
- *To what end do we need to develop this capacity?*
- *What kinds of capacities need to be developed for this?*
- *What will be their purpose?*
- *How do we measure and monitor these capacities and the results they are meant to achieve?*

It is recommended that any entity engaging in an activity to support disaster risk reduction in pursuit of the Sendai Framework for Disaster Risk Reduction targets and indicators, whether directly related to capacity development or not, perform the following six-step process during planning.

Step 1: Stakeholder Engagement

The Sendai Framework calls for “a broader and a more people-centred preventive approach to disaster risk,”⁸⁹ because the community of stakeholders engaged in or otherwise affected by disaster risk reduction is all-encompassing. Everyone and every entity is affected by risk, and therefore each of these stands to benefit from its reduction. Disaster risk reduction is an endeavour for which efficiency and effectiveness are contingent on efforts not only addressing all-hazards, but also all sectors and stakeholders, and therefore it – and the capacity development efforts to enable it - must each be inclusive and accessible.

Each project will differ with regards to what people, organizations, and communities are influenced or affected by it. Planning for capacity development should begin, not end, with engagement of those who stand to be affected in some manner⁹⁰ (as recipient, contributor, provider, or otherwise), and it is contingent on programming staff to understand what that means for their project or endeavour. This is not a simple task, yet it is critical and thus necessary because:

1. It fosters the commitment and active participation of leaders and key players
2. It creates buy-in, a common understanding, and a sense of ownership (thereby reducing resistance and antagonism)
3. It calibrates assumptions and enhances the accuracy of assessments
4. It helps to validate targets
5. It increases the appropriateness and acceptability of interventions
6. It establishes accountability, transparency, complementarity, and sustainability

The aim of this first step is to initiate the relationships and the dialogue that will inform and resource the project, and perhaps form the basis of partnerships that support implementation, monitoring, and evaluation. It also helps planners to better understand who the key actors are, and what influence they have within and outside their area of influence. While there are common targets for engagement at the international, national, local, and nongovernmental and private sector levels, it is also critical that

⁸⁸ Also see Appendix 3

⁸⁹ UNISDR, 2015b. Paragraph 7.

⁹⁰ UNDP, 2009.

engagement occur or be sought even with those relevant groups that are weak or have very little representational capacity.⁹¹

Stakeholder engagement typically involves the following three activities:

1. A preliminary assessment of possible capacity development needs, and identification of any informal or formal political social or political dimensions⁹²
2. Mapping of all key stakeholders and relevant actors (including those with need, resources, expertise, and influence)⁹³, and the relationships and dependencies that exist between them⁹⁴
3. Identification of strategic partners

Step 2: Capacity Needs Assessment

Capacity development interventions must be based on actual assessed needs and not just on desired output or outcomes. It is through the comparison of existing and desired capacities, within a unique local context, that capacity development interventions take form. Research has found that such assessments are often conducted too late in the process to be effective, and sometimes not at all, with the result being reduced impacts and unintended outcomes.⁹⁵ In order to ensure that capacity development programmes are addressing a real problem, and are realistic in terms of their goals and timelines, planners first need to answer the following questions:

- What capacity development efforts have taken place, are ongoing, or are planned?
- How much capacity already exists, what is that capacity, and what changes are already happening?
- How ready for change are targeted stakeholders, as based on their motivations and constraints, and what do they hope to achieve with regards to disaster risk reduction (including their role in making that possible)?
- What is the local political, social, cultural, economic, physical, and environmental context into which interventions will be introduced?⁹⁶

In doing so, it will be possible to determine with greater accuracy the following points of reference which together form the foundation of planning and subsequent assessment baseline:⁹⁷

- Why capacity development is needed
- What capacity development is needed
- Who will participate in and/or benefit from capacity development

⁹¹ UNDG, 2017.

⁹² LenCD, n/d.

⁹³ CADRI, 2011.

⁹⁴ Hegelsteen and Becker, 2014.

⁹⁵ Few, P.14.

⁹⁶ Hegelsteen and Becker, 2014.

⁹⁷ CADRI, 2011.

A capacity assessment typically involves three steps:⁹⁸

1. Mobilizing actors and designing the capacity assessment
2. Conducting the capacity assessment
3. Assessing and interpreting the results

An effective capacity needs assessment considers a broad range of perspectives and experiences to ensure a ‘one-size-fits-all’ approach is avoided. Even within the same geographic area, it is possible for there to be differences in capacity among stakeholder groups, and patterns of capacity or the lack thereof. The capacity needs assessment articulates capacities, gaps, and points of entry (for capacity development intervention) at each of the three levels (individual, organizational, and enabling environment), seeks to understand the cause and impact of such gaps, and sets the stage for the identification of effective interventions. Finally, it provides the initial indicators by which progress is measured in both process and outcome evaluations to follow.

Resources to support capacity assessment include:

- Asian Development Bank. 2008. Capacity Assessment and Capacity Development in a Sector Context Tool Kit. <http://bit.ly/2jOu3ul>.
- Japan International Cooperation Agency (JICA). 2008. Capacity Assessment Handbook: Project Management for Realizing Capacity Development. <http://bit.ly/2BJCwr9>.
- LenCD. N/d. How to Assess Existing Capacity and Define Capacity Needs. <http://bit.ly/2BznHGO>.
- UN Development Group. 2008. UNDG Capacity Assessment Methodology: User Guide for National Capacity Development. <http://bit.ly/2zPcUrz>.
- UNDP. 2008. The UNDP Capacity Assessment Methodology <http://bit.ly/2Anrg3g>
- UNDP. 2008. The UNDP Capacity Measurement Framework <http://bit.ly/2i3aePx>

Step 3: Defining the Intervention

With stakeholders engaged and a needs assessment in hand, planning staff are prepared to design and develop the intervention(s) required. This could be in the form of capacity development plan. It is important that those involved in planning draw from the same representational community that was involved in the assessment process, and that a mix of engagement techniques targeting multiple levels of capacity (individual, organizational, and enabling environment) be considered. Efforts will ideally follow a timeline that allows for both short-term ‘quick wins’ and more heavily-impactful and perhaps more complex and protracted methods. An approach that sets forth explicit prioritization by both impact and order (e.g., *immediate, medium-term, and long-term*) will improve the dedication of resources and improve alignment with other policy directives (e.g., *2030 Agenda and Paris Agreement*). Any interventions should link to targets and indicators, and there must be an exit strategy.

Interventions typically focus on developing one or more of the following capacity elements:⁹⁹

⁹⁸ UNDP, 2011; UNDP, 2009.

⁹⁹ UNDP, 2011.

1. Institutional Arrangements

Institutional arrangements include the policies, practices and systems that allow for effective functioning of an organization or group. These may include ‘hard’ rules such as laws or the terms of a contract, or ‘soft’ rules like codes of conduct or generally accepted values. To better understand institutional arrangements, think of the rules that govern a sports game. These tend to be a combination of formal written rules, for example on what constitutes a goal, and unwritten codes of conduct, such as good sportsmanship.

2. Leadership

Leadership is the ability to influence, inspire and motivate others to achieve or even go beyond their goals. It is also the ability to anticipate and respond to change. Leadership is not necessarily synonymous with a position of authority; it can also be informal and be held at many levels. Although leadership is most commonly associated with an individual leader, from a village elder to a country’s prime minister, it also exists within the enabling environment and at the organizational level. Think of a government unit that takes the lead in pushing for public administration reform, or of large social movements that bring about change at the more systemic level.

3. Knowledge

Knowledge, or ‘literally’ what people know, underpins their capacities and hence capacity development. Seen from the perspective of our three levels (identified above), knowledge has traditionally been fostered at the individual level, mostly through education. But it can also be created and shared within an organization, such as through on-the-job training or even outside a formal organizational setting through general life experience and supported through an enabling environment of effective educational systems and policies.

4. Accountability

Accountability exists when rights holders can make duty bearers deliver on their obligations. From a capacity development perspective, the focus is on the interface between public service providers and its clients or service providers and oversight bodies. More specifically, it is about the willingness and abilities of public institutions to put in place systems and mechanisms to engage citizen groups, capture and utilize their feedback as well as the capacities of the latter to make use of such platforms. Accountability also refers to establishing an understanding of who will do what, who will ensure it gets done, and what will the consequences be if it doesn’t. It should flow both upward and downward through clearly stated goals and responsibilities.

Through the development of these and other capacity elements, capacity development efforts will ideally result in the production of actual capacity, considered an ‘output’ of the intervention. Through these capacity outputs, it goes to reason that beneficiaries will be equipped to initiate actions, which are the outcome of the capacity development efforts. And from these outcomes, measurable impacts may be noted. The literature review noted five distinct capacities that are

relevant to achievement of disaster risk reduction targets and goals per the Sendai Framework, including:¹⁰⁰

- 1. Capacities for engagement**
Capacities of relevant individuals and organizations to engage proactively and constructively with one another to identify, assess, and manage disaster risk.
- 2. Capacities to generate, access and use information and knowledge**
Capacities of individuals and organizations to research, acquire, communicate, educate and make use of pertinent information to be able to identify and assess hazard risk and analyse and implement risk reduction opportunities.
- 3. Capacities for policy and legislation development**
Capacities of individuals and organizations to plan and develop policy and legislation, including strategies and plans, that support or otherwise affect disaster risk reduction.
- 4. Capacities for management and implementation**
Capacities of individuals and organizations to enact disaster risk reduction policies, plans, strategies and/or regulatory decisions, and plan and execute relevant sustainable risk management actions and solutions.
- 5. Capacities to monitor and evaluate**
Capacities of individuals and organizations to effectively monitor and evaluate project and/or program achievements against expected results and to provide feedback for learning, adaptive management and suggesting adjustments to the course of action if necessary.

Interventions should seek to strategically integrate with ongoing and completed capacity development efforts, especially those that have engaged directly with targeted stakeholders. Recognition of and building upon such efforts allows for the benefit of lessons learned and best practices, especially in light of stakeholder motivation built through positive outcomes and celebrated successes.

A good plan of intervention includes the following:¹⁰¹

1. Identification and formulation of pathways to capacity development, based on evidence and tested approaches
2. Identification and formulation of capacity development goals
3. Integration of strategic partnerships and establishment of a division of labour

Step 4: Building Partnerships for Implementation of Capacity Development

Capacity development implementation can be strengthened dramatically through the building of partnerships. Implementation partners may have a broad range of benefits to offer, including credibility, access, human and financial resources, expertise, and more. Partners also stand to benefit

¹⁰⁰ Adapted from Global Environmental Facility, 2010. P.8.

¹⁰¹ UNDG, 2017.

themselves, and in fact the motivations for partnership are greatest when such conditions exist. It is important that clear and mutually acceptable roles and responsibilities are established for all partners, and the partnership must in no way violate the guiding principles or undermine the project goals.

Hagelsteen and Burke identified a set of questions planners can ask when assessing partnership opportunities. These include:

- Are the drivers (motives) for partnering on the part of different actors clear?
- Is the purpose of the partnership clear?
- Do the partners have a written agreement, and if so, what does it include?
- Are the benefits and risks of collaborating articulated?
- How is accountability of the partners described?
- What are the provisions for building, maintaining, reviewing and evaluating the partnership's impact and collaboration process?
- Is there a clear project management structure and operating procedures with timetables?
- Do the terms of reference consider both technical and softer capacity development elements?

The type of service provider or partner to engage depends on the task at hand, the target group, complexity of the task and the coverage area.¹⁰² Considerations for such decisions might include the following criteria:

- What relationship does the partner have with the target audience? Are they considered credible, and can they organize or mobilize that community?
- Will the partnership be cost-effective?
- Is the partner likely to stay engaged in the project, and do they have the capability to foster project scalability?
- Does the partner possess knowledge or skills relevant to the identified capacity needs?
- Does the partner have the resources, systems, and infrastructure needed to support implementation?
- Does the partner have relationships with key networks, decision-makers, or policy makers?
- Does the partner have any political clout, and are they considered politically neutral?

Step 5: Implementation of Capacity Development Efforts

Implementation partners can begin to address capacity gaps once the design of a needs-based, demand-driven intervention program has been completed. The implementation effort should begin and remain flexible to adapt as conditions and needs change as dictated by monitoring and process evaluation.

Recipient stakeholders' interface with implementation efforts should be through a known and trusted source, at least in the early stages of the process. Research on implementation by the United Nations Development Program found that where internal and external partners were involved, implementation that was managed through national systems and processes rather than through the parallel systems of

¹⁰² UNDP, 2011.

external partners, chances for sustainability were considerably improved.¹⁰³ More detailed discussion of this issue is in Section 4 and Section 5.

Step 6: Monitoring and Evaluation

Monitoring and evaluation is a vital yet largely-undervalued part of capacity development.¹⁰⁴ It is conducted not only to ensure implementation partners are progressing towards their intended goals, and to ensure those goals are resulting in the changes required to meet capacity needs – it also helps in the identification of and accommodation for unintended consequences. For this reason, evaluation must not be limited to the completion of implementation efforts, as it is too late to redirect if things do not occur or progress as expected once this point has been reached.

Monitoring and evaluation efforts must be part of the implementation plan and should address both the process and its impact. Evaluation efforts can look at several different factors that help the implementation team to better understand how they are doing, such as whether planning assumptions are proving valid, whether the foundational principles are being adhered to, or whether progress towards the meeting of target indicators has resulted (and if so, the degree to which it has).

Whether planned as a continuous monitoring effort or a series of periodic evaluations, there must exist measures of performance (indicators) as well as standard protocols to guide the process, data systems to collect what is found, authority to carry out the tasks required, and access to necessary human and financial resources. There are three foci of assessment efforts that together provide a full picture of project or program effectiveness, including:¹⁰⁵

- Output (what capacity has been produced or provided)
- Outcome (what changes in performance have occurred because of capacity improvements)
- Impact (how has disaster risk been reduced or otherwise affected)

Monitoring and evaluation are pointless in the absence of an effective strategy to communicate and report on findings. Consultation participants noted that the body of knowledge on disaster risk reduction capacity development was stunted by a lack of published or otherwise available project reports. Moreover, in the absence of a commonly-adopted set of quality standards, planners need to develop their own.

Monitoring and evaluation plans should consider:¹⁰⁶

1. What will be monitored and evaluated
2. What processes will be employed?
3. How, when, how often, and by whom will monitoring and evaluation occur?
4. Which monitoring, evaluation, and learning approaches are described?
5. Are there dedicated resources for monitoring evaluation and learning activities?

¹⁰³ UNDP, 2011.

¹⁰⁴ Hegelsteen and Becker, 2016.

¹⁰⁵ undg, 2017.

¹⁰⁶ Hegelsteen and Burke, 2016.

6. Will a mixture of quantitative and qualitative methods be used?
7. Who is responsible for project reporting – to whom, how often, and in what language?
8. How are the lessons learned assessed, documented, shared, and put into practice?

Tools and resources that can be used to guide monitoring and evaluation planning and conduct include:

- The Capacity Development Scorecard. In *A Framework to Monitor Capacity Development Initiatives*. Global Environmental Facility (GEF). <http://bit.ly/2isXBRS>.
- The Capacity Development Results Framework. World Bank. <http://bit.ly/2By2VrA>

Section 3: Action Areas for Capacity Development for DRR

This section represents the core of the strategy. Areas of action and attention with notable importance and influence on the process and/or the outcome of disaster risk reduction capacity development efforts are presented. Generalized approaches that have been extracted from the knowledge, practice, and experience of consultation participants, and through the literature review process, are provided, as are opportunities for future action, innovation, and/or partnership. For each issue, a list of possible actions, activities, and interventions that may be considered by each stakeholder in their efforts to address the specific capacity need are also provided. The purpose of this section is to communicate the full scope of issues and concerns likely to be encountered (and which therefore require attention) thereby providing a toolbox with which they may be approached and ultimately addressed. Partners are encouraged to determine their areas of focus for capacity development services for member states.

Priority areas identified by consultation participants and through the literature review have been grouped according to six (6) areas of action, including:

- 1. Developing and Strengthening Disaster Risk Reduction Fundamentals*
- 2. Institutionalizing Disaster Risk Reduction Capacity*
- 3. Sharing and Using Risk Information Before and After Disasters*
- 4. Establishing Collaborative Action for Disaster Risk Reduction at the National and Local Levels*
- 5. Strengthening External Support Mechanisms*
- 6. Advancing and Expanding Disaster Risk Reduction Capabilities*

This list would change with time, with gradual enhancement of capacities, and as new needs, and corresponding actions, arise. It therefore also represents a mix of broad and narrow needs, currently identified with the highest priority.

1. Developing and Strengthening Disaster Risk Reduction Fundamentals

Disaster risk reduction is, as the name suggests, a risk-based endeavour. As such, any capacity to conduct the required activities and make relevant decisions are each contingent on the existence of accurate and actionable data and information, the knowledge of how to use that data and information for planning purposes, and the ability to link it all back to the Sendai Framework goals and targets that the collective global risk experience have produced. The following four high-level topics apply specifically within this area of action:

1.1 Ensuring Use of Loss and Risk Information

Priority 1 of the Sendai Framework (“Understanding Risk”) underpins the important actions required for full implementation of all subsequent Sendai Framework Priorities. It is a precursor to the assurance that policy, planning, and investment are risk-informed in a manner that supports a resilient society. The Sendai Framework articulates the need for improved understanding of disaster risk in all aspects, including exposure, vulnerability, mechanisms for likelihood or consequence reduction, among others. Achievement of disaster risk reduction targets is fully-contingent on the development of capacities that support a full understanding of risk not only among the traditional disaster risk reduction community, but also throughout government and society given the integrated nature of disaster risk reduction,

climate change adaptation, and sustainable development. Capacities to collect, understand and use disaster loss and risk information are therefore requisite.

The following actions have been identified:

- Strengthen the knowledge and skills to **collect, understand and use risk information** at all levels, and among all relevant stakeholders to: conduct risk assessment; understand the difference between damage, economic losses, and recovery needs; understand risk in all its facets: hazard, exposure, vulnerability and capacities; understand extensive and intensive risk baselines on a national level, but with locally-relevant and useful granularity; understand risk data and its application for risk-informed development planning and other relevant areas, e.g. enforcement of building codes, urban planning.
- Increase the appreciation and understanding of risk data and associated capacity needs among management and staff at **Local and National Statistics Offices**.
- **Create and foster partnerships** among stakeholder communities that possess skills, knowledge, access, or other capacity to enhance the coverage, depth, and accuracy of risk assessments.
- Institutionalize existing or newly-developed **standardized tools and methodologies** that enable accurate and relevant calculation of the financial costs and economic impacts of disasters, and ensure the requisite procedures, policies, technologies, skills, and knowledge are in developed accordingly.
- Institute mechanisms, practices, platforms, and exchanges that help to increase the **sharing of risk data and information** relevant to capacity assessment and sustainable development at the regional, sub-regional, and national levels, and among relevant sectors and groups including the insurance industry and civil society organizations.
- Increase the availability of **georeferenced risk data**.
- Place focus on increasing the collecting and exchange of data and information on **hydrological and meteorological risk as well as climate change scenarios**.

1.2 Disaster Risk-Informed Development Plans

Sendai Framework Target E, which shares indicators with Sustainable Development Goals 1, 11 and 13, calls for a substantial increase in the number of countries with national and local disaster risk reduction strategies by 2020. Progress towards this target will be highly contingent on integration of disaster risk reduction and sustainable development, but also requires a significant expansion in the scope of stakeholders targeted by disaster risk reduction capacity development efforts, as well as an increased focus on transformational and inclusive planning for effective and sustainable development in risk-related capacity development programmes.

The following actions have been identified:

- Identify and address **functional capacity needs** related to monitoring and evaluation, results-based management, and results-based planning.

- Prioritize **national and sub-national training** programmes focused on integrating understanding of **local needs** (and the plans that exist to address them) that target disaster management authorities as well as representatives from all other relevant sectors.
- **Build upon existing mechanisms:** Build capacity for risk-informed development on existing mechanisms that have a country- or community-specific frame; Coordinate interventions and incorporate relevant standards of practice, information, and methods for planning **inclusiveness** (e.g., persons with disabilities, women, vulnerable groups) that may be drawn from existing sustainable development efforts.
- Incorporate **government-endorsed targets and timeframes** into development plans that address capacity development needs as they align with project implementation goals, including translation of capacity development action plans into projects.
- Promote expanded access to **accredited training** to ensure that sufficient capacity exists to support the creation of quality, sustainable, and accountable local and national disaster risk reduction strategies.
- Ensure that **resources** to support disaster risk reduction capacity that coincide with development activities are adequately accounted for in national and local budgets.
- Increase engagement with the **Ministries of Finance and Planning**.
- Utilize **bottom-up approaches** in plan development that contribute to public education

1.3 Funding and Resource Mobilization for DRR

The availability of funding and other resources has been identified as one of the greatest challenges to disaster risk reduction capacity development efforts. Financial, human, technical, and other resources are in and of themselves a component of capacity, but given the influence that information, education, partnership building, accountability, negotiation, and other forms of capacity can have on the availability and use of such resources it is important that a special focus be placed on development of funding and resource mobilization for disaster risk reduction as a target of capacity development action. Awareness building plays a large role in this area, considering that disaster risk reduction represents an investment in the protection of development gains. The long-term resilience that results from such investment represents one of many returns on that investment. Identifying, understanding and innovating for adequate funding mechanisms requires capacity development in resource mobilization for disaster risk reduction.

The following actions have been identified:

- Collect and assess **data** and develop **documentation** that serves to **justify investments** in disaster risk reduction, including that which is dedicated to capacity development.
- Explore the use of **pooling and sharing of resources** through regional centres.
- Develop and provide **training that guides recipients** in the development of disaster risk reduction proposals for dedicated or ring-fenced disaster risk reduction resources.

- **Mainstream funding** for disaster risk reduction capacity development into sectoral budgets.

1.4 Monitoring of Sendai Framework Implementation

The goal of the Sendai Framework as adopted by Member States is to “prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience.”¹⁰⁷ Ensuring that disaster risk reduction strategies, plans and related actions advance this goal hinges on stakeholders’ abilities to plan, organize, and accomplish monitoring of relevant disaster risk reduction implementation targets at all levels. Whilst the Sendai Framework calls on UNISDR to support the follow-up and review at a global and regional level, including through the web-based Sendai Framework Monitor system, there are numerous other opportunities and capacity gaps that could strengthen overall implementation monitoring at all levels if they are addressed.

The following actions have been identified:

- Increase understanding of Sendai Framework-related **data collection needs and reporting requirements**, including the assignment of roles and responsibilities, among all national government ministries and across all sectors, especially National Statistics Offices
- Develop **technical guidance** and monitoring **procedures and methodologies** to support coordinated and complementary capacity development within and across ministries and sectors.
- Motivate and empower leadership and staff in **local communities**, including government officials, to use and/or contribute to Sendai Framework monitoring to support their own **decision-making effectiveness**.
- Strengthen ground-level monitoring and evaluation systems by developing specially-**tailored** tools and guidance.
- Engage with the **private sector** through the capacity development process to raise awareness of the existence and value of the Sendai Framework, and to motivate and empower relevant individuals and companies to support the collection, analysis, and reporting of data relevant to Sendai Framework monitoring efforts
- Increase **all-stakeholder awareness** that monitoring, and evaluation of Sendai Framework implementation are more an opportunity to improve local disaster resilience and development planning effectiveness and less an obligation to external entities (e.g., global and regional intergovernmental organizations).

2. Institutionalizing Disaster Risk Reduction Capacity

Disaster risk reduction is a capacity need that extends to all sectors and all levels and is closely linked with many other functions of government and policy directives. This interlinkage is most direct in the

¹⁰⁷ UNISDR, 2015b. Paragraph 16

case of climate change adaptation and the Sustainable Development Goals (and sustainable development in general), but also relates to governance, finance, security, and many other policies and pursuits. Stakeholders both within and outside of government must work together and must integrate disaster risk reduction considerations into all the work they do, including work that involves assessing or developing the capacity required. The following three high-level topics apply specifically within this area of action:

2.1 Understanding Links Between Disaster Risk Reduction and Sustainable Development

During the Third UN World Conference on Disaster Risk Reduction, Member States reiterated with a renewed sense of urgency their commitment to addressing disaster risk reduction and building resilience to disasters within the context of sustainable development and poverty eradication. This included, as appropriate, integration of both disaster risk reduction and the building of resilience into policies, plans, programmes and budgets at all levels and within relevant frameworks.¹⁰⁸ The development of capacity to not only understand more fully these critical interlinkages, but also to be able to act on the need to integrate their driving policies at every level of governance and among all stakeholders, is therefore a priority in and of itself.

The following actions have been identified:

- Increase **awareness and understanding of the interlinkages** between Agenda 2030 and the Sustainable Development Goals, the Paris Agreement on climate change, the New Urban Agenda and the Sendai Framework among all stakeholders, at all levels, tailored to their context. (e.g., at Ministerial and Parliamentary level, national and local government)
- Ensure stakeholder knowledge of and access to information that clearly explains how **Sustainable Development Goals and Sendai Framework global targets and principles** are interlinked, preferably using data and case studies
- Increase knowledge of, understanding about, and **the sharing of experiences** between countries and regions regarding integration and interlinking practices and opportunities for development planning, monitoring and reporting under Sendai Framework among focal, line, and related sectoral ministries, including National Statistics Offices.
- Target the development of capacity to foster risk-informed development by promoting integration and mainstreaming of disaster risk reduction among a **more broad-reaching target audience** that is representative of the greater development effort (e.g., ministries of finance, planning, housing, infrastructure, and others).
- **Minimize competition** between different areas of practice and divert time and investment from the disaster risk reduction efforts.
- Incorporate at all junctures the mechanisms to **enable development of internal stakeholder capacity** to understand, assess, and act on the need to integrate disaster risk reduction in all development activities in a manner that ensures outcomes are demand-driven and locally-relevant.

¹⁰⁸ UNISDR, 2015b. Paragraph 2.

- Ensure **disaster risk reduction capacity development requirements** are identified and emphasized in sectoral and cross-sectoral development plans and programmes.

2.2 Understanding Climate Risk Across Sectors

The Sendai Framework considers the coherence of disaster risk reduction and sustainable development policies, plans, practices and mechanisms, across different sectors, to be one of its guiding principles. In line with this principle and to achieve coherent implementation in line with commitments to the Paris Agreement on climate change, participants highlighted the need to ensure that those tasked with disaster risk reduction or who play a relevant or influential role are informed of the interlinkages and influences that exist between the two policy goals.

The following actions have been identified:

- Focus initial capacity development activities around informing elected and appointed leadership throughout government, including parliamentarians, on the need to increase understanding of and capacity to **incorporate climate risk in disaster risk reduction and development planning activities**, and on motivating them to be **champions of change** within their area of influence.
- Increase the understanding of the importance of **risk forecasting** and the influence of climate change risk among disaster risk management and sustainable development stakeholders.
- Coordinate practices and mechanisms that facilitate **climate and risk data** collection, assessment, management, and reporting.
- Promote the involvement of individuals, organizations, and other **stakeholders** involved in the development of **National Adaptation Plans as providers and/or recipients** of capacity development assistance.
- **Incorporate climate-related capacity development** training, educational, and scenario-based materials **into disaster risk reduction** capacity development activities, especially those focused on the national risk assessment, national and local disaster risk reduction strategies, and land use planning

2.3 High-Level Awareness and Cross-Sectoral Understanding of DRR

In line with the *Transforming Our World: 2030 Agenda for Sustainable Development* and the *Sustainable Development Goals*, the Sendai Framework for Disaster Risk Reduction, the Paris Agreement on Climate Change, the New Urban Agenda, the Addis Ababa Action Agenda, and the SAMOA Pathway for Small Island Developing States (SIDS) constitute an integral and ambitious set of action plans for countries, the UN system, and all other development actors. The 2030 Agenda for Sustainable Development recognizes and reaffirms the urgent need to reduce the risk of disasters. Understanding of these interlinkages among key decisionmakers, particularly in terms of the commonalities among the Sendai targets and SDG indicators, is important for mainstreaming disaster risk reduction into all development planning and investment. Tailored and contextualized awareness-raising and capacity to coordinate, advocate,

mediate, and negotiate for disaster risk reduction for Ministers, Parliamentarians, national and local decisionmaker is needed.

The following actions have been identified:

- Focus initial capacity development efforts on raising the awareness of **senior officials and key leadership**, especially parliamentarians and business leaders, about the economic case for disaster risk reduction, highlighting the cost of inaction.
- **Maintain engagement with senior leaders throughout** the course of capacity development activities to promote greater appreciation for and understanding of the impacts of risk on operations, to encourage action to address greater risk management, and to advocate on behalf of greater (nation- or society-wide) disaster risk reduction needs.
- Motivate and **encourage decisionmakers to promote disaster risk reduction** planning and implementation within their area of influence to contribute to sustainable development, notably in pursuit of the Sustainable Development Goals.
- Engage stakeholders from the **science and technology community** to increase cross-sectoral and inter-ministerial understanding of risk-related impacts on development.
- Design targeted capacity development interventions to **ensure relevance** to specific ministries, government entities at sub-national levels, and other concerned partners.
- Develop **short courses for university students** and focus on people other than those already working in the disaster risk reduction field.
- Ensure that some aspects of training and education are **mainstreamed in the general curriculum** through much more intense advocacy with the ministry of education.

3. Sharing and Using Risk Information Before and After Disasters

Disaster resilience requires all-stakeholder awareness of risk and the vulnerability factors that exacerbate it. Individuals, organizations, and societies must be able to gather and share risk information among those that need it – whether to act or to react. Any development activity conducted in the absence of information on risk and vulnerability is likely to exacerbate community or country risk, but the ability to receive and act on such information is not intrinsic. And just as risk information is vital to pre-disaster development and preparedness activities, it is key to avoiding the roots of risk and vulnerability in the aftermath of disasters when recovery and reconstruction take place. The following three high-level topics apply specifically within this area of action:

3.1 Conducting Effective Risk Communication and Knowledge Management

Despite challenges, governments and societies are taking steps to increase their information sharing capacities. The Sendai Framework for Disaster Risk Reduction encourages improvements in how nations manage disaster information before, during, and after disasters occur, and highlights the importance of risk and emergency communications mechanisms, participatory processes for developing communications systems, and expanded use of community, traditional, indigenous and local knowledge to achieve risk reduction targets.

The following actions have been identified:

- Elicit **political or leadership support** for and commitment to implementing and overseeing information sharing activities at every level.
- Encourage decisionmakers to support information sharing capacity through the **dedication of financial and human resources**.
- Support sharing through the **building of understanding and trust** between relevant agencies, organizations, and other key stakeholders.
- Work with stakeholders at all levels to **develop data standards** and information requirements that facilitate and simplify data sharing.
- Ensure that knowledge products are **tailored and targeted** to enable all stakeholders, including vulnerable groups, to use them effectively.
- **Promote innovation** among relevant stakeholders, including academia, the private sector, and media, **to ensure risk data is available and accessible**.
- Highlight the **value of accurate risk data** for stakeholders engaged in emergency response and continuity of operations planning, especially in key businesses sectors (e.g. energy and finance).
- Encourage and support the **capture and sharing of best practices and lessons learned** through resources, technical assistance, and advocacy.
- Promote the **capture and use of traditional knowledge** to increase participation of all stakeholder groups in capacity development efforts
- Convene stakeholders for **establishing agreements** that support communications and information sharing at the individual, the organizational, and the inter-organizational levels.
- Design capacity development interventions that **appeal to the news media as both a provider and a recipient**.
- Support the establishment of **legal, regulatory, and procedural frameworks** that promote more effective information sharing, including disaster statistics, risk information, and emergency messages.

3.2 Enhancing Disaster Preparedness and Planning for “Build Back Better”

The value of having in place a culture and system that is prepared to respond to disasters that happen, and incorporate disaster risk reduction into post-disaster recovery, reconstruction, and rehabilitation, (including in pre-disaster recovery planning efforts), is unquestioned. Disaster impacted countries and communities are almost always better equipped to build back better when actions have been taken to strengthen decision-making and operational capacity prior to disaster onset. As such, the Sendai Framework included through Priority 4 a call on UN member states to address capacity development in this area by creating and strengthening recovery-focused relationships, establishing planning and coordination mechanisms, and introducing methods and procedures to ensure recovery activities are adequately informed and supported. Countries are encouraged to pursue people-centred multi-hazard, multi-sectoral forecasting and early warning systems, disaster risk and emergency communications

mechanisms, social technologies and hazard-monitoring telecommunications systems to address this requirement.¹⁰⁹

The following actions have been identified:

- Develop **complementarity between formal and informal groups** involved in disaster response by seeking coherence of and with capability and practice standards by all.
- Incentivize the conduct of local and sub-national disaster preparedness and disaster recovery planning; provide training materials and guidance to increase **standardization and complementarity across communities and regions**.
- Provide materials and opportunities for officials in government, private institutions, and throughout society to become educated in **actionable response and recovery activities**, including participation in official response and recovery action teams.
- Design **drills and simulations** to include those most likely to be involved in the response and recovery efforts.
- Ensure that efforts are made to **educate all stakeholders on the concept of build back better** and ensure that there is common understanding among different stakeholder groups.
- Develop and provide nationally- and locally-relevant **guidance and protocols on early warning and multi-hazard early warning systems**, including low-tech options.
- Establish and communicate **ex-ante standards for reconstruction**.
- Increase the **use of lessons learned and experience** sharing to promote and inform **those with inexistent or inadequate plans and strategies**.
- **Engage with engineers and others** traditionally involved in pre- and post-disaster recovery planning and operations to support the development of training and education and the raising of awareness about needs.
- Understand how **underlying risk factors**, including poverty, poor land use planning, inequality, climate change and variability, unplanned and rapid urbanization, inter alia, contribute to disaster risk and thus need to be addressed during recovery, reconstruction, and rehabilitation planning and operations

3.3 Understanding the Economics of DRR

The Sendai Framework asserts that among the lessons learned from the implementation of its predecessor, the Hyogo Framework for Action 2005-2015 (HFA), is that investment in disaster risk reduction is cost-effective in terms of prevented future losses. Indeed, over the same 10-year timeframe as the HFA, the total economic loss was more than \$1.3 trillion.¹¹⁰ Stakeholders must have a collective and common understanding and trust in the value proposition of disaster risk reduction investments if there are to exist concerted efforts to pursue them. Knowledge of the true economic

¹¹⁰ UNISDR, 2015b. Paragraphs 3 and 4.

costs of disasters and their negative impact on development play a key role in making such an understanding possible and to ensuring public and private investment is risk-informed.

The following actions have been identified:

- Enhance capacities to collect and analyse data that supports a more complete, accurate understanding of the **actual or anticipated economic impacts** of future hazard events such that cost-benefit analyses may be performed in the analysis of disaster risk reduction and resilience-building plans.
- Prioritize early capacity development efforts on increasing the awareness and understanding of the **cost-effective benefits**, and the economics of risk reduction and resilience, among key decisionmakers working in ministries with influence over disaster risk reduction and sustainable development decisions.
- Expand the knowledge of and capacity to **utilize standardized cost-benefit analysis** methodologies for risk-informed public and private investments.
- Increase awareness and understanding of the Sendai Framework and its associated targets among **ministry of finance officials and budget officers** throughout government at all levels.
- Establish **private sector partnerships** with entities that understand the value proposition of risk management, risk-informed private investment, and participation in community-based and national disaster risk reduction efforts.
- Support expansion of stakeholders' understanding of disaster risk reduction economics to include **social and behavioural influences, and the longer-term consequences** of disasters (using scenario-based planning and computer-generated models).
- Develop a diverse range of disaster risk reduction financing instruments and ensure that all relevant stakeholders have adequate access.

4. Establishing Collaborative Action for Disaster Risk Reduction at the National and Local Levels

Disaster risk reduction is everyone's responsibility, from the national government to the individual and household level. While directives and support from the national government and from development partners are critical, decentralization allows for much greater tailoring of interventions. It is at this local level, where capacity development needs are greatest, that capacity development activities are most rarely encountered. Moreover, many of the stakeholders that are most significantly influenced or affected by disaster risk reduction efforts - whether as beneficiaries or providers – are not included in or targeted by capacity development for disaster risk reduction. The following three high-level topics apply specifically within this area of action:

4.1 Establishing an 'All-of-Society' Approach

Among its thirteen guiding principles, the Sendai Framework calls for the engagement of all of society, in addition to related calls for shared responsibility between central government and national authorities, sectors and stakeholders as appropriate to national circumstances, and the empowerment of local authorities and communities through resources, incentives and decision-making responsibilities as appropriate. Paragraph 7 of the Framework calls for a "broader and a more people-centred preventive

approach to disaster risk,” and states that “[d]isaster risk reduction practices need to be multi-hazard and multi-sectoral, inclusive, and accessible in order to be efficient and effective.”¹¹¹ Moreover, it calls for the engagement of all relevant stakeholders, including women, children and youth, persons with disabilities, poor people, migrants, indigenous peoples, volunteers, the community of practitioners and older persons. The public and private sectors, civil society organizations, academic, scientific, and research institutions are each called upon to work more closely and to create opportunities for collaboration.

The following actions have been identified:

- Ensure that project staff appreciate the **value of contributions by all stakeholders** in the community and use this as a basis to promote and incentivize the active participation and engagement of a broad range of relevant stakeholders drawn from government, civil society, academia, the private sector, as well as from vulnerable, marginalized, and special interest groups, and individual citizens.
- Incorporate the provision of or encouragement of **partnership building** guidance, lessons, policies, and other supportive actions and resources into disaster risk reduction capacity development interventions.
- Apply innovative methods and approaches when drafting and implementing **inclusive DRR policies** that encourage involvement of less traditional stakeholders and partners in the capacity development effort.
- Support capacity development programming staff in their efforts to **incorporate National and Local Platforms for Disaster Risk Reduction**, and other multi-stakeholder mechanisms, to engage all of society.
- Institute approaches, procedures, and mechanisms that together help decisionmakers to assess, understand, and **support the ‘collective memory’** of disaster risk reduction, which in turn supports and expands growth in the culture of prevention and sustainable disaster risk management.
- Ensure that programmes are set up to identify and **provide support** to individuals from groups that are or have been marginalized given that these same **individuals and groups are often more significantly-exposed to risk**.

4.2 DRR at Local Government Level

Like the impacts of disasters, all disaster risk reduction gains are felt most significantly at the local level. However, there are many factors that together contribute to a predominance of weak local government disaster risk reduction capacity. The Sendai Framework Target E, in conjunction with indicators of Sustainable Development Goals 1, 11 and 13, seeks to address local disaster risk reduction capacity by calling for a substantial increase in the number of countries with local disaster risk reduction strategies by 2020. Additionally, the Sendai Framework’s four priorities for action stress the importance of action

¹¹¹ UNISDR, 2015b. Paragraph 7.

at both the national and local levels. The Guiding Principles further highlight that disaster risk reduction and management depends on coordination mechanisms within and across sectors and with relevant stakeholders at all levels, requiring the full engagement of all public institutions of an executive and legislative nature at national and local levels, and a clear articulation of responsibilities across public and private stakeholders, to ensure mutual outreach, partnership, complementarity in roles and accountability and follow-up.¹¹²

The following actions have been identified:

- Identify capacity development interventions that help to better utilize a community's **in-house staff** to reduce or eliminate reliance on 'substitution' capacities provided by external experts to fulfil disaster risk reduction responsibilities and tasks.
- Push capacity development efforts down to the **local and sub-national levels** in a manner that increases understanding and implementation of disaster risk reduction and promotes integration of disaster risk reduction and Sustainable Development Goals pursuits.
- Utilize capacity development interventions that support local stakeholder creation and management of, and participation in, and use of **locally-based disaster risk reduction platforms**.
- Expand access to **locally- and contextually-relevant**, culturally-sensitive, and language-appropriate land use and building code training and education, including among key elected and appointed officials with decision-making authority
- Include locally-relevant information on disaster risk reduction **investment**, budgeting and resource mobilization in interventions **targeting local leaders and decision-makers** and stakeholders in the urban and economic development communities.
- Ensure that locally-based stakeholders appreciate the value of data collection and reporting efforts on data localization, and that they are motivated to **contribute to and utilize local risk data** products.
- Develop **governance tools and incentivization techniques** that motivate and enable intergovernmental teams to address local disaster risk reduction needs in a strategic, locally-relevant manner.
- Ensure that capacity development **ownership exists at the most local level** relevant to the project or program.
- Reduce the impact of **institutional memory** loss through attrition.
- **Reduce parallel processes** or efforts to address capacity needs.
- **Decentralize training** so that areas outside of urban centres are reached.
- Increase **prioritization of capacity development at the local level** and ensure that a wide range of people are exposed to capacity development efforts rather than those in the offices and agencies most closely-linked to disaster risk reduction.

¹¹² UNISDR, 2015b. Paragraph 19(e).

4.3 DRR at Community Level

The role of community level engagement is well articulated throughout the Sendai Framework and within the role of stakeholders, including civil society, volunteers, organized voluntary work organizations and community-based organizations to participate, in collaboration with public institutions, to, inter alia, provide specific knowledge and pragmatic guidance in the context of the development and implementation of normative frameworks, standards and plans for disaster risk reduction; engage in the implementation of local, national, regional and global plans and strategies; contribute to and support public awareness, a culture of prevention and education on disaster risk; and advocate for resilient communities and an inclusive and all-of-society disaster risk management that strengthen synergies across groups, as appropriate. The role of women, children, persons with disabilities, older persons, indigenous peoples and migrants are noted.

The following actions have been identified:

- Support the establishment of **culture norms** that dictate disaster risk reduction as the responsibility of everyone, not just that of government
- **Gather and validate** information that informs the local context within which interventions are to be planned.
- Incorporate information and methodologies into capacity development interventions that are **systematic and sustainable** in their ability to increase the appreciation for and understanding of disaster risk reduction at and throughout the community level.
- Ensure that nongovernmental organizations, civic and other community-based associations and voluntary organizations, faith-based groups, individual citizens, and other local stakeholders are **engaged in the entire lifecycle** capacity development processes to the extent that is feasible and appropriate, whether such projects are locally- or nationally-based.
- **Tailor interventions** so that they are not only useful and relevant, but also engaging to and perceived to be value added by local level stakeholders and partners.
- Ensure long-term local engagement by **empowering locally-based partners** with management and implementation responsibility, targeting capacity needs at the organizational and enabling environment levels, and institutionalizing capacity development methods in local policy and practice.
- To the extent that is possible, ensure that program planners understand and **link to local routines, livelihoods, cultures**, and other key factors that affect a sense of relevance, trust, and motivation to engage.
- Provide **rotational training** that goes deeper into the staff pool than leadership.
- **Involve all community stakeholders** in awareness-raising events including disaster exercises.
- Support the enabling environment by providing support to **increase local-level access** to technology and other capacity development resources that are not widely available.
- **Incentivize community-wide action** using community awards, certifications, or prizes.

5. Strengthening External Support Mechanisms

There are many opportunities for external partners to provide capacity development support. Bilateral cooperation has proven highly effective in the transfer of skills and knowledge for many technical areas, inclusive of disaster risk reduction, and there is a recognition of the value to be gained through an increase in the use of South-South and Peer-to-Peer arrangements. UN Country Teams are another major source of capacity development support, and as such there needs to be a focus on how to maximize this support through increased mainstreaming of disaster risk reduction activities and coordination with national and local capacity development efforts. Finally, there is great untapped potential for capacity development support relative to disaster risk reduction in the work of the many humanitarian agencies that participate in disaster response and early recovery operations. The following three high-level topics apply specifically within this area of action:

5.1 South-South and Peer-to-Peer Mechanisms

Bilateral cooperation through North-South, South-South, and triangular cooperation arrangements have each proven effective in many instances where the transfer of disaster risk reduction capacity was sought. There has been an increase in calls for South-South arrangements given the tendency for partners to have more closely-matched risk profiles, governing arrangements, economic constraints, and other relational factors. Peer-to-peer partnerships have also played an additional important role in helping countries to harness greater potential in their disaster risk management and reduction activities, and for improving the social, health and economic well-being of citizens, communities, and society as a whole.

The following actions have been identified:

- Establish and strengthen **methods and best practices** to help initiate and conduct peer-to-peer (country-to-country and city-to-city) support and learning.
- Develop, promote, and maintain mechanisms that enable country and city partners to **gather and share experience and lessons**, including those linked to Sendai Framework monitoring.
- Encourage **development partners to facilitate arrangements** that are more conducive to or supportive of South-South and Triangular cooperation.
- **Identify innovative opportunities** to support twinning and peer-to-peer approaches, including secondments, government exchanges, symposia, and tours.
- Identify ways to move beyond 'learning together' such that actual sharing of lessons and practices occurs in both existing and new **collaborative programmes** and in **joint exercises**.

5.2 UN Country Teams

The UN Plan of Action on Disaster Risk Reduction for Resilience: Towards a Risk-informed and Integrated Approach to Sustainable Development¹¹³ is the contribution by the UN to ensure the implementation of

¹¹³ United Nations, 2017.

the Sendai Framework contributes to a risk-informed and integrated approach to the achievement of the 2030 Agenda for Sustainable Development. It addresses the need for coherence and mutual re-enforcement of the UN's resilience building efforts and seeks to more effectively integrate UN operational preparedness and response capacities into national operational and capacity development arrangements. The Plan of Action places emphasis on country and local level engagement, ensuring the UN system is responsive to the different country needs and contexts in regard to disaster risk reduction. Likewise, ongoing United Nations Development System (UNDS) reform recognizes that stronger integrated planning for risk management capacities will bolster the system's ability to anticipate risks and draw on system-wide assets and expertise. UNDAFs must remain risk-informed to ensure any threats to the SDGs and vulnerable populations are well anticipated and mitigated, and where possible, prevented.¹¹⁴

The following actions have been identified:

- Build UN Country Teams' capacities to **understand the linkages** that exist between disaster risk reduction (vis-à-vis the Sendai Framework and other programmes and efforts) and the Sustainable Development Goals.
- Promote wider understanding of the **Sendai Framework Monitor system** among all UN Country Team members.
- Ensure that UN Country Team staff have an **operational-level understanding** of the UN Plan of Action for Disaster Risk Reduction and Resilience, such that implementation in all contexts is both possible and likely.
- Support the **mapping of existing services, needs, and actions** of the national development plan.
- Ensure that all staff involved in country programming can assess and act on the need to include (where necessary) assistance to **support technical capacity development** as it relates to project-specific or generalized disaster risk.
- Encourage policies that reduce a reliance on activity-focused and rigidly process-oriented disaster risk reduction efforts that fail to address capacity development needs of beneficiaries including the national government, by training staff **to view interventions through a capacity development lens**.
- **Support capacity assessments** and use the outcomes of such efforts in the design and formulation of programmes and projects so they are more responsive to actual capacity development issues and gaps.
- Ensure that the goal of capacity development support is to maximize effectiveness, efficiency, sustainability, and **country ownership** of its own disaster risk reduction needs by ensuring country level stakeholders can effectively, efficiently, resiliently, and self-sufficiently manage and deliver intended products and services to their target groups
- Support the capacity development efforts of **National Platforms for Disaster Risk Reduction**.

¹¹⁴ United Nations General Assembly, 2017. Pp. 11-12.

- Explore alternative models like secondments and colocation within the Office of the Resident Coordinator or other agencies with related mandates.
- Identify UN entities that should be active in-country to support capacity development priorities.
- Support Coordinators in proactively and regularly engaging Non-Resident Agencies, ensuring their participation in UNDAF elaboration and UN Country Team meetings.

5.3 Humanitarian Development Nexus

The compressed timelines and response-focused mandates associated with post-disaster humanitarian work can inhibit opportunities to promote and/or support capacity development for disaster risk reduction. Even when disaster risk management capacity is addressed during post-disaster humanitarian work, the tendency is towards enhancing response preparedness rather than managing risk drivers. At the same time, there is significant overlap between the humanitarian and development communities of practice, and in fact the knowledge, skill sets, and influences are oftentimes similar or the same. From a capacity development standpoint, there needs to be more strategic alignment between the two areas of practice.

The following actions have been identified:

- Use stakeholder engagement, training and education, and other capacity development tools to **address the lack of understanding of the links between development and humanitarian response** that may persist between those engaged in response and those focused on disaster risk reduction and longer-term development.
- Ensure that **academic and other research entities have access** to areas where humanitarian interventions are ongoing so that accurate, science-based capacity development resources may be developed.
- Educate humanitarian stakeholders in the **long-term value of incorporating disaster risk reduction** considerations into planning and operations for humanitarian interventions, including those that occur in the immediate aftermath of a disaster.
- Encourage humanitarian partners to **emphasize disaster risk reduction and resilience messages at the outset**.
- Promote and incentivize **engagement of humanitarian partners in the capacity development process**, most significantly in the assessment of capacity, implementation, and monitoring and assessment.

6. Advancing and Expanding Disaster Risk Reduction Capabilities

Current and future generations of disaster risk reduction professionals need the right skills and resources to do what is required of them. Disaster risk management professionalization is rapidly advancing, and with that trend comes a renewed focus on formulation of the competency standards, the course curriculum, and a cadre of effective teachers and trainers to serve the many relevant stakeholders. Innovation, fuelled by investments in research and development, offers many new and

unexpected opportunities to close capacity gaps. The following two high-level topics apply specifically within this area of actions:

6.1 Education for Disaster Risk Reduction

Disaster risk reduction capacity is developed to a significant degree through the availability of relevant educational opportunities, most notably at the higher-education level. The availability of higher education curricula focused on disaster risk management topics is a relatively new phenomenon, and as such there is wide variability in the coverage, quality, and effectiveness of inventory between countries. At the same time, inclusion of disaster risk reduction lessons in training and education across a broad array of disciplines (e.g., finance, architecture, urban planning) has increased significantly in the past two decades, and this represents a valuable resource to promote capacity development. The Sendai Framework for Disaster Risk Reduction articulates the role that education plays in the reduction of new and existing risk in its first priority, “Understanding Disaster Risk”. Priority 1 calls for the building of knowledge among government officials, civil society, communities and volunteers, as well as the private sector, through sharing experiences, lessons learned, good practices and training and education on disaster risk reduction, including the use of existing training and education mechanisms and peer learning. It encourages progress in this area through: the promotion of investments in multi-hazard and solution-driven research in disaster risk management; the incorporation of disaster risk knowledge into formal and non-formal education, civic education, as well as professional education and training; and the promotion of national strategies to strengthen public education and awareness in disaster risk reduction. Capacity development programmes that utilize or support disaster risk reduction education are understandably hailed for the significant role they play in the achievement of Sendai Framework targets.

The following actions have been identified:

- Establish a national-level platform to promote and support the development and improvement of **higher-education programmes** in disaster risk management, including the development of standards of teaching and learning, competency-based curricula, demand-driven coursework, and other support.
- Target leadership and staff of **education ministries** to raise awareness of their role, to motivate them to take action, and to ensure that the efforts they initiate or promote are in light with disaster risk reduction goals.
- Encourage and **empower schools** at basic, primary, secondary and university levels to incorporate resilience programmes that address risk through a multitude of means including changing the organizational culture, including disaster risk reduction lessons in the curriculum, and instituting enterprise risk management policies and practices.
- Provide teachers with **curriculum materials and training of trainer** courses to enable broad-reaching exposure of risk reduction education and messaging.
- Incentivize and support the mainstreaming of disaster risk reduction into **standard curricula**.
- Provide the materials and support that enables **embedding of disaster risk reduction materials and messages into existing professional training programmes**, including employee on-

boarding, staff technical training, and other avenues for entry across all government and societal sectors.

- Establish **competency-based standards** for key positions that encourage applicants and incumbents to seek and enrol in disaster risk reduction training and education relevant to their job roles, and that encourage programmes of higher-education and professional training to develop and offer relevant courses and degree-based programmes to source expected vacancies
- Assess disaster risk reduction **research needs** and increase availability of **financial support** to encourage educational facilities to address those needs through training and degree-based programmes.
- Engage with **community centres and civil society organizations** to identify opportunities for non-traditional engagement of target populations with risk-related messages (e.g., through community theatre, civic association meetings, public events, and other venues).
- Increase access to education and training using **online learning systems**.

6.2 Innovation and Use of Technology for DRR

The need to develop and apply innovative disaster risk reduction solutions is consistently identified as a key area of need in both the literature and by participants in the consultative process. There exist substantial global disparities with regards to the awareness of and access to technologies that promote disaster risk reduction and enable disaster risk reduction capacity. Moreover, there are insufficient motivators and/or incentives for stakeholders, irrespective of their sector, to actively pursue research, innovation, and development in the areas of science and technology that support disaster risk reduction capacity. All too often, training, education, and capacity development in general is based on anecdotal evidence or assumptions rather than on research methods and hard science. Without purposeful investment in this area, including that which supports capacity development, insufficient capabilities to achieve progress in several core areas of the Sendai Framework will persist.

The following actions have been identified:

- Promote and incentivize disaster risk reduction **research and development** by partners in academia, the private sector, the media, civil society organizations, and others, through action by the national disaster management office or other government entity actively engaged in such efforts.
- Encourage and enable government decisionmakers in key ministries to **assess the cost-benefit relationship of public investments** in disaster risk reduction research considering the reductions that may be expected in terms of minimized direct and indirect disaster losses.
- Promote **academic investments in research, development, and student scholarship** by creating an environment wherein employment prospects among students engaged in research and development viewed positively.
- Engage and support the mass media by **enabling media stakeholders to synthesize and communicate innovations and opportunities** for research, and the availability and purpose of the products of innovation, to spur the action of other stakeholders.

- Support an economic environment through policy and other methods that **incentivize private sector development of disaster risk reduction-focused technologies** either directly (e.g., a promise to purchase products or technologies directly) or indirectly (a policy that ensures a market for such products or technologies) that ultimately serve to increase capacity of one or more target groups.
- Create, improve, or otherwise support **platforms and fora** by which government and other relevant stakeholders (e.g. private sector, academia.) may work collaboratively to promote and/or invest in disaster risk reduction as an innovative, practical, affordable, and localized pursuit.

Summary of Priority Areas and Actions for Capacity Development		
	Priority Area	Actions
1	Developing and Strengthening Disaster Risk Reduction Fundamentals	1.1 Ensuring Use of Loss and Risk Information
		1.2 Disaster Risk-Informed Development Plans
		1.3 Funding and Resource Mobilization for DRR
		1.4 Monitoring of Sendai Framework Implementation
2	Institutionalizing Disaster Risk Reduction Capacity	2.1 Understanding Links Between Disaster Risk Reduction and Sustainable Development
		2.2 Understanding Climate Risk Across Sectors
		2.3 High-Level Awareness and Cross-Sectoral Understanding of DRR
3	Sharing and Using Risk Information Before and After Disasters	3.1 Conducting Effective Risk Communication and Knowledge Management
		3.2 Enhancing Disaster Preparedness and Planning for “Build Back Better”
		3.3 Understanding Economics of DRR
4	Establishing Collaborative Action for Disaster Risk Reduction at the National and Local Levels	4.1 Establishing an ‘All-of-Society’ Approach
		4.2 DRR at Local Government Level
		4.3 DRR at Community Level
5	Strengthening External Support Mechanisms	5.1 South-South and Peer-to-Peer Mechanisms
		5.2 UN Country Teams
		5.3 Humanitarian Development Nexus
6	Advancing and Expanding Disaster Risk Reduction Capabilities	6.1 Education for Disaster Risk Reduction
		6.2 Innovation and Use of Technology for DRR

Section 4: Stakeholders and Partners

Effective capacity development depends on the involvement of all stakeholders, all partners, and all of society. Stakeholders may become involved as a provider of capacity development assistance, as a recipient of some training or other benefit through interventions, or perhaps a mix of both provider and recipient roles. In some cases, this may involve little more than providing leadership, authority, or other forms of support, or receiving exposure to risk reduction messages.

This section presents for each of the primary stakeholder groups that are concerned with or impacted by DRR capacity development a broad overview of the expected or likely roles and responsibilities. The purpose of this section is to assist stakeholders in recognizing not only the value that is gained by engaging in the disaster risk reduction process, but also in understanding how they can assume greater control of efforts to improve their own capabilities and those of their community or nation, and how the common and collective roles and responsibilities of each stakeholder group (including that to which they subscribe are interlinked.

During the consultative process, workshop and survey participants worked to characterize in broad and inclusive terms the disaster risk reduction capacity development roles and responsibilities of each of the following stakeholder categories for which roles and responsibilities are listed:

1. National Government (including elected leaders, parliamentarians, and line ministries)
2. Local and Sub-national Government
3. Private Sector
4. Nongovernmental and Civil-Society Organizations (NGOs and CSOs)
5. Academia
6. Individuals and Households
7. Regional Organizations including IGOs
8. The United Nations, International Organizations, and International Financial Institutions

National Government (including elected leaders, parliamentarians, and line ministries)

- a. State and promote the national capacity development vision and support the process.
- b. Develop or support the development of a national strategy that will guide the planning and implementation of capacity development for disaster risk reduction across all stakeholder groups and at all levels.
- c. Coordinate national-level capacity development efforts, and support mechanisms that provide coordination at the sub-national and local levels (including support for stakeholder community engagement and provision of monitoring and evaluation measures and standards).
- d. Actively support the capacity development enabling environment through legislation, policies, procedures, budgeting, and strategic planning.
- e. Support professional development by providing standards, accreditation and credentialing
- f. Fund and incentivize innovation through research and development and provision of financial support for development of technologies and other resources that improve planning, assessment, communications, information sharing, and other programmatic needs.

- g. Coordinate capacity assessment data and information to enable cross-community, sub-national, and national awareness of capacity resources and needs.
- h. Take action to integrate national-level capacity development efforts that address disaster risk reduction, sustainable development, and climate change adaptation pursuits, and mainstream each of these throughout all relevant ministries.
- i. Encourage and empower leadership and staff to understand their role in disaster risk reduction and associated capacity needs and provide mechanisms to address those needs.
- j. Provide guidance, documentation, and doctrine to support national and subnational capacity development efforts.

Local and Sub-national Government

- a. Promote knowledge and understanding of the Sendai Framework among all offices and all local stakeholders and assess local capacity development needs as dictated by the Sendai Framework priorities.
- b. Assert and assume local ownership and leadership of capacity development efforts.
- c. Convene community stakeholders and lead or coordinate locally-based capacity development efforts.
- d. Perform risk assessments that inform the assessment of capacity needs.
- e. Coordinate and communicate the results of community-wide capacity needs assessments.
- f. Support the enabling environment for capacity development through legislation, policies, procedures, budgeting, and strategic planning.
- g. Support the enabling environment by providing standards, accreditation, technologies, and resources that guide and support planning, assessment, communications, information sharing, and other programmatic needs.
- h. Integrate capacity development for disaster risk reduction, sustainable development, and climate change adaptation pursuits, and mainstream each throughout all relevant government offices.
- i. Increase awareness of capacity development needs and the value of reducing them.
- j. Ensure local activities are coordinated and aligned with those occurring at the sub-national and regional and liaise with national and subnational governments about capacity needs and the support required to address them.
- k. Provide or otherwise support training and education programmes that address locally-relevant capacity needs.
- l. Encourage and empower leadership and staff to understand their role in disaster risk reduction and associated capacity needs and provide mechanisms to address those needs.
- m. Facilitate community-based capacity development initiatives and activities.
- n. Conduct monitoring and evaluation of capacity development activities.
- o. Identify capacity resources in the community and engage with stakeholders to further develop or otherwise harness disaster risk reduction capacity.
- p. Work directly with citizens or support engagement through nongovernmental and private sector organizations to understand and address capacity gaps.

Private Sector

- a. Participate in and complement locally-based and government-led capacity development strategic planning, including capacity assessments.
- b. Work with government and other stakeholders to identify where research and development needs are greatest.
- c. Provide products and services that support capacity development, including those that support the capacity development process.
- d. Coordinate with other private sector entities either in general or by sector and/or geographic area to address common capacity development needs.
- e. Support community-wide capacity development efforts through corporate social responsibility and fundraising, mentorship, training, secondment, and other programmes and initiatives.
- f. Organize and participate in knowledge exchanges.
- g. Establish sector-specific training, accreditation, and credentialing programmes.
- h. Contributing to the enabling environment by making infrastructure and technical assets available, and by working with government to formulate policies and practices.
- i. Identify and establish competency-based requirements in job descriptions to encourage individual and academic-based development of capacity development resources.
- j. Encourage new and existing staff to participate in individual and job-related capacity development training.
- k. Work together as a block to encourage disaster risk reduction activities (e.g., land use policies, safety practices, building codes, regulation).

Nongovernmental and Civil Society Organizations (NGOs and CSOs)

- a. Participate in and complement locally- and nationally-based capacity development strategic planning efforts, including capacity assessments.
- b. Work with communities of care (especially marginalized and vulnerable groups), government counterparts, the private sector, and other stakeholders to identify capacity development research and development needs.
- c. Serve as an intermediary as required to ensure wider stakeholder involvement in the strategic planning process.
- d. Design service-based programmes and other support to address capacity development needs of target populations.
- e. Coordinate with other nongovernmental organizations either by sector or geographic area to address common capacity development needs.
- f. Support community-wide capacity development efforts through mentorship, training, secondment, and other programmes and initiatives.
- g. Organize and participate in knowledge exchanges.
- h. Contributing to the enabling environment by making infrastructure and technical assets available, and by working with government to formulate policies and practices.
- i. Identify and establish competency-based requirements in job descriptions to encourage individual and academic-based development of capacity development resources.

- j. Encourage new and existing staff to participate in individual and job-related capacity development training.
- k. Work with target communities to understand needs and to elevate the importance of capacity development.
- l. Ensure that projects consider capacity development needs and encourage and support national- and local- ownership of capacity development efforts.
- m. Ensure that capacity development interventions are demand-driven and impact-based.
- n. Advocate for target populations with regards to capacity development needs to other national and community stakeholders (including government and the private sector).
- o. Provide technical assistance and training.

Academia

- a. Elevate awareness of capacity development needs both internal and external to the academic community.
- b. Encourage faculty to pursue research that supports disaster risk reduction knowledge and practice.
- c. Provide curriculum and course offerings that prepare the next generation of disaster risk reduction experts, ensuring that the skills that are taught match the skills that are required.
- d. Incorporate the disaster risk reduction curriculum beyond tradition disaster risk management courses to include finance, financial risk management, development, planning, public policy, public health, and others.
- e. Support the identification of key competencies and provide competency-based learning.
- f. Coordinate with government, the private sector, and civil society organizations to understand and more effectively address training and education needs to meet disaster risk reduction job requirements.
- g. Develop and provide reliable and audience-appropriate access to courses that serve audiences that fall outside the traditional academic community, including courses with short timeframes, courses utilizing non-technical terminology and concepts, courses that are locally-tailored, and other distinctions that increase interest in courses or otherwise motivate participants to enrol in them.
- h. Collect and share data and information that supports disaster risk reduction.
- i. Organize, convene, and participate in conferences, symposia, round-table discussions, and other information exchanges.
- j. Develop and apply capacity standards and support monitoring and evaluation efforts.
- k. Develop localized learning materials and provide capacity development trainings that go beyond the student body including specialized courses for professional and government leadership.
- l. Provide data and knowledge resources that better inform government policymaking.
- m. Educate and disseminate disaster risk reduction information to students, staff, and faculty.
- n. Support basic, primary and secondary schools in developing curriculum-based training for students and staff.

Individuals and Households

- a. Build and support a culture of resilience that considers risk management to be every citizen's responsibility.
- b. Learn what to do as an individual, whether at home, at work, or within the community, to address community-wide risk drivers, and find the time to address capacity gaps through education, training, or other means.
- c. Encourage family, friends, and neighbours to increase their capacity to address risk drivers.
- d. Participate in and inform locally- and nationally-based capacity development strategic planning efforts, including capacity assessments.
- e. Participate in individual and community-wide preparedness training.
- f. Remain active in local disaster risk reduction efforts through schools, religious organizations, social networks, professional associations and other means.
- g. Understand risk and vulnerability drivers that impact the community, and demand responsible action to address them by local elected leaders and businesses.

Regional Organizations including IGOs

- a. Set the tone for regional action on capacity development.
- b. Coordinate regional efforts to conduct strategic planning on disaster risk reduction capacity development.
- c. Lead the implementation of regional capacity development frameworks and strategies
- d. Establish standards and benchmarks to guide regional action.
- e. Support member countries by providing funding, training, technical assistance, information sharing, and advocacy.
- f. Promote national-ownership and sustainability through training-of-trainer and other similarly-focused initiatives.
- g. Encourage inter-regional cooperation among member countries where similar capacity development needs arise between them and provide implementation support.
- h. Create an enabling environment through policies, agreements, and regional partnerships.
- i. Increase integration of capacity development with other related policy goals including sustainable development, climate change adaptation, and others.
- j. Identify cooperative capacity development opportunities, including South-South, Triangular, and Peer-to-Peer relationships, and encourage the capture and sharing of lessons learned and best practices.
- k. Organize and fund regional meetings and regional capacity development initiatives

The United Nations, International Organizations, and International Financial Institutions

- a. Continue to provide global leadership on disaster risk reduction and the capacity development required, including targets, goals, and standards.
- b. Provide resources to support monitoring and evaluation of capacity development programmes at national and regional levels as they pertain to the Sendai Framework.

- c. Provide technical expertise, information, and other guidance and resources to increase the capacity of member countries to better understand disaster risk, reduce vulnerabilities, and adapt to climate change.
- d. Integrate capacity development activities into all disaster risk reduction projects and programmes.
- e. Create and maintain knowledge and information management platforms, including for best practices and lessons learned specific to capacity development activities.
- f. Establish venues for training and sources of funding.
- g. Expand understanding of the linkages between disaster risk reduction, sustainable development, and climate change adaptation within the United Nations system, and develop corresponding policy, to ensure that all project planning and implementation addresses capacity development both adequately and appropriately.
- h. Ensure implementation partners address capacity development needs in a coordinated manner and in line with the capacity development principles.
- i. Ensure that capacity development programmes reach less visible DRR staff that are operating at the local or sub-national levels, or that are working outside the traditional DRM agencies and offices such that the participant pool is expanded both vertically and horizontally.
- j. Facilitate communication and coordination among members and between regions on capacity development issues of global significance and influence.
- k. Implement UN Plan of Action for DRR.
- l. Standardize training materials and delivery but ensure that both are provided in languages (or have adequate translation support) that enable greater local and non-traditional staff participation.

Section 5: Implementation of the Strategy

This section promotes operationalization of Strategy recommendations among communities of stakeholders engaged in capacity development for disaster risk reduction. The purpose of this section is to justify the need for concerted national planning efforts and to provide a set of key target outcomes and actionable planning guidelines (rather than prescribing any specific “one-size-fits-all” methodology) by which desired results may be met.

Promoting awareness of the need for capacity development at all levels and by all stakeholders, and supporting the development of national and local strategic plans

Beyond the global and regional international organizations involved in disaster risk reduction activities (development-related or otherwise), and the national government disaster risk management agencies or platforms, very few of the relevant stakeholders act according to or are even remotely aware of the Sendai Framework goals and targets. This is especially problematic at the local level where awareness of Sendai Framework goals and targets is even lower or is inaccessible due to language restrictions.¹¹⁵ By extension, few go on to incorporate these goals and targets into their project planning processes, and fewer still conduct any form of capacity assessment or adhere to a capacity development process.¹¹⁶

Lack of action by so many stakeholders is unfortunate given the benefits that stand to be gained. However, without greater recognition or even simple awareness of their own disaster risk reduction role (whether in terms of their influence on disaster risk or the way disaster risk influences what they do), or awareness of the myriad risk reduction programmes and activities (whether pursuant to the Sendai Framework or otherwise) they might contribute to or benefit from, they are unlikely to pursue or increase disaster risk reduction capacity development opportunities.

National and local governments, through their offices of disaster risk management or dedicated disaster risk management platform (or other mechanism if more suitable), can drastically increase the reach and effectiveness of capacity development planning (*vis-à-vis* the capacity development cycle). This includes raising awareness of the Sendai Framework goals and targets and promoting each stakeholder’s role in achieving them.

The United Nations, most regional organizations, and many national governments have made great progress in establishing communications with and among DRR stakeholders using the internet and social media. Improvement and expansion of capacity development activities and opportunities will require increased reliance on such networks and platforms. Using social media messaging, online presentations and promotional videos, and other innovative marketing and communications methods, national and international partners can help explain the need for increased involvement by all-of-society and greater cooperation and coordination among these various stakeholders. Advancement in this area will not occur without significant dedication to its promotion.

However, coordinated action will require more than just the raising of awareness and promotion. In fact, coordination of even those capacity development programmes and activities that already exist, as

¹¹⁵ McLean, 2016. P. 1.

¹¹⁶ Few, 2015. P. 14.

conducted by the many stakeholders operating within a specific geographic or administrative context (e.g., national or community-based), requires that there be a user-driven strategy in place. In most countries, there exists no single plan, framework, or authority to guides or otherwise coordinate capacity development efforts, and it is often the case that no agency or office is even tracking such efforts whether at the national government level or any level subsequent to it.

To address this common gap, consultation participants recommended that national governments (and local and sub-regional governments where appropriate) develop comprehensive stakeholder-driven capacity development strategies. These would centralize capacity development efforts and serve a range of important functions including:

- Increase awareness of the Sendai Framework and associated capacity development activities
- Increase engagement of relevant stakeholders in the process
- Coordinate disparate programmes and activities
- Reduce or eliminate overlaps and gaps
- Provide a platform for information sharing and communication
- Establish common capacity development principles, goals, and objectives
- Increase national and local ownership and participant buy-in
- Centralize capacity assessment efforts and facilitating the reporting of outcomes
- Promote the building of effective implementation partnerships
- Identify and establish appropriate points of entry for capacity development interventions
- Standardize the capacity development process
- Increase access to resources and incentives for action
- Provide common indicators for monitoring and evaluation

Such a strategy would provide consistent and operational guidance for relevant stakeholders. It would enable the translation of the Sendai Framework's broad capacity development objectives into ground-level actionable directives and activities. It would serve as the basis for identifying capacity assets and for developing capacity enhancement objectives that support the achievement of disaster risk reduction strategies. Such frameworks could also provide insight into the types and degree of support required from external partners, and to increase alignment of national or community-based activities with those occurring in pursuit of other policy agendas (such as climate change adaptation or Sustainable Development Goals). While it would be beneficial regardless of the geographic area, such a strategy would increase in importance as the number of stakeholders increases and the field becomes more complex.

While plans and strategies need to be tailored to the local or national context and be capable of coordinating action under related policy directives (e.g., climate change adaptation plan of action, national development plan), considerations for information or direction provided in the national or local strategy might include:

- A statement of purpose, scope, and audience
- Description of the capacity development process used
- Mechanisms for conducting a capacity survey and maintaining a capacity inventory
- Knowledge and information management systems and procedures

- National and/or local capacity development goals
- Monitoring, evaluation, and reporting procedures, including indicators for output, outcome, and impact

Establishing nationally-based and Sendai Framework-relevant evaluation indicators that enable measurement of capacity development outputs, outcomes, and impacts

Stakeholder communities engaged in disaster risk reduction, whether nationally-, sub-nationally-, or locally-based, must establish a set of needs-driven performance measures that enable locally-relevant monitoring and evaluation. This applies to not only the impact that capacity development efforts have on disaster risk reduction in terms of progress towards the Sendai Framework goals and targets, but also in terms of the outputs and outcomes of the capacity development efforts themselves.

Because no two communities of action are the same, and projects are each unique in what they seek to accomplish, there do not exist universal indicators for evaluation and assessment. While stakeholders engaged in capacity development efforts are likely to have developed performance measures for monitoring and evaluation of their own internal project efforts, they each have much to contribute to the development of nation, society, or community-wide indicators as well. These can form the centrepiece of the national or local capacity development strategy, as they communicate what all stakeholders are striving to achieve through their efforts.

Indicators as developed should enable evaluation of:

- Output
- Outcome, and
- Impact

Ultimately, it is the impact, as measured against the 38 Sendai Framework Indicators¹¹⁷ (which are expansions of the Sendai Framework Priorities for Action and Global Targets), that determines the success of capacity development efforts in terms of reductions in disaster risk that occur because of having been performed. However, what can be and is achieved is a function of the capacity gains, and these gains merit their own measures as driven by the goals of capacity development itself. As identified above, the output of capacity development efforts is generally a factor of one or more of the following:¹¹⁸

Capacity Output 1: Capacity for engagement

This is the capacity of relevant individuals and organizations (disaster management or DRR department, sectoral ministries, local government, private sector, NGO and civil sector, gender organization, scientific organization, the citizens, and others relevant) to engage proactively and constructively with one another to identify, assess, and otherwise manage disaster risk. Specific areas of measure include:

- Indicator 1.1: Legitimacy and/or mandate of the organizations or individuals
This indicator measures whether the appropriate organizations and individuals targeted for

¹¹⁷ <http://bit.ly/2iUt1NC>.

¹¹⁸ Also see Appendix 6

capacity development have been identified, as determined by how clearly and accurately their respective responsibilities have been defined (in accordance with Sendai Framework goals and targets) and whether the authority they hold to perform these responsibilities is recognized.

- Indicator 1.2: Existence of operational engagement and coordination platforms or mechanisms
This indicator measures whether there exist public and/or private mechanisms (e.g., associations, contracts, memoranda of understanding) through which the engagement and coordination of disaster risk management stakeholders may occur, and whether or not these mechanisms are functional.
- Indicator 1.3: Existence of cooperation among stakeholder groups
This indicator measures the quality of involvement of stakeholders, including representation of all appropriate stakeholder groups, the establishment of stakeholder consultation processes, and the active contribution of these stakeholders to decision-making.

Capacity Output 2: Capacities to generate, access and use information and knowledge

This is the capacity of relevant individuals and organizations to research, acquire, communicate, educate others, and make use of pertinent information to be able to identify and assess hazard risk and analyse and implement risk reduction opportunities. Specific areas of measure include:

- Indicator 2.1: Degree of stakeholders' disaster risk reduction awareness
This indicator measures how much awareness stakeholders have with regards to the existence and severity of hazard risk at all levels (including the community level), and about the existence and availability of risk reduction interventions.
- Indicator 2.2: Access and sharing of disaster risk reduction information by stakeholders
This indicator measures the knowledge that exists about the information needs of disaster risk reduction stakeholders, the adequacy of the information management infrastructure in place, and the degree to which sharing of this knowledge and information is occurring.
- Indicator 2.3: Extent of inclusion/use of local and traditional knowledge in disaster risk reduction decision-making
This indicator measures whether or not local and traditional knowledge exists among stakeholder groups (including beneficiaries), and whether such knowledge has been captured and shared among stakeholders for effective participative decision-making processes.
- Indicator 2.4: Existence of disaster risk reduction education programmes
This indicator looks at the quantity and quality of formal and informal disaster risk reduction education that are provided by and available to stakeholders, as a factor of capacity gaps and stakeholder demand.
- Indicator 2.5: Extent of the linkage between Disaster Risk Reduction research and science and policy development
This indicator measures the linkage between disaster risk reduction policy and research; including the identification of research needs and research strategies and programmes; and the relevance of the research available to policy development.

Capacity Output 3: Capacities for strategy, policy and legislation development

This is the capacity of relevant individuals and organizations to plan and develop disaster risk reduction policy and legislation, and to develop strategies and plans, all of which support or otherwise operationalize disaster risk reduction efforts. Specific areas of measure include:

- Indicator 3.1: Extent of the DRR planning and strategy development process
This indicator measures the quality of the planning and strategy development process, whether the planning and strategy development process produces adequate plans and strategies related to disaster risk reduction, and if adequate resources and coordination mechanisms are in place to ensure proper implementation of these plans, programmes and projects.
- Indicator 3.2: Existence of policies and regulatory frameworks to support capacity building
This indicator measures the completeness of the policy and regulatory frameworks that exist or have been put in place to support disaster risk reduction (including capacity development for disaster risk reduction), including measurement of mechanisms for enacting, complying, and enforcing these policies and laws.
- Indicator 3.3: Adequacy of the information available for DRR-related decision-making
This indicator measures the adequacy of the information available for decision-making, if the information is made available to decision-makers, and if this information is updated and used by decision-makers.

Capacity Output 4: Capacities for management and implementation

This is the capacity of relevant individuals and organizations to perform the required implementation actions guided or mandated by disaster risk reduction policies, plans, strategies and/or regulatory decisions, and the capacity to plan and execute relevant sustainable risk management actions and solutions. Specific areas of measure include:

- Indicator 4.1: Existence and mobilization of resources by the relevant organizations
This indicator measures the availability of human, financial, and other resources within the relevant organizations, whether potential sources for resource shortfalls have been identified, and whether resources have been mobilized appropriately.
- Indicator 4.2: Availability of required technical skills and technology transfer
This indicator measures the availability of skills and knowledge, if the technical needs and sources are identified and accessed by the program or project, and if there is a basis for an ongoing locally- or nationally-based upgrading of skills and knowledge.

Capacity Output 5: Capacities to monitor and evaluate

This is the capacity of individuals and organizations to effectively monitor and evaluate project and/or program achievements against expected results and to provide feedback for learning, adaptive management and suggesting adjustments to the course of action if necessary to reduce disaster risk and make risk-informed development decisions. Specific areas of measure include:

- Indicator 5.1: Adequacy of the project/program monitoring process

This indicator measures the existence of a monitoring framework, whether the monitoring involves stakeholders, and whether the monitoring results inform the implementation process.

- **Indicator 5.2: Adequacy of the project/program evaluation process**

This indicator measures the existence of an evaluation framework, whether adequate resources and access to information are available, and whether the evaluation results inform the planning process.

Stakeholders working to establish measures of effectiveness can tailor these standard indicators to local or national conditions by applying a range of qualitative or quantitative scoring factors for each. By applying scores to each measure, it is possible to establish capacity benchmarks and measure progress over time. An example of such measures is provided in Appendix 6.

Expanding South-South, Triangular, and other partnership and cooperation opportunities through the creation of a global capacity development provider marketplace

Given the novel nature of capacity development efforts in the disaster risk reduction domain, there exists a lack of strong provider networks at the local, national, and international levels. There are and will continue to be situations where governments and organizations recognize capacity gaps and understand the remaining capacity development needs but are unable to address those needs. By establishing or otherwise creating a capacity development provider marketplace, implementation partnership opportunities may be greatly expanded.

Similar partnership marketplaces have been established for other similar pursuits, such as UNDP-developed SSMART for SDGs. The SSMART for SDGs is a global marketplace and an end-to-end service that provides easy and broad access to demands and supply in development solutions to address challenges that have been identified in achieving the Sustainable Development Goals.¹¹⁹ Similar structures may be established at the international, regional, and national levels to address challenges that relate to achievement of the Sendai Framework goal. Through such a structure, it will be possible to:¹²⁰

- Enable partners to post demands, search for solutions, share solutions and collaborate
- Help partners assess demands and facilitate collaboration between each other in seeking or sharing solutions.
- Provide advisory services to partners, including resources and expertise for feasibility studies, adaptation of solutions for a specific context, project implementation, monitoring and impact assessments.
- Encourage and allowing partners to share solutions, post their demands and proactively seek collaborative opportunities and partnerships in order to create a vibrant marketplace of ideas,

¹¹⁹ UNDP, 2016.

¹²⁰ UNDP, n/d. P. 1.

expertise, knowledge and technologies.

Demystifying Capacity Needs by Providing Nationally- and Locally-Relevant, Sendai Framework-Focused Target Capability Standards

To better understand the capacities that are needed, whether for the purposes of performing a capacity assessment or to design and implement coordinated capacity development projects and programs, it is necessary to first have an understanding of the competencies and capabilities of the individuals and organizations tasked with DRR-related roles and responsibilities. For most capacity development stakeholders, actionable and accurate information on these competencies and capabilities is not readily available.

Capacity development partners can work together to develop disaster risk reduction capability and competency guidelines. Guidelines should be locally- or nationally-relevant to the extent possible, and provide a means to achieve the desired output, outcomes, and impacts of DRR efforts including those aligned with the Sendai Framework. Capabilities are supported by competencies, and are delivered by various combinations of planning, organization, equipment, training, and exercise.

Capability standards allow stakeholders to determine whether or adequate capacity exists, whether in the individual, organizational, or enabling environment levels, to perform a required function or to achieve a desired end state. They are holistic and therefore assess the capabilities of whole communities, societies, or countries in terms of their ability to address needed conditions or conduct necessary actions. In this manner, they enable more focused use of time and resources, and provide confidence in assessments of resilience.

Examples of information that capability standards may provide include:¹²¹

- Identification and definitions of specific capabilities
- Expected outcomes and impacts of the capability
- Relationships to and influences on and of other capabilities
- The activities, tasks, and measures that must be performed in order for the capability to meet expectations (capability elements)
- Preparedness measures required to ensure capabilities exist
- Performance measures or other assessments to evaluate capabilities
- Capability activity process diagrams and relational maps
- Capability development planning assumptions
- Differentiated capability and capacity measures (i.e., needs distinguishes by community size or hazard profile)
- Relevant capability and capacity standards reference material

¹²¹ US Department of Homeland Security, 2007. Pp. 6-9.

Strengthening advancement and professionalization of disaster risk reduction capacities and capabilities by establishing regional and national capacity development institutes

Stakeholders identified a critical shortage of educational and training resources to support disaster risk reduction capacity development needs, especially those at the higher-education level. Such training and education needs are not limited to university degree students and in fact stand to benefit those mid-career and leadership professionals who are not enrolled in such programs even more so. While a small number of national governments and academic associations have begun establishing academic platforms that could better support advancement and professionalization of disaster risk reduction capabilities, there remains much room for action in this area.

Whether through a country's national disaster risk reduction platform or by cooperative agreement between academic and training institutions that provide relevant course offerings, centralization of curriculum development and course offerings is an implementation solution that carries significant promise. Like the marketplace of providers mentioned above, such 'institutes' could facilitate the connection of providers of education and training with the individuals and organizations for which training is an identified need.

The infrastructure around which such an institute is built could vary in size according to the needs and resources of the stakeholders that create it, centring on such functions as administration, hosting of technological solutions, storage of materials and coursework, granting of certifications, and other related tasks (e.g., marketing and outreach). However, the effort could and perhaps should remain user driven, with the communities of stakeholders engaged in DRR best equipped to develop guidance documents, texts, lectures, courses (including downloadable course content for instructors to adopt), and other resources to support standards- and needs-driven capacity development. Such institutes could also serve as platforms by which stakeholders assess and address professionalization needs and opportunities and push the agenda among academic and other partners.

Implementation and roll out

The implementation of the global capacity development strategy requires appropriate coordinating mechanisms, agreed by partners. Several points of coordination are possible, depending on the nature of the partnership.

For UN agencies potential possibilities include:

1. **UNDAF (and other UN strategic partnership frameworks):** The UN Development Assistance Framework (UNDAF) will by 2019 become the single most important mandatory United Nations tool for planning and accountability for results.¹²² UNDAFs will need to be risk-informed, to ensure that any threats to the SDGs and vulnerable populations are well anticipated and mitigated, and where possible, prevented¹²³. This positioning of the UNDAFs provides a unique

¹²² United Nations General Assembly, 2017b.

¹²³ From: Repositioning the United Nations development system to deliver on the 2030 Agenda: our promise for dignity, prosperity and peace on a healthy planet, Report of the Secretary-General

opportunity for coherent and sustained capacity development.

At the time the UNCT develops the UNDAF (and other UN strategic partnership frameworks for non-UNDAF countries), capacity development needs of the government must be determined through consultations and a detailed capacity needs assessment through CADRI or other available mechanisms (when possible). An approach towards capacity development for the needs identified can be developed as part of the UNDAF and through the Common Country Analysis. The process will help identify partners for implementation. UNISDR will provide advisory services, as required.

A similar approach will be used for **UN System Strategic Approach on Climate Change Action**¹²⁴: Through the implementation of the impact area – Climate Resilience and DRR, which calls for joint capacity building for risk informed development. This impact area will be pivoted through the UNDAFs, which can be the entry point for coordinating the capacity development strategy, amongst partners, as well as with the national government. This approach involves close coordination and collaboration with UNDG.

Similarly, the proposed analytical framework on risk and resilience¹²⁵ has suggested a systems-thinking approach, a risk and resilience equation, and a prevention lens to guide the implementation of these measures within the UN system.

2. **United Nations Plan of Action on Disaster Risk Reduction for Resilience: Towards a Risk-Informed and Integrated Approach to Sustainable Development (UNPoA):** The UNPoA

identifies three key results of **Commitment 2** Build UN system capacity to deliver coordinated, high-quality support to countries on disaster risk reduction:

Result 2.1: UN system and related organizations have intensified their capacity to support countries to integrate disaster and climate resilience into national, sectoral and local development strategies and plans that are aligned with the Sendai Framework.

Result 2.2: UN system, related organizations and UN Country Teams (UNCTs) have strengthened their ability to effectively support national and local communities in early warning, preparedness, response and recovery.

Result 2.3: Disaster risk and climate information that is compliant with disaggregation requirements of the Sustainable Development Goals and the Sendai Framework, informs all complete or partial UN Development Assistance Frameworks (UNDAFs) and other UN Development Partnership Frameworks.

¹²⁴ <https://www.unsceb.org/content/un-system-strategic-approach-climate-change-action-0>

¹²⁵ <http://www.unsceb.org/CEBPublicFiles/RnR.pdf>

Reporting of the implementation of the three results of the UNPoA by the UN agencies could become a mechanism to coordinate the global capacity development strategy by adhering to the principles for capacity development as identified in the strategy, as pillars for reporting on the three results.

To achieve agreement on these proposals UNISDR will organize a meeting on the implementation of the Strategy with all UN DRR Focal Points, after launch of the Strategy.

For coordination with national governments, possibilities include:

1. **Capacity Development for DRR Platform (Marketplace):** An online platform developed to provide a marketplace where service providers can connect with governments requiring specific services for capacity development – this will be an attempt to help demand meet supply. The demand side being the governments, and the supply side being the service providers. This could be modeled on **SS Mart for SDGs**¹²⁶. The platform is envisaged to also include space for sharing of best practices, lessons learned, mapping of partners (an on-going process), making it a “living” platform. The platform will be designed so it can link with networks of partners and tap into the networks to help disseminate “demands and requests” and link up with possible service providers through the networks of our partners.

2. **The Sendai Monitor:** The national Sendai focal points will be asked to report on the adherence of the strategy within the country. (Relevant custom nationally determined indicators). The Sendai Monitor tools (custom indicators portion) can help governments develop plans for DRR, detailing activities to be undertaken to achieve the resilience desired in the Sendai Framework. Projectization of the activities defined under the DRR plan will help develop a finance mechanism for the plan. The custom indicators also ask for dedicated plans or policies for capacity development.

Indicators relevant for this action:

Custom Nationally Determined Indicators:

5. DRR education, awareness raising and capacity building

I-20: Mandatory Education: Are disaster risk knowledge (disaster mechanism, DRR measures and emergency preparedness) incorporated into the national educational curriculum at primary and secondary levels? (Y/N)

I-23: Capacity building for government official: Are there dedicated plan or policy to strengthen the DRR capacity of public officials at both national and local levels? (Y/N)

I-24: Capacity building for civil and private sector: Are there a dedicated plan or policy to strengthen the DRR capacity of civil and private sector? (Y/N)

¹²⁶ <http://global-smart.org/en>

4. Accountability and liability

II-15: Capacity Review: Does the national government carry out assessment of the technical, financial and administrative DRM capacity to deal with the identified risks at national and local level? (Y/N)

Global Targets:

Global target F: Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030.

F-7 Number of international, regional and bilateral programmes and initiatives for disaster risk reduction-related capacity-building in developing countries.

Roll out plan:

It is expected at least one year of roll out, before the actual implementation, will be required to ensure success of the strategy. The roll out will include actions (seminars, orientation sessions, advocacy) taken to ensure an understanding of the Strategy by national governments, UN agencies and country teams & other partners. The roll out will be parallel in some instances, as countries may adopt elements of the Strategy without waiting for roll out. The process may include organization of pilots in select countries.

Appendices

Appendix 1: List of consultations

Towards the Development of the Global Capacity Development Strategy to support the Implementation of the Sendai Framework

218 total participants: 169 global and regional consultations, 49 online. With representation from: 45 Member States, 32 NGOs, 15 Local Government and City Networks, 15 UN and International Organizations, 15 Academic and Research Organizations, 11 IGOs, and 7 private sector entities.

Region(s)	Event	Location and Dates	Members States	Stakeholders
Global	Discussion: Global Capacity Development Strategy for Implementation of the Sendai Framework for Disaster Risk Reduction (56 participants)	23 May 2017, 2017 Global Platform, Cancun, Mexico	Australia, Bosnia and Herzegovina, Croatia, Egypt, Guatemala, Kuwait, Lebanon, Mongolia, South Sudan, Swaziland, Sweden, Zambia	<i>Local government:</i> La Plata, Argentina, Tecoluca, El Salvador; Aqaba City, Jordan; Chiapas, Mexico; Iriga City, Philippines; <i>IGO:</i> CEPREDENEC, DPPI-SEE, Pacific Community <i>NGO:</i> ASB, CANEUS, CBM, GNDR, CMB New Zealand, Fundación todo tuyo Maria Riadis, Panama; <i>UN and International:</i> ADPC, CADRI, FAO, GFDRR, UNDP Indonesia, UNICEF, UNESCO, WHO, <i>Academia:</i> CUDRR+R, CEPED Brasil, REDULAC/RRD, University of Alabama in Huntsville, Nagasaki University, Massey University / Joint Centre for Disaster Research, <i>Private Sector/Foundations:</i> Instituto de Gestión Desarrollo y Negocios, Bill and Melinda Gates Foundation, RESILIENT/CITY

Africa, Asia	Consultation during the KOICA-UNISDR Joint Fellowship Programme module on the Understanding the Sendai Framework at National Level: Development of Risk Reduction Strategies and Plans (18 participants)	5 July 2017, Incheon, Republic of Korea	<i>Africa:</i> Cameroon, Ghana, Mozambique <i>Asia:</i> Indonesia, Philippines, Sri Lanka	N/A
Arab States, Asia	Consultation during the Training of Trainers Workshop on the Understanding the Sendai Framework at Local and National Level (15 participants)	18-20 July 2017, Incheon, Republic of Korea	<i>Arab States:</i> Lebanon	<i>Arab States:</i> <i>UN:</i> UNDP Lebanon, UNDP Tunisia, <i>Local government:</i> Union of Municipalities of Zghorta, Lebanon; Khartoum State, Sudan; Makati City, Philippines; Incheon, ROK; <i>NGO:</i> Center for Environment and Development for the Arab Region and Europe, Egypt; Osman Ahmed Osman Institution, Egypt <i>Asia:</i> South South West Sub-region United Cities and Local Governments Asia Pacific (UCLG ASPAC); Municipal Association of Bangladesh-MAB & Bangladesh Union Parishad Forum (BUPF); Association of District Development Committees of Nepal (ADDCN); AIILSG;
Arab States	Arab States Consultation: Capacity Development Strategy for Implementation of the Sendai Framework (14 participants)	9-10 October 2017, Abu Dhabi, United Arab Emirates	Lebanon, Palestine, Sudan, Tunisia, United Arab Emirates	<i>Local government:</i> Aqaba, Jordan <i>IGO:</i> League of Arab States (LAS)
Africa, Americas, Arab States, Asia	Consultation during the Training of Trainers Workshop on the Understanding the Sendai Framework at National Level: Development of Risk Reduction Strategies and Plans and Introduction to Monitoring (24 participants)	17-18 October 2017, Incheon, Republic of Korea	<i>Africa:</i> Ethiopia, Kenya, Liberia, Mauritius, Swaziland, Zambia <i>Arab States:</i> Tunisia <i>Americas:</i> Argentina, The Dominican Republic, Guatemala, Paraguay	<i>IGO:</i> African Union (AU), Central American Centre for the Coordination of Natural Disasters (CEPRENAC); <i>Local government:</i> Catbalogan City, Philippines <i>NGO:</i> Asian Disaster Preparedness Center Academy (ADPC), Egyptian

Americas	Americas Consultation: Capacity Development Strategy for Implementation of the Sendai Framework (22 participants)	26-27 October 2017, Panama	Argentina, Colombia, Costa Rica, Ecuador, Guatemala, Nicaragua, Paraguay, Saint Lucia, Uruguay	IGO: CEPREDENAC, CDEMA, CAN, EU/ECHO Academia: Consejo Superior Universitario Centroamericano (CSUCA); Latin American and Caribbean Network of Universities for DRR (REDULAC) UN: UNDP LAC; IFRC NGO: GNDR LAC
Africa	Africa Consultation: Capacity Development Strategy for Implementation of the Sendai Framework (4 participants)	Incheon, Republic of Korea	Mauritius, South Sudan	IGO: IGAD
Asia and the Pacific	Asia-Pacific Consultation: Capacity Development Strategy for Implementation of the Sendai Framework (16 participants)	6-7 November 2017, Bangkok, Thailand	Australia, Mongolia, Vietnam, Thailand	IGO: ASEAN, ECO; UN & International: IFRC Regional Centre; UNDP Thailand, UN Women Vietnam, OCHA Regional Centre; Private sector: ARISE Japan NGO: ADPC, Duryog Nivaran, SEEDS
Online	Online consultations towards the development Global Capacity Development Strategy for Implementation of the Sendai Framework (2 surveys, one with follow-up interviews) (49 total participants; 44 survey only; 5 survey with follow-up discussion)	November-December 2017	Bosnia and Herzegovina, Cote d'Ivoire, The Gambia, Ghana, Maldives, Nepal, Sierra Leone, Swaziland, and (2) anonymous.	5 Academia working in: Perú, Iran, Japan, Mauritius, the Philippines. 3 Local government of: the Philippines, Uganda. 20 NGOs working in: Afghanistan, Argentina, (2) Bangladesh, Burundi, Central African Republic, El Salvador, Haiti, Irak, Jordan, the Philippines, Nepal, Nigeria, Pakistan, (2) Peru, Somalia, South Sudan, Sweden, Syria, Turkey, United Kingdom, (2) United States, and (2) anonymous. 2 Private sector working in: Mauritius, globally. 4 Regional organizations working in: East Africa; Pacific Region; (2) South and Southeast Asia.

Appendix 2: Select Capacity Development Planning Tools

1. CADRI Capacity Assessment Tool: <http://www.cadri.net/en/cadri>
2. UNDP “The Process of Capacity Development”: <http://bit.ly/2kHQQso>
3. World Bank “Capacity Development Results Framework”: <http://bit.ly/2By2VrA>
4. JICA Capacity Development Guideline / Manual: <http://bit.ly/2AVFK9T>
5. JICA Capacity Development Handbook: <http://bit.ly/2BhKmdP>
6. Government of Rwanda Capacity Building Toolkit: <http://bit.ly/2yVsuR0>

Appendix 3: Capacity Development Planning Questionnaire

1. **Whose capacities do we need to develop?**

2. **To what end do we need to develop this capacity?**

3. **What kinds of capacities need to be developed for this?**

4. **What will be their purpose?**

5. **How do we measure and monitor these capacities and the results they are meant to achieve?**

Appendix 4: Checklist of Capacity Development for Disaster Risk Reduction Principles

- ✓ **Capacity Development Efforts are Guided by a Common Understanding**
 - There exists coherence between practitioners and programs, and acceptance of a common set of terms and concepts.
 - Individuals and organizations working together in pursuit of disaster risk reduction capacity development have identified, agreeing upon, and adopted a common understanding and consistent use of terms and practices.

- ✓ **Efforts are Coherent Within and Between Levels (National, Sub-national, and Local)**
 - National-, sub-national, and local-level actors and processes are cognizant of programs and activities that are being planned and conducted in pursuit of disaster risk reduction capacity development at all levels.

- ✓ **Efforts Pursue an “All-of-Society” Approach**
 - Programming efforts apply broadly across multiple stakeholders and consider how cross-sectoral combinations may result in synergistic movement towards common goals.
 - The perspectives of both those with expertise or resources to provide capacity development and those who are vulnerable and affected by disasters have been considered.
 - Programming seeks ways to improve stakeholders’ capacity to interact with each other.

- ✓ **Efforts are Goal-Driven, Impact-Focused, and Transformative**
 - Programming identifies clear objectives and expected outcomes that can be judged to make a lasting impact on coherent implementation of national DRR plans and policy, including the Sendai Framework and the 2030 Agenda.
 - Goals address both the capacities themselves and the impact of their existence.
 - Stakeholders have considered both outcome- and output-level objectives in their planning.
 - Goals and impacts pursue long-term positive transformation of disaster risk reduction capabilities.

- ✓ **Efforts are Demand-driven and Needs-based**
 - Identification of local demands and needs is possible.
 - Capacity development programming aligns with what stakeholders and target audience members desire.
 - Interventions are familiar to and preferred by the individuals and organizations for which change is sought.
 - Capacity development programming considers what is actually needed in light of existing capacities and ongoing programmes.
 - Establishment of parallel structures has been avoided.

- Interventions are conducted with the knowledge of and in a manner that adapts to local conditions.
- ✓ **Efforts are Strategic and Sustainable**
 - Programming supports the strategic implementation of national and sub-regional policy and programming in a manner that promotes long-term sustainable results.
 - Capacity development interventions are embedded in strategy formulation and integrated systematically starting from the analysis of needs through implementation, operations, and monitoring and evaluation.
 - Where integration of disaster risk reduction, sustainable development, and climate change adaptation has been achieved, capacity development programming conforms to those efforts, and speaks to those partners.
 - Efforts balance short term gains with longer-term results that enable sustainable improvement of lives beyond the project or program timeframe.
- ✓ **Efforts are Nationally-Owned and Led**
 - Programming is convened, organized or co-organized, funded or cost-shared, and directed by internal governmental or community institutions.
 - Management control exists at the level that is most appropriate for the impacts sought.
 - Capacity development efforts are stakeholder-informed and, to the extent possible, managed, at every step in the capacity development cycle.
 - Commitments occur organically and not from the outside.
- ✓ **Efforts are Value-Added**
 - Capacity development programming adds value, avoids duplication and aims for coherent implementation.
 - Value is measured in terms of sustainable capacity that is created and disaster risk reduction achieved.
- ✓ **Efforts are Practical, Replicable, and Localized**
 - Capacity development targets account for the motivations, resources, and capabilities of the stakeholders involved (both recipients and providers).
 - Capacity development programming considers whether interventions are understood and relevant in local languages and the local context.
 - Capacity development programming considers whether it is possible for governmental and other affiliated partners to replicate, adapt, and adopt the methods to meet their needs.
 - Approaches aim to develop sustainable individual, organizational, and enabling environment capacity.
- ✓ **Efforts Foster Partnerships**

- Capacity development programming is conducted in a manner that enables the identification and engagement of appropriate and viable partners drawn from all appropriate sectors and levels.
 - Methods and practices employed are based on partners' existing capabilities, identified needs, and organizational objectives, with the aim of enhancing in-country ownership and sustainability.
 - Partners have a clear and significant role in not only program implementation but also design.
- ✓ **Efforts are Standard-Conformant or Standard-Setting**
- Where standards exist, whether based on competencies or other measures, capacity development programming assesses needs accordingly and provide assistance in a manner that addresses gaps.
 - Programming partners have identified or developed and applied quality standards for projects or interventions that enable the measurement of the quality of progress and results prior to implementation.
- ✓ **Efforts Employ a Mix of Activities across Multiple Levels and Timeframes**
- Capacity development efforts focus on multiple levels of capacity (individual, organizational, and enabling environment) and are appreciative of the interrelationships that exist between these levels.
 - Capacity development efforts address a range of timeframes, and ensure a complementarity of actions that foster change.
 - Planning has a strategic basis and employs a combination of complementary activities beyond the provision of training and education.
 - Targeted activities enable engagement across the short, medium, and longer-term timeframes.
 - Projects and programs are components of a single, coordinated process.
- ✓ **Efforts Strengthen Knowledge Frameworks**
- Capacity development programming provides opportunities to capture, assess, translate, transfer, and broker knowledge in order to foster knowledge innovation.

Appendix 5: Checklist of Common Capacity Development for Disaster Risk Reduction Obstacles

- **DRR-specific capacity development needs are understood and appreciated**

There exists sufficient understanding and appreciation of the capacities required to bring about disaster risk reduction and the methods that exist to build them. Stakeholders know what to do and believe those tasks and actions to be necessary. The following strategies and methods have been attempted in order to increase understanding and appreciation of DRR specific capacity development needs:

- National capacity development plan, framework, or strategy has been drafted
- Capacity needs assessments are being promoted for use in all projects and programmes that address disaster risk reduction and disaster risk management (in coherence with climate change adaptation and sustainable development)
- Development partners are encouraged or required to incorporate disaster risk reduction capacity development considerations into their project designs
- Competency-based standards are applied to K-12 and higher-education disaster risk reduction courses and curricula
- Competency-based standards have been established for jobs that are directly and/or indirectly associated with disaster risk reduction

- **Training and education balanced with other non-training interventions**

Capacity development efforts address organization-level and enabling environment needs and structures in addition to providing training and education to individuals. The following strategies and methods have been applied in order to increase capacity development sustainability:

- Capacity development efforts include a mix of activities that together address the individual, organizational, and enabling environment levels
- ‘Train-the-trainer’ courses have been incorporated into regular training and education programs to ensure new staff and staff replacements can receive the required instruction
- ‘On-the-job’ training programmes, mentorships, and use of secondments have been instituted
- Interventions have focused on the “whole of society” (including elected representatives, private sector representatives, civil society organizations, and even the general public)

- **Action has been taken to increase access to and the existence of facilities, programmes, and resources to support awareness, knowledge, and skills**

There exist sufficient facilities, programmes, and resources that are equipped to support development of the awareness, knowledge, and skills required to achieve disaster risk reduction objectives. DRR-relevant staff and stakeholders are able to easily address their knowledge and skills gaps. Reliance on international development organizations and donors for capacity development needs is minimal or is being reduced. End users are able to influence or direct

their own education and training. Materials are in a language understood by stakeholders. Capacity development project reports are published, with results included. The following strategies and methods have been applied to increase access to facilities, programmes, or resources that support disaster risk reduction awareness, knowledge, and skills, for all stakeholders:

- Public and private higher-education institutions have been provided with curriculum development materials and support, including materials translation
 - Organizations are encouraged or required to publish capacity development tools and reports in all relevant languages
 - Participation in academic and training programs have been incentivized through the establishment of minimum disaster risk reduction educational competencies in DRR-related job descriptions
 - Online access to training and education is offered
 - In-country disaster risk reduction information and knowledge platform that includes lessons learned and good practice has been established
 - Staff have been supported in their efforts to participate in international and regional training and education exchange programmes, including through the hosting of other countries' staff
- **Access to and support for disaster risk reduction capacity development opportunities have been provided for staff that are not traditionally involved in Disaster Risk Management (DRM)**
Disaster risk reduction capacity development activities are not concentrated within and on the needs of those departments and agencies most closely affiliated with, responsible for, or focal point for governmental disaster risk management. Individuals, agencies, and organizations with less obvious yet critical DRR roles (e.g., elected officials, non-disaster ministries, planning agencies or departments, humanitarian organizations, private sector entities, and others) are targeted. The following strategies and methods have been applied to ensure a more holistic approach to staff capacity development:
 - Integration of disaster risk reduction, capacity development, climate change adaptation and sustainable development efforts have been pursued, including the use of explicit references in risk-focused legislation
 - Expansion of policies and programmes that permit eligibility of a greater range of stakeholders has occurred
 - A wider range of people beyond that extends beyond the offices and agencies most closely linked to disaster risk reduction is being exposed to capacity development efforts
 - A national capacity development strategy that ensures more accurate identification of capacity development needs as matched to the organizations and individuals targeted is being or has been created
 - **Sufficient availability of resources (Human, technical, financial, other)**
Interventions are supported with adequate financial and human resources. Resource availability

is sufficient in terms of technologies, tools, equipment, information, data, and other resources as well. The following strategies and methods have been applied in order to help meet disaster risk reduction resource needs:

- Partnerships and collaboration opportunities have been pursued with stakeholders and partners in order to create opportunities for secondment of officials with capacity development needs
 - Partnerships have been established with the private sector and academia
 - Capacity assessments have been conducted in order to better understand the scope of technical expertise that exists among all stakeholders
 - Long-term resource development strategies have been created as a component of a national or sub-national capacity development strategy, linked where possible to legislation
 - Incentives that encourage and maintain required resource allocations have been applied
- **Local ownership of capacity development programmes and projects exists**

Ownership of programs or projects lies with the national or local governments rather than with external partners or donors, including in program design, methods selection, identification of targets, and other aspects. Recipient community stakeholders are involved throughout the entire project cycle. The following strategies and methods have been applied to increase local ownership of capacity development programmes and projects:

 - A comprehensive stakeholder analysis has been performed at the earliest stages of project design
 - Local organizations have been encouraged to play a key role in project management and decision-making
 - Projects are demand-driven and needs-based
 - Local stakeholders and communities have been engaged in localizing content and tools
- **Sufficient focus on sub-national capacity**

DRR capacity development efforts have addressed the sub-national levels of government in project design and implementation. Integration of local and subnational programmes exists. Capacities, policies, and procedures at the national and local level coincide and/or coordinate with those at the sub-national level. The following strategies and methods have been applied in order to improve disaster risk reduction capacity development at the sub-national level:

 - Sub-national governments have been encouraged to play a coordinative role in capacity assessment and development efforts, including development of sub-national capacity development strategies and establishing a DRR-focused position or office at the sub-national level that are in line with the national strategy
 - Sub-national governments have been empowered to work with cities in their region to participate in global resilience efforts including Making Cities Resilient, New Urban

Agenda, Tsunami Ready International, and others

- **Standardized indicators have been developed for the evaluation of disaster risk reduction capacity development efforts**

Tools exist that enable the assessment of programmes and practices according to their impacts. Reporting systems consider whether or not the project had an impact on disaster risk reduction capacity and not just output and outcomes. Reporting systems address a broad view of capacity development. The following strategies and methods have been applied in order to improve the existence of and access to standardized indicators for the evaluation of disaster risk reduction capacity development efforts:

- A national capacity development strategy, framework, or plan with corresponding results-based indicators has been developed
- Compliance programmes with corresponding performance guidelines that enable monitoring and evaluation of capacity development efforts and sharing of lessons learned and best practices have been developed
- Seminars, workshops, and other activities and means have been conducted in order to develop and mainstream multi-stakeholder owned and accepted evaluation indicators and methods

- **General awareness and knowledge of risk drivers and the role stakeholders play in societal disaster risk reduction (including at the local level and among the general public)**

There exists a common awareness of the need for capacity development efforts and awareness among stakeholders in terms of how their own activities and the activities of others contribute to risk. Citizens and stakeholders understand and appreciate the risks that exist and the opportunities that exist to address them in order to react appropriate to information on capacity development needs. The following strategies and methods have been applied in order to increase general awareness and knowledge of risk drivers and the role stakeholders play in societal disaster risk reduction:

- An ‘all-of-society’ approach to community risk management has been encouraged
- Private sector and nongovernmental partners have been included in disaster planning and exercise efforts
- There has been integration of the disaster risk reduction and sustainable development communities at the local level
- A locally-focused and managed disaster risk reduction knowledge platform has been established
- Encouragement or provision of opportunities for informal education and public awareness raising has occurred

- **Adequate consideration of capacity development in conflict and post-conflict areas**

Capacity development efforts have occurred in post-conflict areas, addressing the hazard vulnerability of the people that live within them and any reductions in or elimination of

institutional knowledge on DRR practices. The following strategies and methods have been applied in order to increase capacity development efforts in post-conflict areas:

- Assessment of hazard risk and vulnerability has been prioritized early in the post-conflict reconstruction process
- Individuals or ministries capable of championing disaster risk reduction capacity development have been identified
- The disaster risk reduction capacity development process has been performed in planning and design for reconstruction and development in all sectors, focusing on capacity assessment and target indicators
- Stakeholder awareness of capacity development needs has been increased
- Coordination mechanisms have been established for capacity development efforts at all levels
- Migrants have been engaged in disaster risk reduction planning and processes wherever possible

Appendix 6: Proposed Indicators for Monitoring and Evaluation of Capacity Development for Disaster Risk Reduction

These indicators have been adapted to the disaster risk reduction context from *Monitoring Capacity Development in GEF operations: A Framework to Monitor Capacity Development Initiatives*, GEF, 2011, pp. 12-16

Capacity Result 1: Capacities for engagement		
Relevant individuals and organizations (disaster management or DRR department, sectoral ministries, local government, private sector, NGO and civil sector, gender organization, scientific organization, the citizens, and others relevant) engage proactively and constructively with one another in managing a global disaster risk reduction issue.		
Indicator 1.1 – Degree of legitimacy/mandate of lead disaster risk reduction organizations: This indicator measures whether or not the appropriate organizations and individuals targeted for capacity development have been identified, as determined by how clearly and accurately their respective responsibilities have been defined (in accordance with Sendai Framework goals and targets) and whether the authority they hold to perform these responsibilities is recognized.	Organizational responsibilities for disaster risk reduction are not clearly defined	0
	Organizational responsibilities for disaster risk reduction are identified	1
	Authority and legitimacy of all lead organizations responsible for disaster risk reduction are partially recognized by stakeholders	2
	Authority and legitimacy of all lead organizations responsible for disaster risk reduction recognized by stakeholders	3
Indicator 1.2 – Existence of operational multi stakeholder mechanisms: This indicator measures whether or not there exist public and/or private mechanisms (e.g., associations,	No multi stakeholder mechanisms are in place	0
	Some multi stakeholder mechanisms are in place and operational	1
	Some multi stakeholder mechanisms are formally established through agreements, MOUs, etc.	2

<p>contracts, memoranda of understanding) through which the engagement and coordination of disaster risk management stakeholders may occur, and whether or not these mechanisms are functional.</p>	<p>Comprehensive multi stakeholder mechanisms are formally established and are operational/functional</p>	<p>3</p>
<p>Indicator 1.3 – Existence of cooperation among stakeholder groups: This indicator measures the quality of involvement of stakeholders, including representation of all appropriate stakeholder groups, the establishment of stakeholder consultation processes, and the active contribution of these stakeholders to decision-making.</p>	<p>Identification of stakeholders and their participation/involvement in management decision-making is poor</p>	<p>0</p>
	<p>Stakeholders are identified but their participation in management decision-making is limited</p>	<p>1</p>
	<p>Stakeholders are identified and regular consultations mechanisms are established</p>	<p>2</p>
	<p>Stakeholders are identified and they actively contribute to established participative management decision-making processes</p>	<p>3</p>
<p>Capacity Result 2: Capacities to generate, access and use information and knowledge This is the capacity of relevant individuals and organizations to research, acquire, communicate, educate and make use of pertinent information to be able to identify and assess hazard risk and analyse and implement disaster risk reduction solutions.</p>		
<p>Indicator 2.1 – Degree of stakeholders’ disaster risk reduction awareness: This indicator measures how much awareness stakeholders have with regards to the existence and severity of hazard risk at all levels (including the community level), and about the existence and availability of risk reduction interventions.</p>	<p>Stakeholders are not aware about global disaster risk reduction issues and their related possible solutions</p>	<p>0</p>
	<p>Stakeholders are aware about global disaster risk reduction issues but not about the possible solutions</p>	<p>1</p>
	<p>Stakeholders are aware about global disaster risk reduction issues and the possible solutions but do not know how to participate</p>	<p>2</p>
	<p>Stakeholders are aware about global disaster risk reduction issues and are actively participating in the implementation of related solutions</p>	<p>3</p>
<p>Indicator 2.2 – Access and sharing of disaster risk</p>	<p>The disaster risk reduction information needs are not identified and the information management infrastructure is inadequate</p>	<p>0</p>

<p>reduction information by stakeholders: This indicator measures knowledge that exists about the information needs of disaster risk reduction stakeholders, the adequacy of the information management infrastructure in place, and the degree to which sharing of this knowledge and information is occurring.</p>	The disaster risk reduction information needs are identified but the information management infrastructure is inadequate	1
	The disaster risk reduction information is partially available and shared among stakeholders but is not covering all focal areas and/or the information management infrastructure to manage and give information access to the public is limited	2
	Comprehensive disaster risk reduction information is available and shared through an adequate information management infrastructure	3
<p>Indicator 2.3 – Extent of inclusion/use of local and traditional knowledge in disaster risk reduction decision-making: This indicator measures whether or not local and traditional knowledge exists among stakeholder groups (including beneficiaries), and whether such knowledge has been captured and shared among stakeholders for effective participative decision-making processes.</p>	Local and traditional knowledge is ignored and not taken into account into relevant participative decision-making processes	0
	Local and traditional knowledge is identified and recognized as important but is not collected and used in relevant participative decision-making processes	1
	Local and traditional knowledge is collected but is not used systematically into relevant participative decision-making processes	2
	Local and traditional knowledge is collected, used and shared for effective participative decision-making processes	3
<p>Indicator 2.4 – Existence of disaster risk reduction education programmes: This indicator looks at the quantity and quality of formal and informal disaster risk reduction education that are provided by and available to stakeholders, as a factor of</p>	No disaster risk reduction education programmes are in place	0
	Disaster risk reduction education programmes are partially developed and partially delivered	1
	Disaster risk reduction education programmes are fully developed but partially delivered	2
	Comprehensive disaster risk reduction education programmes exist and are being delivered	3

capacity gaps and stakeholder demand.		
<p>Indicator 2.5 – Extent of the linkage between disaster risk reduction research/science and policy development: This indicator measures the linkage between disaster risk reduction policy and research; including the identification of research needs and research strategies and programmes; and the relevance of the research available to policy development.</p>	No linkage exists between disaster risk reduction policy development and science/research strategies and programmes	0
	Research needs for disaster risk reduction policy development are identified but are not translated into relevant research strategies and programmes	1
	Relevant research strategies and programmes for disaster risk reduction policy development exist but the research information is not responding fully to the policy research needs	2
	Relevant research results are available for disaster risk reduction policy development	3
<p>Capacity Result 3: Capacities for strategy, policy and legislation development This is the capacity of relevant individuals and organizations to plan and develop disaster risk reduction policy and legislation, and to develop strategies and plans, all of which support or otherwise operationalize disaster risk reduction efforts.</p>		
<p>Indicator 3.1 – Extent of the disaster risk reduction planning and strategy development process: This indicator measures the quality of the planning and strategy development process, whether the planning and strategy development process produces adequate plans and strategies related to disaster risk reduction, and if adequate resources and coordination mechanisms are in place to ensure proper implementation of these plans, programmes and projects.</p>	The disaster risk reduction planning and strategy development process is not coordinated and does not produce adequate disaster risk reduction plans and strategies	0
	The disaster risk reduction planning and strategy development process does produce adequate disaster risk reduction plans and strategies but there are not implemented /used	1
	Adequate disaster risk reduction plans and strategies are produced but there are only partially implemented because of funding constraints and/or other problems	2
	The disaster risk reduction planning and strategy development process is well coordinated by the lead disaster risk reduction organizations and produces the required disaster risk reduction plans and strategies; which are being implemented	3

<p>Indicator 3.2 – Existence of policies and regulatory frameworks to support capacity building: This indicator measures the completeness of the policy and regulatory frameworks that exist or have been put in place to support disaster risk reduction (including capacity development for disaster risk reduction), including measurement of mechanisms for enacting, complying, and enforcing these policies and laws.</p>	The disaster risk reduction policy and regulatory frameworks are insufficient; they do not provide an enabling environment	0
	Some relevant disaster risk reduction policies and laws exist but few are implemented and enforced	1
	Adequate disaster risk reduction policy and legislation frameworks exist but there are problems in implementing and enforcing them	2
	Adequate policy and legislation frameworks are implemented and provide an adequate enabling environment; a compliance and enforcement mechanism is established and functions	3
<p>Indicator 3.3 – Adequacy of the information available for disaster risk reduction decision-making: This indicator measures the adequacy of the information available for decision-making, if the information is made available to decision-makers, and if this information is updated and used by decision-makers.</p>	The availability of information for disaster risk reduction decision-making is lacking	0
	Some disaster risk reduction information exists but it is not sufficient to support the disaster risk reduction decision-making processes	1
	Relevant disaster risk reduction information is made available to disaster risk reduction decision-makers but the process to update this information is not functioning properly	2
	Political and administrative decision-makers obtain and use updated disaster risk reduction information to make decisions	3
<p>Capacity Result 4: Capacities for management and implementation This is the capacity of relevant individuals and organizations to perform the required implementation actions guided or mandated by disaster risk reduction policies, plans, strategies and/or regulatory decisions, and the capacity plan and execute relevant sustainable risk management actions and solutions.</p>		
<p>Indicator 4.1 – Existence and mobilization of resources by the relevant organizations: This indicator measures the</p>	The disaster risk reduction organizations don't have adequate resources for their programmes and projects and the requirements have not been assessed	0
	The resource requirements are known but are not being addressed	1

availability of human, financial, and other resources within the relevant organizations, whether potential sources for resource shortfalls have been identified, and whether resources have been mobilized appropriately.	The funding sources for these resource requirements are partially identified and the resource requirements are partially addressed	2
	Adequate resources are mobilized and available for the functioning of the lead disaster risk reduction organizations	3
Indicator 4.2 – Availability of required technical skills and technology transfer: This indicator measures the availability of skills and knowledge, if the technical needs and sources are identified and accessed by the program or project, and if there is a basis for an ongoing locally- or nationally-based upgrading of skills and knowledge.	The necessary required skills and technology are not available and the needs are not identified	0
	The required skills and technologies needs are identified as well as their sources	1
	The required skills and technologies are obtained but their access depend on foreign sources	2
	The required skills and technologies are available and there is a national-based mechanism for updating the required skills and for upgrading the technologies	3
Capacity Result 5: Capacities to monitor and evaluate Individuals and organizations have the capacity to effectively monitor and evaluate project and/or programme achievements against expected results and to provide feedback for learning, adaptive management and suggesting adjustments to the course of action if necessary to reduce disaster risk and make risk-informed development decisions.		
Indicator 5.1 – Adequacy of the project/programme monitoring process: this indicator measures the existence of a monitoring framework, if the monitoring involves stakeholders and if the monitoring results inform the implementation process.	Irregular project monitoring is being done without an adequate monitoring framework detailing what and how to monitor the particular project or programme	0
	An adequate resourced monitoring framework is in place but project monitoring is irregularly conducted	1
	Regular participative monitoring of results is being conducted but this information is only partially used by the project/programme implementation team	2
	Monitoring information is produced timely and accurately and is used by the implementation team to learn and possibly to change the course of action	3
Indicator 5.2 – Adequacy of the project/programme evaluation	None or ineffective evaluations are being conducted without an adequate evaluation plan; including the necessary resources	0

<p>process: this indicator measures the existence of an evaluation framework, if the adequate resources and access to information is available and if the evaluation results inform the planning process.</p>	An adequate evaluation plan is in place but evaluation activities are irregularly conducted	1
	Evaluations are being conducted as per an adequate evaluation plan but the evaluation results are only partially used by the project/programme implementation team and other staff designing the next generation of projects	2
	Effective evaluations are conducted timely and accurately and are used by the implementation team to correct the course of action if needed and to learn lessons for further project planning activities.	3

These indicators have been adapted to the disaster risk reduction context from: Global Environmental Facility (GEF). 2011. *Monitoring Capacity Development in GEF operations: A Framework to Monitor Capacity Development Initiatives*. pp. 12-16.

References and Key Resources

- Asian Development Bank (ADB). 2011. Practical Guide to Capacity Development in a Sector Context. <http://bit.ly/2jNDE5K>.
- Becker, Per and Marcus Abrahamsson. 2012. Designing Capacity Development for Disaster Risk Management: A Logical Framework Approach. Swedish Civil Contingencies Agency (MSB).
- Burby, Raymond, R. 1998. Cooperating with Nature: Confronting natural hazards with landuse planning for sustainable communities. Joseph Henry Press, Washington DC.
- CADRI. 2011. Basics of Capacity Development for Disaster Risk Reduction. Capacity for Disaster Reduction Initiative. Brochure. <http://bit.ly/2yYXuB6>.
- Few, R., Scott, Z., Wooster, K., Avila, M.F., Tarazona, M., and Thomson, A. 2015. Strategic Research into National and Local Capacity Building for DRM: Synthesis Report. Geneva. International Federation of Red Cross and Red Crescent Societies.
- GFDRR. 2016. Reviewing the Impact of Capacity Building in GFDRR. World Bank. <http://bit.ly/2zMVgnY>.
- Global Environmental Facility (GEF). 2010. Monitoring Capacity Development in GEF Operations: A Framework to Monitor Capacity Development Initiatives. <http://bit.ly/2isXBRS>.
- Gülkan, P. 2010. "Disaster Risk Reduction in Turkey: Revisions for Building Code Enforcement Since 1999." Case study prepared for ISDR Global Assessment Report 2011.
- Hagelsteen, Magnus and Joanne Burke. 2016. Practical Aspects of Capacity Development in the Context of Disaster Risk Reduction. International Journal of Disaster Risk Reduction. No. 16. Pp. 43-52.
- Hagelsteen, Magnus and Per Becker. 2014. *Forwarding a Challenging Task: Seven Elements for Capacity Development for Disaster Risk Reduction*. Global Risk Forum Davos. V.2, No.2. April.
- Hemstock, Sarah, Leigh-Ann Buliruarua, Emily Y. Y. Chan, Gloria Chan, et. al. 2016. Accredited Qualifications for Capacity Development in Disaster Risk Reduction and Climate Change Adaptation. Australasian Journal of Disaster and Trauma Studies. V.20, No.1. Pp. 15-34.
- International Federation of Red Cross / Red Crescent Societies. n/d. Building Disaster Risk Management Capacity: A Strategic Approach. IFRC Briefing Note. <http://bit.ly/2ko8mSj>.
- International Federation of Red Cross / Red Crescent Societies. n/d. Building Disaster Risk Management Capacity: Key Principles. IFRC Briefing Note. <http://bit.ly/2BUNmJX>.
- Japan International Cooperation Agency (JICA). 2003. Capacity Building and JICA's Activities: Cooperation for Promoting Multi-Layered Capacity Development. JICA Study Report. <http://bit.ly/2BKA9Yq>.
- Japan International Cooperation Agency (JICA). 2004. Capacity Development Handbook for JICA Staff: For Improving the Effectiveness and Sustainability of JICA's Assistance. JICA Study Report. <http://bit.ly/2FU6VEm>.

- Japan International Cooperation Agency (JICA). 2008. Capacity Assessment Handbook: Project Management for Realizing Capacity Development. <http://bit.ly/2BJCwr9>
- Johnson, Cassidy. 2011. Creating an Enabling Environment for Reducing Disaster Risk: Recent Experience of Regulatory Frameworks for Land, Planning, and Building in Low- and Middle-Income Countries. Paper written for the Global Assessment Report on Disaster Risk Reduction 2011.
- Krause, Phillip. 2013. Of Institutions and Butterflies: Is Isomorphism in Developing Countries Necessarily a Bad Thing? Overseas Development Institute. <http://bit.ly/2nR7tXv>.
- Learning Network on Capacity Development (LenCD). 2011. Cairo Consensus on Capacity Development: Call To Action. <http://bit.ly/2BD1onG>.
- Learning Network on Capacity Development. n/d. LenCD Website. www.lencd.org
- LenCD. n/d. How to Assess Existing Capacity and Define Capacity Needs. LenCD Website (Accessed November 2017). <http://bit.ly/2BznHGO>.
- Lucas, Brian. 2013. Current Thinking on Capacity Development. GSDRC Applied Knowledge Services. <http://bit.ly/2igToNh>.
- McLean, Dennis. 2016. Asia Adopts Ambitious Sendai Plan. UNISDR Press Release. November 5. <http://bit.ly/2AkQUom>.
- Morgan, Peter. 2006. The Concept of Capacity. European Centre for Development Policy Management. May. <http://bit.ly/2jmx5qx>.
- Oxford Policy Management. 2010. A Framework for Capacity Development in the Process of Achieving Sustainable Development. Oxford Policy Management. <http://bit.ly/2A28Rly>.
- Pearson, Jenny. 2011. LenCD Learning Package on Capacity Development. <http://bit.ly/2ygBeB3>.
- Pearson, Jenny. 2011. Training and Beyond: Seeking Better Practices for Capacity Development. OECD Development Cooperation Working Papers. No.1. OECD Publishing. <http://bit.ly/2jzfBud>.
- UN News Service. 2015. Ahead of Global Risk Reduction Conference, UN Review Finds Vast Majority of Disasters Climate-Related. UN Press Release. March 6. <http://bit.ly/2AAuGii>.
- UNDG. 2006. Enhancing the UN's Contribution to National Capacity Development. A UNDG Position Statement. <http://bit.ly/2AnRLHX>.
- UNDG. 2008. UNDG Capacity Assessment Methodology: User Guide. <http://bit.ly/2zPcUrz>.
- UNDG. 2016. Capacity Development: UNDAF Companion Guidance. <http://bit.ly/2zv7XE0>.
- UNDG. 2017. Capacity Development Companion Guidance (Updated). 23 March.
- UNDP. 2009. Capacity Development: A UNDP Primer. UNDP. New York, NY.
- UNDP. 2010. Capacity Development for Disaster Risk Reduction. UNDP Bureau for Crisis Prevention and Recovery. October. <http://bit.ly/2AywbAW>.

- UNDP. 2011. Strengthening Capacity for Disaster Risk Reduction: A Primer. Bangkok. <http://bit.ly/2B7pYfn>.
- UNDP. 2016. SSMART for SDGs: Why Do We Need SSMART for SDGs? UNDP Website. <http://bit.ly/2z5TahU>.
- UNDP. 2017. UNDP & The Sendai Framework for Disaster Risk Reduction: Supporting Progress in Over 160 Countries. <http://bit.ly/2ntlkSr>.
- UNDP. n/d. SSMart for SDGs. UNDP Brochure. <http://bit.ly/2z6B4wk>.
- UNESCAP and National Institute of Disaster Management (NIDM) India. 2016. Regional Capacity Development Workshop: Mainstreaming Disaster Risk Reduction in Sustainable Development Planning. 13-16 September. New Delhi.
- UNISDR. 2005. Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters. ISDR. Geneva.
- UNISDR. 2006. Words Into Action: A Guide for Implementing the Hyogo Framework for Action. United Nations.
- UNISDR. 2007. Words Into Action: A Guide for Implementing the Hyogo Framework. United Nations. <http://bit.ly/2nINBv5>.
- UNISDR. 2014. Progress and Challenges in Disaster Risk Reduction: A Contribution Towards the Development of Policy Indicators for the Post-2015 Framework on Disaster Risk Reduction. <http://bit.ly/2EKU2A9>.
- UNISDR. 2015. Making Development Sustainable: The Future of Disaster Risk Management. Global Assessment Report (GAR) on Disaster Risk Reduction. <http://bit.ly/2nGXW3y>.
- UNISDR. 2015b. Sendai Framework for Disaster Risk Reduction 2015-2030. UNISDR. Geneva. <http://bit.ly/2BI4Da3>.
- UNISDR. 2016. Science and Technology Partnership Capacity Development concept note Launching UNISDR Science and Technology Partnership and the Science and Technology Roadmap to 2030: To Promote and Support the Availability and Application of Science and Technology to Decision-Making in Disaster Risk Reduction. <http://bit.ly/2B7eFDR>.
- United Nations General Assembly. 2017. Report of the Open-Ended Intergovernmental Expert Working Group on Indicators and Terminology Relating to Disaster Risk Reduction. A/71/644. <http://bit.ly/2j4LRl3>.
- United Nations General Assembly. 2017b. Repositioning the United Nations development system to deliver on the 2030 Agenda: our promise for dignity, prosperity, and peace on a healthy planet. Report of the Secretary General. December 21. A/72/684-E/2018/7. <http://bit.ly/2EKch9c>.
- United Nations Sustainable Development Knowledge Platform. 2017. Capacity-Building. United Nations Website. <http://bit.ly/2Bv1HjN>.

United Nations. 2017. United Nations Plan of Action on Disaster Risk Reduction for Resilience: Towards a Risk-Informed and Integrated Approach to Sustainable Development. <http://bit.ly/2iQd1Qr>.

US Department of Homeland Security. 2007. Target Capabilities List: A Companion to the National Preparedness Guidelines. <http://bit.ly/2BpkJsl>.

USAID. 2010. Challenges Encountered in Capacity Building: Review of Literature and Selected Tools. Arlington, VA. May.