



DISABILITY INCLUSION IN DISASTER RISK MANAGEMENT

PROMISING PRACTICES AND OPPORTUNITIES
FOR ENHANCED ENGAGEMENT



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Cover Photo: Southern Thailand, January 9, 2017. A volunteer helps a man with a disability get through the flood in his wheelchair. Issara Anujun / Shutterstock.com

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ACRONYMS

ASB	Arbeiter-Samariter-Bund
BP	Bank Policy
CAC	Consumer Advisory Committee
CBDIDRR	Community-Based Disability-Inclusive Disaster Risk Reduction
CDEM	Civil Defense and Emergency Management
CPF	Country Partnership Framework
CRPD	Convention on the Rights of Persons with Disabilities
CRW	Crisis Response Window
DDS	Department of Developmental Services
DiDRR	Disability-inclusive disaster risk reduction
DPF	Development policy financing
DPO	Disabled people's organization
DRM	Disaster risk management
DRR	Disaster risk reduction
ESF	Environmental and Social Framework
GFDRR	Global Facility for Disaster Reduction and Recovery
ICR	Inclusive Community Resilience
IDA	International Development Association
IPF	Investment project financing
LDMO	Local Disaster Management Office
LGBTQI	Lesbian, Gay, Bisexual, Transgender, Queer, Intersex
NGO	Nongovernmental organization
OP	Operational Policy
PforR	Program-for-Results financing
SCD	Systematic Country Diagnostic
SDG	Sustainable Development Goal
UN	United Nations
UNISDR	United Nations Office for Disaster Risk Reduction

EXECUTIVE SUMMARY

REDUCING VULNERABILITY, MAXIMIZING INCLUSION

While hazard events can threaten the life, health, and well-being of all people, some are disproportionately affected by the immediate and long-term effects of such events, especially the world's one billion people with disabilities. Reasons for this disparate impact include not only aspects of disability but also the interplay between disability and other risk factors for enhanced vulnerability during emergencies, such as poverty. Disability-based discrimination marginalizes persons with disabilities in society during periods of non-emergency and in many cases forces them into lives of dependency. Disasters exacerbate such conditions, enhancing the disparities between persons with disabilities and other members of society and increasing the likelihood that those with disabilities will be disproportionately negatively affected both during and after an emergency.

Persons with disabilities are not a homogenous group, and include people with physical disabilities, vision disabilities, hearing and speech disabilities, cognitive disabilities, and psychosocial disabilities, among many others. Moreover, people with similar disabilities may experience common barriers in different ways, and some barriers may equally affect people with very different disabilities. Those barriers can be physical, informational, and communicational in nature and can involve legislation, regulation, policy, and attitudes. The experience of barriers and societal discrimination is also dynamic and affected by the intersection of disability with other identities and bases of discrimination, including age, gender, ethnicity, religion, sexual orientation, gender identity, indigeneity, or other status. In collaboration with persons with disabilities, these barriers need to be addressed during all phases of the disaster risk management (DRM) process. Part 1 of this report offers a detailed discussion of the importance of disability-inclusive DRM.

Disproportionate negative outcomes for persons with disabilities need not be inevitable, and the

benefits of being disability-inclusive extend to all members of society. For example, the application of accessibility standards and universal design to early warning systems increases the ability of such systems to effectively warn people with and without disabilities. Reaching more people with early warning systems allows them to maximize the use of pre-disaster time to effect evacuation or shelter-in-place plans, or to protect essential assets. In addition, bolstering the resiliency of persons with disabilities to withstand and recover from disasters bolsters the resiliency of entire communities and societies, benefitting everyone. Perhaps most important, disability-inclusive DRM can empower persons with disabilities to take their rightful place as agents of change and as active contributors to the development and effective implementation of DRM policies, plans, and standards.

THE GLOBAL MANDATE FOR DISABILITY-INCLUSIVE DRM

Numerous international policy frameworks are available to help guide effective implementation of disability-inclusive DRM. Among them are the 2030 Agenda for Sustainable Development, the Convention on the Rights of Persons with Disabilities (CRPD), the World Humanitarian Summit, Paris Climate Change Agreement, and Habitat III and the New Urban Agenda. Several policy frameworks are especially relevant to disability-inclusive DRM, these are briefly described below.

The Sendai Framework for Disaster Risk Reduction 2015–2030 adopted by United Nations Member States in 2015 sets four priorities for action to guide the development and implementation of policies on disaster risk reduction (DRR) from 2015–2030. Those priorities are: understanding disaster risk; strengthening disaster risk governance to manage disaster risk; investing in DRR for resilience; and enhancing disaster preparedness for effective response and to “build back better” in recovery, rehabilitation and reconstruction. The relevance of these priorities to disability-inclusive DRM, the status



Benjamin Tampadong Jr., a person with a disability works with FTI (DPO) to collect disability data in this community. ASB Indonesia & Philippines, Community Resilience Program. Photo copyright: Foundation of TheseAble Persons, Inc. (FTI) 2017.

of implementation with respect to persons with disabilities, and examples of promising practices, are detailed in Part 2 of the report.

Several World Bank regulatory frameworks also are relevant, including the Environmental and Social Framework, Rapid Response to Emergencies and Crises operations policy (OP/BP 8.00), and International Development Association (IDA) crisis financing mechanisms (including the Immediate Response Mechanism and the Crisis Response Window).

HOW DRM PROCESSES HAVE FALLEN SHORT OF DISABILITY INCLUSION

Although promising practices exist, much more remains to be done to ensure that persons with disabilities are empowered to be active participants in all phases of DRM, and that

proactive measures are taken to incorporate disability into disaster risk analysis; facilitate the meaningful participation of persons with disabilities at all levels of disaster risk governance; build the resilience of persons with disabilities; and recover and “build back better” in a way that fully addresses the concept as it applies to persons with disabilities. For example, many risk analyses do not account for the existing social exclusion of persons with disabilities—exclusion that can be exacerbated during emergencies, leading to diminished resilience and disproportionately negative outcomes. Many emergency preparedness plans also do not reliably include the perspectives and inputs of persons with disabilities, meaning that they are unable to effectively evacuate or avail themselves of shelters or other response initiatives. First responders frequently lack the training and

tools to respond appropriately to the specific needs of persons with disabilities. Recovery interventions that do not address the accessibility of housing, or inclusion of persons with disabilities in financial protection systems, for example, can leave persons with disabilities excluded from the benefits of such initiatives and disadvantaged with respect to other members of society.

DEVELOPING A ROBUST ACTION PLAN FOR DISABILITY INCLUSION ACROSS DRM

The Global Facility for Disaster Reduction and Recovery (GFDRR) and the World Bank are well positioned to assist countries and the international disability community by incorporating disability into their DRM-related development portfolios, using their convening ability to bring together relevant stakeholders and experts, and providing technical and analytical assistance. The following recommendations (discussed in more detail in Part 3 of the report), address specific lines of effort that the GFDRR and World Bank should undertake to improve the inclusion of persons with disabilities in their DRM activities, as well as improve their relationship to the Sendai priorities.

A. GENERAL RECOMMENDATIONS

The following recommendations reflect the Sendai Framework's calls for an inclusive and all-of-society approach, cutting across all disaster reduction and recovery initiatives or projects supported by the GFDRR and the World Bank:

- **Ensure that persons with disabilities and disabled people's organizations (DPOs) are included as contributing stakeholders.** As stated in the Sendai Framework, Part V, persons with disabilities and DPOs have relevant knowledge and expertise to support the development, implementation, monitoring, and evaluation of disability-inclusive DRR.
- **Identify potential strategic partnerships that can be used to address accessibility standards at the national level.** Work with DPOs and sector experts in construction, communication, and other areas, and seek the support and guidance of international organizations with expertise in accessibility standards.
- **Collaborate with partners to improve data.** A partnership with the Washington Group on Disability Statistics, for example, would facilitate

the use of existing data collection tools and tools yet to be developed to address disability data needs, particularly risk information.

B. ENTRY POINTS IN GFDRR AREAS OF ENGAGEMENT

The thematic areas of engagement identified in the GFDRR Strategy 2018–2021 offer several entry points for disability inclusion.

PROMOTE open access to risk information. In assisting communities to map their exposure to disasters, GFDRR mapping activities should:

- Empower and include persons with disabilities and DPOs in mapping activities.
- Disaggregate data by disability and ensure protection of personal information.
- Ensure that all tools and methods for collecting, analyzing, and disseminating risk information are accessible to people with disabilities.

PROMOTE resilient infrastructure. In providing technical assistance to governments to improve the design, operations and maintenance, and contingency planning of new and rehabilitated infrastructure, GFDRR should:

- Assist countries in the adoption and implementation of accessibility standards, including in GFDRR's "Safer Schools" initiative. Accessibility should include not only physical accessibility but also information and communication accessibility. Collaboration on this work should include national organizations, to ensure locally appropriate standards are developed and implemented, as well as international organizations and nongovernmental organizations (NGOs) with expertise on accessibility standards.
- Engage DPOs and persons with disabilities in identifying critical infrastructure.

SCALE UP the resilience of cities. Urban resilience and urban development practices need to adapt to reduce risk for all, including persons with disabilities. Scaling up the resilience of cities has the potential to contribute to achievement of the SDGs, as well as the Sendai Framework and the Convention on the Rights of Persons with Disabilities (CRPD). It will therefore be important for GFDRR to:

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- Engage DPOs in the piloting, monitoring, and evaluation of resilient cities projects. Where possible, disability-disaggregated data and accessibility audits should be used in decision-making to determine what urban resilience investments and policy changes should be made.
- Include accessibility in resilient city construction and policy reforms and ensure accessibility of information and communication.

STRENGTHEN hydrometeorological services and early warning systems. When offering technical expertise and capacity building to governments, especially in low-income and small island states, GFDRR should:

- Encourage and promote the use of accessible early warning and weather forecast systems. The more accessible such systems are, the more people reached, and the more lives and assets saved when a natural hazard event occurs.

DEEPEN financial protection. In its work with governments to develop comprehensive financial protection strategies, including direct and indirect insurance programs, GFDRR should:

- Facilitate the enhanced inclusion of persons with disabilities in financial protection schemes. This should include identifying relevant qualifying criteria; promoting opportunities for persons with disabilities to contribute to social protection and poverty alleviation programs (including cash-for-work schemes); and ensuring that government contingency funds for scaling up social protection schemes in emergencies can include or target persons with disabilities.
- Work with governments to address barriers to the inclusion of persons with disabilities in financial protection schemes.
- Facilitate research on the costs of exclusion. This would include identifying the return on investment for social protection systems, risk financing, and contingency funds, to enhance understanding of the importance of including persons with disabilities in such mechanisms. Research on the benefits of inclusion of persons with disabilities will support the identification of investments benefitting not only persons with disabilities but also their families and communities.

BUILD resilience at the community level. Working through its Inclusive Community Resilience (ICR) Initiative, GFDRR can:

- Ensure that lessons learned documentation includes disability-inclusive scalable DRM models identifying key components that could be incorporated, replicated, and scaled up in community resilience programs. Where disability-inclusive DRR elements do not exist, assessments should address what components could have been undertaken to ensure that opportunities for disability inclusion in similar projects are not missed.
- Engage DPOs and DRM actors. Facilitating cross-sector learning, training, and capacity building will assist persons with disabilities in being able to better identify risks, barriers, and solutions, and assist DRM actors in working collaboratively with community members with disabilities to achieve disability-inclusive DRM solutions.

ENABLE resilient recovery. In its activities to help train government officials on post-disaster needs assessment and recovery planning, as well as strengthening its own response capacity to help coordinate and support post-disaster assistance, it will be important for GFDRR to:

- **Ensure that damage and impact assessments include disability perspectives.** Actively engage persons with disabilities and DPOs to ensure that disability-related issues (such as access to assistive devices, rehabilitation services, accessible shelter and housing, and life-sustaining supplies such as food and water) are addressed as part of the damage and impact assessments. It will also be important to gather (and promote the collection of) disability-disaggregated data as part of these assessments.
- **Ensure that recovery plans are inclusive of persons with disabilities.** The recovery process offers an opportunity to promote the long-term recovery and resilience of persons with disabilities through “building back better.” The full scope of that concept should involve not only physical infrastructure but also community-based supports, such as access to rehabilitation services, mental health support, supported decision-making, independent living, and other support activities.

C. ENTRY POINTS IN WORLD BANK PROCESSES

The following recommendations relate to components of the World Bank's development work with its country clients.

COUNTRY STRATEGIES. The World Bank's Country Partnership Framework (CPF), which is informed by analysis and stakeholder consultations reflected in the Systematic Country Diagnostic (SCD), guides the World Bank's support to a country. To ensure that CPFs are disability-inclusive, SCDs should be developed by:

- Engaging the disability community, including DPOs, in meaningful, accessible consultations.
- Building disability expertise into staff review processes.
- Countering data gaps by supporting collection of disability data (for example, through censuses, household surveys, and supporting statistics offices).

FINANCING. A variety of financing instruments are available to contribute to World Bank activities that promote disability-inclusive DRM, including:

- Investment project financing (IPF). Disability-focused projects, as well as incorporation of disability into larger projects through subproject-level interventions, can have positive impacts on the ability of persons with disabilities to be resilient to and recover from hazard events. The existing Safeguards and the Environmental and Social Framework (ESF) should facilitate the inclusion of disability as part of the social assessment, so that persons with disabilities are meaningfully consulted, and are protected from negative impacts and included in mitigation plans and actions. IPF projects that could support disability-inclusive DRM include community-driven development projects; new construction or rehabilitation or reconstruction; development of accessible communications systems; and disability-inclusive social safety net mechanisms.
- Development Policy Financing (DPF). This can provide a mechanism through which to fund, for example, the strengthening of country DRM policy through strengthening the institutional/legal framework for DRM, and/or integrating DRM into development planning and decision-making. In the formulation and implementation of such projects, task teams can promote

and facilitate the inclusion of persons with disabilities and DPOs in related stakeholder consultations.

- Program-for-Results Financing (PforR). PforR financing offers the opportunity to engage in a wide variety of DRM-related activities, such as scaling up capacity to engage in DRR activities, improving disaster risk financing, and insurance for targeted populations.

ADVISORY SERVICES AND ANALYTICS. Broadly illustrative examples of disability-inclusive DRM-related activities that should be undertaken by the World Bank include:

- Using the convening role of the World Bank to bring together persons with disabilities and DPOs with other DRM experts at conferences, seminars, and accessible online discussions for knowledge sharing and networking.
- Capacity-building activities with disability-inclusive DRM stakeholders.
- Advising countries on developing or adapting accessibility and universal design standards for hazard warning systems, accessible resilient housing, accessible transportation, among others.
- Analytical work, such as desk reviews of country DRM policies and practices to assess the degree of disability inclusion.
- Support and promote primary data collection, to determine whether persons with disabilities are being served by social safety net programs, and to identify those unable to participate due to qualification, registration, or dissemination-related barriers.
- Connecting clients to information resources and international experts in the field of disability-inclusive DRM.

D. ENHANCING THE INTERNAL CAPACITY OF GFDRR AND WORLD BANK

The following recommendations relate to enhancing the internal capacity of the World Bank and GFDRR to execute disability-inclusive DRM across their portfolios, so that staff are better equipped to conceptualize disability-inclusive projects, engage with stakeholders (including the disability community), measure progress, and share promising practices.



Children participate in a mock drill. Photo copyright: Centre for Disability in Development.

ENHANCE staff expertise. In addition to consultations with the World Bank’s Global Disability Advisor as appropriate, and ensuring that there is a corps of staff available for internal “just in time” consultation (including staff with disabilities), guidance notes and other training, information, and professional development tools should be made available to guide staff in ensuring that DRM-related projects incorporate disability from the earliest phases onwards.

MONITOR AND REPORT on disability aspects across the DRM portfolio. At present there is no way to readily identify DRM projects that are disability-inclusive. Consequently, there is no way to benchmark the degree to which projects are disability-inclusive, nor measure the progress made by the World Bank and GFDRR. GFDRR’s new system for screening gender as a cross-cutting theme offers a model for how disability could be tracked. Designating projects as “disability-informed,” and/or including “disability actions,”

would help identify the degree to which disability inclusion manifests across the GFDRR portfolio. Indicators in results and monitoring and evaluation frameworks, should specifically assess disability inclusion or be disability-disaggregated where possible.

COMMUNICATE engagement on disability-inclusive DRM. Enhancing the public-facing information (including websites, policy statements, and publications) of the World Bank and GFDRR to more comprehensively discuss disability inclusion would greatly assist in educating country clients, other stakeholders (including the disability community), and the public at large about the World Bank’s commitment to disability-inclusive DRM, and would also help to catalyze consultations and create synergies for information exchange and engagement with persons with disabilities and other stakeholders.

INTRODUCTION

Natural hazards pose significant threats to all people, but particularly to the poor and marginalized. Increased losses from disasters due to those hazards are being driven by economic development, population growth, and rapid urbanization. On top of that, climate change could push an additional 100 million people into extreme poverty by 2030¹. The threats are especially great for the world's one billion persons with disabilities, who are already more likely to experience adverse socioeconomic outcomes than their peers without disabilities, and who have historically been disproportionately affected by hazard events. (See the Glossary in Annex A for definitions of hazard, hazard event, and other terminology used in this report.)

Mainstreaming climate and disaster risk management (DRM) into development could reverse the rising trend of disaster losses. The World Bank is committed to climate and DRM as part of its development portfolio. One mechanism that supports work in this area is the Global Facility for Disaster Reduction and Recovery (GFDRR), a grant-funding mechanism, managed by the World Bank, that supports DRM projects worldwide. The global partnership helps countries to better understand and reduce their vulnerability to natural hazards and climate change. GFDRR also contributes to the effective implementation of the Sendai Framework for Disaster Risk Reduction by helping countries integrate DRM and climate change adaptation into development strategies and investment programs, as well as recover from the impacts of hazard events quickly and effectively.

Although some progress has been made in addressing the specific needs of persons with disabilities in DRM and promoting resilience to natural hazards, fewer efforts have incorporated lessons learned into long-term disaster and climate risk management systems and policies. This is particularly evident in the gaps on disability inclusion in large-scale planning and interventions for risk identification, risk reduction, preparedness, and resilient recovery and reconstruction. Such approaches are necessary, not only to ensure that persons with disabilities are not disproportionately affected by natural hazards but also because disability-inclusive DRM interventions can benefit all members of society.

This report offers an overview of the state of practice in disability-inclusive DRM and highlights the potential roles of the GFDRR and World Bank in significantly advancing the reach and uptake of inclusive and accessible practices. The report:

- Illustrates promising practices related to disability-inclusive DRM
- Identifies key gaps in knowledge and practice
- Identifies value-added areas for GFDRR and the World Bank, including specific actions that can be taken to advance the disability and social inclusion agenda in DRM.

In addition to examining the importance of disability-inclusive DRM; synergies between disability, poverty, and disasters; and barriers faced by persons with disabilities in the DRM context; the report includes:

- Relevant guiding international policy frameworks
- Disability inclusion in the priorities of the Sendai Framework for Disaster Risk Reduction
- Illustrations of promising practices in disability-inclusive DRM
- Recommendations of specific actions that can improve the inclusion of persons with disabilities in GFDRR and World Bank investments
- An annex of resources related to disability and DRM.

The report was developed through a comprehensive desk review of the state of practice in disability-inclusive DRM and good practices in inclusive DRM service delivery. Additional insights were gathered through consultations with stakeholders, including DRM specialists and practitioners within the World Bank and GFDRR, external practitioners working on disability inclusion in DRM, disabled persons' organizations (DPOs) and other relevant civil society organizations, and academia (Annex B provides details on the methodology).

Although the report is intended to help World Bank staff incorporate persons with disabilities and a disability perspective into their ongoing DRM work, the information it contains will also be of interest to other development actors and stakeholders working on DRM.



Baako Jamilla with her children in Uganda. Source: Leonard Cheshire

PART 1:

WHY PROMOTE DISABILITY INCLUSION IN DISASTER RISK MANAGEMENT?

1.1. THE IMPORTANCE OF DISABILITY INCLUSION IN DISASTER RISK MANAGEMENT

Natural hazards, by their nature, pose threats to the life, health, and well-being of all people. However, some groups, especially the world's one billion persons with disabilities, are disproportionately affected by the immediate and long-term effects of disasters. Following the 2011 Great East Japan earthquake and tsunami, for example, the fatality rate for persons with disabilities was 4.3 times higher than that of the general population according to the Miyagi Prefectural authorities². Reasons for this disparate impact include aspects of disability as well as the interplay between disability and other risk factors for enhanced vulnerability during emergency situations.

Societal discrimination and stigma contribute to systemic barriers to education, health care, employment, transportation and infrastructure, housing, political and public life, justice, and other aspects of life necessary for persons with disabilities to live independently and be included in the community. Societal barriers to enjoyment of human rights by persons with disabilities on an equal basis with others can be physical, informational, and communicational, as can include legislation, regulation, policy, and attitudes. Specific examples of barriers experienced in the context of DRM are discussed more fully below, but the net effect of all such discrimination is to marginalize persons with disabilities in society during periods of non-emergency, and in many cases force them into dependency. Disasters exacerbate such conditions, enhancing the disparities between persons with disabilities and other members of society and increasing the likelihood that persons with disabilities will be negatively and disproportionately affected both during and after the emergency.

Persons with disabilities are not a homogenous group, and anyone can be born with or acquire a

disability. The intersectionality of disability with age, race, ethnicity, sex, gender, religion, sexual orientation, socioeconomic status, and other identities can multiply the types and degrees of stigma, discrimination, and disadvantage that persons with disabilities experience. Recent CBM-Nossal Institute Partnership research involving 648 households and DPOs affected by Tropical Cyclone Pam in Vanuatu confirmed that disasters disproportionately affected persons with disabilities in the Pacific region³. The research also found that 74 percent of women with disabilities reported barriers compared to 50 percent of men with disabilities. Privacy, isolation of hygiene services, and mobility barriers can compromise safety in evacuation centers. Although gender-based violence was not explored in this study, research indicates that women with disabilities are at greater risk⁴, particularly in disasters where official statistics show increased incidence of gender-based violence. Particularly powerful is the interrelationship between disability and poverty. It is now widely accepted that disability is a risk factor for poverty, and poverty is a risk factor for disability, as illustrated in **Figure 1**.

This relationship is especially important, because as noted in the *Unbreakable* report, poor people suffer disproportionate negative impacts to their well-being from natural hazards due to:

- **Overexposure** to natural hazards from floods, drought, and high temperatures, including overexposure to frequent, low-intensity events that may attract little public attention but can have significant cumulative impacts.
- **Higher vulnerability** to loss of wealth, including rates of loss “two to three times that of the non-poor, largely because of the nature and vulnerability of their assets and livelihoods.”
- **Less ability to cope and recover** due to diminished access to supports such as social protection.

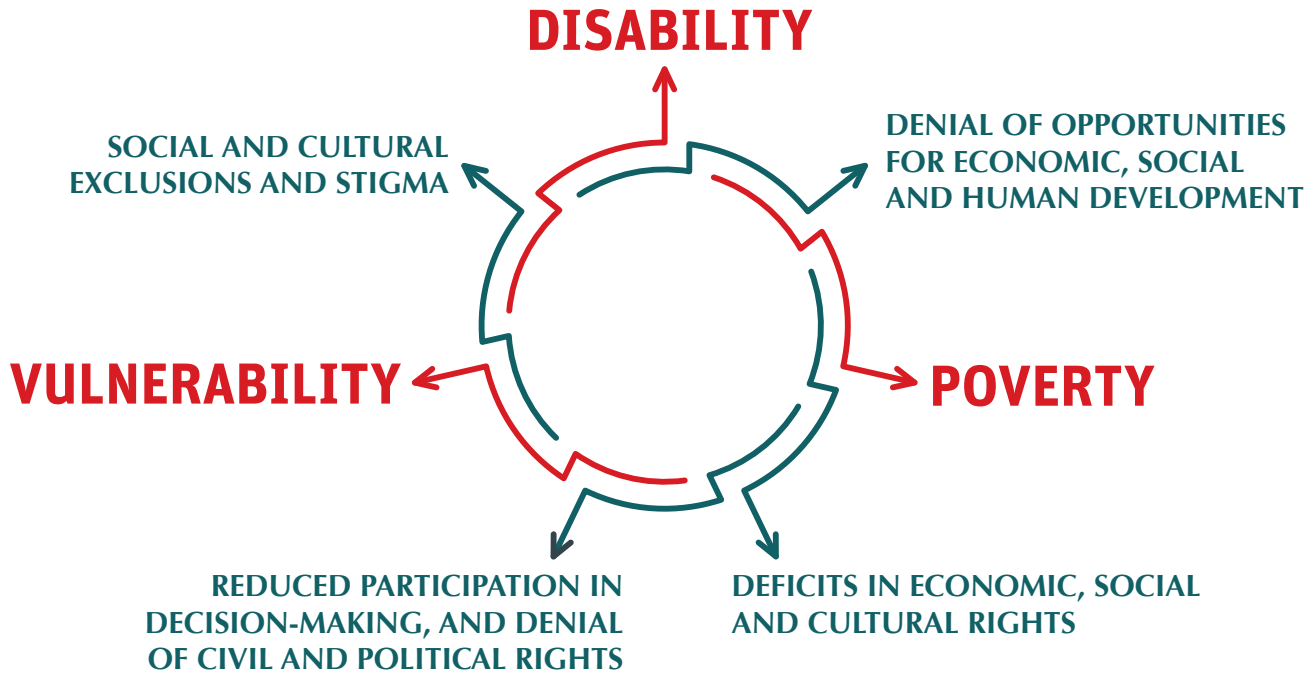
² http://www.dinf.ne.jp/doc/english/resource/IDF/un_expert_group_meeting_120420_fujii_en.html

³ CBM-Nossal Institute Partnership for Disability-Inclusive Development, Oxfam, VSPD, DPA, et al. (2017). Disability Inclusion in Disaster Risk Reduction.

⁴ Vanuatu National Statistics Office and Statistics for Development Programme of the Secretariat of the Pacific Community (2009), National Population and Housing Census: Analytical Report, Volume 2. Port Vila in CBM-Nossal et al. (2017).

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FIGURE 1. The poverty/disability cycle



Source: Disability, Poverty and Development, U.K. Department for International Development, London, United Kingdom, February 2000.
<http://hpod.org/pdf/Disability-poverty-and-development.pdf>

- **Permanent impacts on education and health** due to the choices poor households must make following disasters, such as whether to send a child to school or cut health care expenses. Such decisions can have consequences that span generations, and in so doing “reinforce the intergenerational transmission of poverty.”⁵
- **Effects of risk on saving and investment behavior**, which can lead to poor people engaging in risk-averse behaviors, such as planting low-return, low-risk crops, or avoiding investment in equipment that could be destroyed by disasters. These behaviors, driven by the experience or prospect of disasters, can contribute to persistent poverty.

The report also notes the tendency to underestimate the degree of impact of disasters on the poor. Traditional estimates of the effects of disasters tend to focus on asset losses, of which poor people experience only a relatively small share. However, poor people experience magnified losses in well-being. Moreover, the historic lack of disability-disaggregated data collection makes it likely that assessments of the well-being of persons with disabilities following disasters underestimate

the deleterious effects of such emergencies.

The intersectionality of disability and poverty have significant implications for the importance of disability in DRM, as well as the role of the larger development agenda in building the resilience of persons with disabilities, mitigating the negative effects of disasters, and promoting robust recovery that benefits all people. Development interventions that help to move persons with disabilities out of poverty will help to reduce the impact of disasters on persons with disabilities who might otherwise be at increased risk because of poverty. Disability-inclusive DRM engagements will also help to ensure that persons with disabilities are more resilient to disasters, reducing the likelihood that emergencies will create or exacerbate poverty for persons with disabilities. By ensuring that recovery efforts are inclusive of persons with disabilities, those leading such efforts can better ensure that “building back better” (both physically and with respect to provision of services and community support) has tangible benefits for persons with disabilities and their families and builds their resilience and does not reinforce or sustain societal inequalities.

⁵ Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters, World Bank Group, 2017, pp. 4–5.
<https://openknowledge.worldbank.org/handle/10986/25335>

BOX 1.**OLDER PERSONS AND DISASTER RISK REDUCTION:
IBASHO CAFÉ, JAPAN**

Older persons face barriers to inclusion and participation in society similar to those of persons with disabilities. Aging is viewed negatively in many societies, and many elders experience social and physical marginalization and isolation, often in institutional settings. This is a large and growing problem—the World Health Organization estimates that 22 percent of the global population will be aged 60 and over by 2050. Like persons with disabilities, older persons can be disproportionately affected by hazard events due to poverty and limited access to social protection systems; inaccessible or age-inappropriate environments; lack of global or national policies and legal frameworks related to aging; poor housing; limited family or community support leading to isolation; and physical or mental conditions that may require specific attention or responses adapted to their needs.

Not including older persons in DRM is a missed opportunity. Older persons still aspire to well-being and their accumulated years of knowledge and experience are valuable assets for their communities. For example, they may be able to recall details about previous disasters (and previous response efforts), providing localized understanding of the risk environment and highlighting what could be improved. They can also reflect on climate variability and climate change, and how the community has adapted. With the right kind of support, older persons can contribute to the strengthening of key DRR and preparedness measures,^a using their knowledge to complement scientific and technological developments.

Including older persons in disaster recovery also benefits communities. For example, following the 2011 earthquake and tsunami in Japan, elders led the community of Ofunato in the design and development of the “Ibasha café,” an informal, intergenerational gathering place for the community that actively engages elders in the operation of the café. The Ibasha approach recognizes elders as valuable community assets, empowering them to be active participants and changing the harmful outcomes created by society’s negative perceptions and expectations.

Approaches like the Ibasha café can improve the community’s ability to withstand shocks caused by natural hazards by creating a strong informal support system in which elders are the catalyst to strengthen social capital among all community members.^b Stronger social networks across all age groups support stronger community resilience by enhancing the capacities of those groups, promoting understanding of vulnerabilities, and leading to the development of better coping strategies. The Ibasha experience has garnered interest from communities recovering from disasters in Nepal and the Philippines, and GFDRR is providing support to replicate the model, including bringing together elders from Japan, Nepal, and the Philippines for peer support.

Notes:

- a. “Building resilience of older people,” Global Age Watch, Brief 6, Helpage International: <http://www.helpage.org/download/5494603e06f53>
- b. Elders Leading the Way to Resilience, Emi Kiyota, Yasuhiro Tanaka, Margaret Arnold, and Daniel Aldrich, World Bank Group & GFDRR (2015) <https://www.gfdr.org/sites/default/files/publication/Elders-Leading-the-Way-to-Resilience.pdf>

**1.1.1. INTERSECTIONALITY AND MULTIPLE
SOURCES OF MARGINALIZATION**

The World Bank report *Inclusion Matters*⁶ notes that the exclusion of certain groups in society—people “branded by stigmas, stereotypes, and superstitions”—leads to those people failing to benefit from a nation’s progress, resulting in unequal benefits from development investments⁷. Exclusion does not mean that the individuals will necessarily experience poverty, as it is possible to be affluent and experience exclusion. However, there are social, political, and economic costs to society as a whole when entire groups of people are excluded⁸. The membership of individuals in different groups at once, and the simultaneous intersectionality of their various identities can produce multiple advantages or disadvantages in different contexts⁹. Thus, the experience of a young white man without a disability will be different than that of an elderly indigenous woman with a disability, who may experience increased exclusion and discrimination. Although social transitions, such as those that follow disasters, can increase the societal tensions and exclusion experienced by some groups, they also offer opportunities for social inclusion¹⁰ to be planned and achieved. The report cites climate change and climate-related stress as causes for “one of the most profound spatial transitions of this century,” but it also notes that natural catastrophes can provide a “blank slate” for reconstruction and transformation of societies to be more inclusive¹¹. Proactively planning for disability-inclusive DRR in response to natural hazards provides such an opportunity.

A commitment to disability inclusion in both DRM and the larger development agenda (consistent with the vision of the Sustainable Development Goals for development that leaves no one behind) will garner tangible benefits for people already disabled and affected by disasters, as well as the thousands of people who acquire disabilities due to such events. According to the United Nations, approximately 200,000 people are expected to live with long-term disabilities due to injuries sustained in the January 2010 earthquake in Haiti¹². As long as disasters have the potential to disable people through injury and trauma, disability inclusion in both development and DRM will be essential to ensuring that such individuals have the

6 *Inclusion Matters: The Foundation for Shared Prosperity*, World Bank Group, 2013. <https://openknowledge.worldbank.org/handle/10986/16195>
7 *Ibid.* p. 1.
8 *Ibid.* p. 2.
9 *Ibid.* pp. 6–7.

10 Social inclusion is defined throughout *Inclusion Matters* as both “the process of improving the terms for individuals and groups to take part in society” and, more specifically, as “the process of improving the ability, opportunity, and dignity of people, disadvantaged on the basis of their identity, to take part in society.”

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opportunity to rehabilitate, adapt to their acquired disabilities, and regain their place as contributing members of society.

Moreover, disability-inclusive interventions have the potential to benefit everyone. For example, the application of accessibility standards and universal design to early warning systems increases the ability of such systems to effectively warn people with and without disabilities, people with low literacy, people who speak other languages, children, and many others. The more people are reached by early warning systems, the more they can maximize the time pre-disaster to effect evacuation or shelter-in-place plans, thus increasing their chances for survival, and potentially giving them time to protect assets such as homes, livestock, and transportation.

This is a particularly salient time to seize upon the opportunities for disability-inclusive DRM and development. According to the Intergovernmental Panel on Climate Change, climate change will likely lead to changes in the magnitude and frequency of extreme weather events, with major impacts on human health. For the negative impacts of climate change to be ameliorated to the maximum extent possible, it will be essential for stakeholders to consider the needs and contributions of persons with disabilities in developing DRM and development interventions. As will be discussed below, such work can be assisted by the comprehensive policy and regulatory frameworks that exist to guide those committed to effective inclusion of persons with disabilities in DRM and development.

1.2. BARRIERS FACED BY PERSONS WITH DISABILITIES IN DRM

“Because I can’t hear sirens, when there is severe weather, I have to stay awake to watch storms until all gone.”

Quote from a respondent to the 2013 UNISDR global survey of persons with disabilities¹⁴

Persons with disabilities include those with physical disabilities, vision disabilities, hearing and speech disabilities, cognitive disabilities, psychosocial disabilities, and many other forms of disability. Moreover, people with seemingly similar disabilities may experience common barriers in different ways, and some barriers

may equally affect people with seemingly very different disabilities. When considering how best to avoid or mitigate barriers it is important, therefore, to consider the diversity of the disability community and ensure that DRM consultations reflect the inputs of a wide range of persons with disabilities and their representative organizations. It should also be remembered that persons with disabilities who would typically be able to lead quite independent lives during non-emergency situations, may experience emergency-related barriers—such as separation from social support networks, support staff, mobility devices, medication, and physical isolation—that may increase their reliance on others during and after a disaster.

Societal barriers experienced daily by persons with disabilities can be magnified and potentially life threatening in a disaster and have the potential to negatively affect people with different disabilities at all stages of DRM. At the same time, these barriers can inhibit the ability of persons with disabilities to take their rightful place as agents of change and as active contributors to the development and effective implementation of DRM policies, plans, and standards. In some cases, barriers may mean that people with only certain types of disabilities are able to participate, so consultations may lack diversity of disability experience and perspectives. As noted in Priority 4 of the Sendai Framework, “empowering women and persons with disabilities to publicly lead and promote gender equitable and universally accessible response, recovery, rehabilitation and reconstruction approaches is key.”

The following are some of the barriers experienced by persons with disabilities that should be addressed through consultation with persons with disabilities at all phases of the DRM process. It should also be emphasized that all development interventions that promote the equality and inclusion of persons with disabilities have the capacity to bolster the resilience of persons with disabilities and their families to withstand disasters.

1.2.1. PHYSICAL BARRIERS

Public consultations to develop community disaster preparedness plans that are held in inaccessible locations will not benefit from the contributions

¹¹ Ibid, pp. 135–137.

¹² <https://www.un.org/development/desa/disabilities/issues/disability-inclusive-disaster-risk-reduction-and-emergency-situations.html>

¹³ *Climate Change 2001: Impacts, Adaptation, and Vulnerability*, Intergovernmental Panel on Climate Change, 2001, Chapter 9.5

<http://www.ipcc.ch/ipccreports/tar/wg2/index.php?idp=0>

¹⁴ <http://www.unisdr.org/archive/35032>

of persons with disabilities who require access to participate effectively. Prevention and mitigation measures that are identified as priorities to protect life and assets are often not accessible. For example, water collection points in rural communities facing seasonal floods may be built on higher locations, or the water pumps and tubewells raised above the level of potential floods. Such measures may add new barriers to equitable access to water. Those additional barriers often affect the ability of persons with disabilities to collect clean water, thus increasing their exposure and risk of contracting water-borne diseases.

Public transportation systems and road systems that are inaccessible to wheelchair users or people with other mobility disabilities will have limited capacity to assist in evacuating such people, potentially leaving them (and their families) stranded in hazardous locations. Physical barriers, such as debris, in the aftermath of an emergency can also affect mobility. To the extent that shelters are available at all, shelters that are physically inaccessible, or that place critical services such as medical care, food, and bathrooms in inaccessible locations within the shelter complex, may leave evacuees with disabilities and their families unable to use such shelters and without viable alternative shelter options. Quiet spaces in shelter settings are often unavailable for people with autism and others to be able to decompress and avoid sensory overload. Persons with disabilities may also have difficulty accessing settings in which they can maintain their privacy and dignity. For example, some persons with disabilities may need more space in the toilet or a private space for personal hygiene needs, such as the use of equipment for bowel and bladder management, or for women with disabilities to manage their menstrual hygiene.

Emergency housing that is inaccessible or is located away from accessible transportation options can leave persons with disabilities without temporary housing or reliant on housing that segregates them from social networks, support services, schools, workplaces, medical care, or other essential aspects of community living. In some cases, housing built during the recovery phase may use building methods intended to promote community resilience to future hazards. This can create barriers for people with mobility disabilities, for example, raising the ground floor

living space above anticipated flood waters can render housing inaccessible to wheelchair users. When inaccessible temporary housing provided during the recovery phase becomes de facto long-term housing, these kinds of barriers can have long-lasting and detrimental impacts on persons with disabilities.

1.2.2. INFORMATION AND COMMUNICATION BARRIERS

Community consultations to develop disaster preparedness plans will not benefit from the contributions of persons with disabilities if the discussions and associated materials are inaccessible to people with hearing or vision disabilities due to lack of captioning, sign language interpretation, Braille, or large print; or to people with cognitive disabilities due to failure to use plain language, among others. Persons with disabilities who are serving as members of DRM teams at local, regional, or national levels may also require reasonable accommodations to facilitate their communications to fulfill their duties.

Early warning systems that rely solely on audible methods, such as sirens, radios, loudspeakers, and some mobile phone alerts, are inaccessible to people who are deaf or hearing impaired, meaning that they may be unaware of impending emergencies, or become aware with little or no time to respond. Similarly, awareness campaigns, education programs informing the public about existing risks, and prevention and preparedness measures or relief activities often rely on oral communications. Crucial information may therefore be inaccessible to persons with disabilities, affecting their capacity to understand risks and prepare adequately.

Reliance on televisions as a medium for communication may be of limited value if sign language interpretation and captioning are not provided for people who are deaf or hard of hearing, or audio description is not provided to ensure that people with vision disabilities can access visual information, such as maps and checklists. Critical information such as guidance and way-finding information, emergency numbers, evacuation instructions, and instructions on how to claim emergency financial support that is not communicated in plain language is likely to be inaccessible for people with cognitive or other

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disabilities that affect their ability to process and respond to information. Communications with first responders—either in person or via telephone, text, or similar method—will not be effective if they are inaccessible to persons with hearing, speech, or cognitive disabilities. Accessible and diversified communication channels will also benefit non-native language speakers, such as migrants and tourists, as well as people with low literacy. Using multiple channels to share information about disasters will provide helpful redundancy to support sustainability and reliability.

1.2.3. LEGISLATIVE/REGULATORY BARRIERS

Legislative and regulatory barriers to the employment of persons with disabilities by government entities can reduce the numbers of those employees with disabilities, and in so doing contribute to a lack of internal awareness and responsiveness of public entities to the DRM-related needs of the disability community. For example, where employment criteria restrict the ability of persons with certain types of disabilities from being considered qualified, where mandatory civil service tests are inaccessible to applicants with disabilities, or where workplace reasonable accommodations are capped at arbitrary funding amounts, persons with disabilities may find themselves unable to gain or retain government employment.

Pervasive legal restrictions on the ability of persons with disabilities to exercise legal capacity, own land, or own their own home can negatively affect the resilience of persons with disabilities to withstand disasters. Even if a jurisdiction has strong non-discrimination legislation or accessibility standards, failure to effectively enforce and implement those requirements can negate the efficacy of those laws and regulations. For example, failure to implement accessibility requirements for schools and other public buildings can render those facilities unable to accommodate persons with disabilities when those facilities are used as shelters during emergencies or when they are used for food distribution programs. If schools are used as evacuation centers or temporary shelters, temporary learning spaces should be arranged to ensure continuity of education.

Ineffective or lax zoning restrictions may result in the construction of housing or other critical

infrastructure in areas at risk to natural hazards. Without affordable or accessible alternatives, persons with disabilities may have little option but to live in these higher-risk areas.

Financial protection systems and insurance schemes may be rendered inaccessible due to legal restrictions on the ability of persons with disabilities to contract for insurance services, hold a bank account, or for other reasons, or they may operate in ways that perpetuate societal barriers. For example, insurance policies may be legally allowed to require damaged assets to be repaired or replaced exactly as they were before the disaster, thus limiting the opportunities for recovery efforts to “build back better” through more accessible construction. Persons with disabilities may already be unable to benefit from social protection schemes under normal conditions due to inaccessibility of financial systems, deprivation of legal capacity, lack of access to identification cards or other necessary documents, for example. This limits the ability of such systems to serve as distribution mechanisms to get financial assistance directly to persons with disabilities after a disaster.

1.2.4. POLICY BARRIERS

Policies that promote separate facilities or services for persons with disabilities can result in the inaccessibility of emergency response systems. For example, the establishment of evacuation centers exclusively for persons with disabilities may result in their being turned away from general shelters or being separated from family. Persons with disabilities may also engage in self-segregation if they feel that general shelters are unaccommodating, or if they wish to avoid potential competition for limited resources with other community members.

Policies that prohibit evacuation or housing of animals in shelters may discourage those who rely on support animals from choosing to evacuate in order to stay with their animals. Alternatively, they may be limited in which shelters will accept them and their support animals, or they may become separated, leaving them without an important support and means of independence. In communities where persons with disabilities rely on livestock for income or self-sufficiency, they may choose to remain with their animals to

try to protect those assets, as may other similarly situated members of the community.

Policies that over-medicalize support to persons with disabilities can negatively affect the willingness or ability of volunteers who are not medical professionals to assist persons with disabilities. This can leave persons with disabilities without adequate or timely support to assist them in eating, getting dressed, going to the bathroom, or other activities of daily life. Policies that medicalize disability also tend to assume that all health needs are disability-related, forcing persons with disabilities toward disability-centric supports as a default, rather than mainstream supports that may be more timely and effective. For example, a child with disabilities who has diarrhea caused by the same virus that is affecting other evacuees may seek care from a general health center, reasonably expecting a doctor or nurse to treat them as they would any other child. However, in many instances the general medical staff may believe that only disability specialists can treat that child. As a result, they will refer the child to disability health care specialists, even though those specialists may not be well placed to treat general conditions such as diarrhea. This can leave the child with disabilities without adequate or timely intervention for what should be a readily treatable health condition.

Policies regarding documentation requirements can interfere with the ability of persons with disabilities to resume their lives and access services after a disaster. For example, students with disabilities may have had to evacuate without documentation certifying their qualification for reasonable accommodations in school. Insistence by education authorities on production of such documents when students enroll in new or temporary schools, can leave students with disabilities without the support they need to resume their education. In other instances, policies may prohibit students with disabilities from attending mainstream schools at all or deny them opportunities to use reasonable accommodations to facilitate effective learning. In the compilation of national progress reports on the implementation of the Hyogo Framework curriculum indicator, 2009–11, just over half of the 70 reporting countries discussed the inclusion of DRR-related themes and topics in educational settings, mainly at the

primary level (UNISDR 2011).¹⁵ Although DRM information should be part of the school curricula in countries at high risk of disasters (incorporated in topics such as sciences, for example), students with disabilities may find themselves lacking this essential information because they are not in school to receive it, or because the information is inaccessible to them.¹⁶

1.2.5. ATTITUDINAL BARRIERS

The attitudes of others can be the most significant barriers for persons with disabilities. Stereotyping and stigmatizing of persons with disabilities can lead to both overt and more subtle forms of discrimination, which can permeate the policies and practices associated with DRM and create or perpetuate physical, informational, communicational, and other barriers. For example, disparaging societal views of persons with disabilities, or even beliefs that they will bring bad luck, may lead to them being turned away from shelters or relief centers by aid workers or other survivors.

Disability stereotypes can lead to persons with disabilities being viewed as passive beneficiaries of the interventions of others. This can be especially true for persons with cognitive and psychosocial disabilities, though it is a challenge experienced across the disability community. Although sometimes well-intentioned, such approaches risk violating people's autonomy, and lead to substituted decision-making that ignores or violates the wishes of persons with disabilities. Such patronizing approaches also limit the opportunities for persons with disabilities to be—and be respected as—active and empowered contributors to all phases of DRM.

A related concern is the tendency for policy makers, first responders, volunteers, and others involved in DRM to communicate with family and support staff of persons with disabilities instead of communicating directly with persons with disabilities. This marginalizes and disempowers persons with disabilities and can lead to inaccurate or incomplete information collection, which can have negative consequences. Even when people do wish to communicate directly with persons with disabilities, if societal stigma and shame has caused families to hide a family member with disabilities, those involved in DRM may be

¹⁵ Input Paper: Global Assessment Report on Disaster Risk Reduction 2015; Disaster Risk Reduction in the school curriculum, the present and potential role of development agencies and the implication for the Hyogo Framework for Action 2005–2015 successor. <https://www.preventionweb.net/english/hyogo/gar/2015/en/bdocs/inputs/Kagawa%20and%20Selby,%202014.pdf>

¹⁶ Disaster Risk Reduction in School Curricula: Case Study from Thirty Countries; UNICEF/UNESCO; 2012. <https://www.unicef.org/education/files/DRRinCurricula-Mapping30countriesFINAL.pdf>



Indonesia: Building resilience for children with disabilities. Disaster Risk Reduction training has to include all members of society, especially the most vulnerable. Photo Credit: ASB 2011

unable to find, count, assess, or communicate with persons with disabilities. If DRM personnel do not see any persons with disabilities, it can lead to the assumption that “there are no persons with disabilities,” or that “all persons with disabilities must have died,” excluding persons with disabilities from DRM activities, including relief and recovery efforts.

Triage is often used to prioritize needs during emergencies, so that limited resources can be maximally used. However, due to pervasive beliefs that there is limited potential for persons with disabilities to benefit from such interventions, the needs of non-disabled people are often addressed first. Alternatively, aid workers may believe that only specialized organizations can assist persons with disabilities, even with respect to basic needs such as food and water. This can leave persons with disabilities without timely access to resources and undermine their resiliency and well-being during and after disasters. In worst case scenarios,

such denials of access to resources can be life threatening.

Although disasters are, by their nature, situations of great risk that can pose unique challenges for persons with disabilities, the types of barriers discussed above should not be considered unavoidable. As will be discussed in Part 2 of the report, ensuring that DRM is disability-inclusive is the key to avoiding and mitigating barriers, and ensuring that persons with disabilities are not disproportionately affected during and after situations of emergency.

“We have water and food stored outside, clothing, portable shower/toilet, etc. I am a member of our triage team for our retirement community.”

Quote from a respondent to the 2013 UNISDR global survey of persons with disabilities¹⁷

¹⁷ http://www.unisdr.org/2013/iddr/#assets_resources

1.3. RELEVANT INTERNATIONAL POLICY FRAMEWORKS

A variety of international policy frameworks are available to guide effective implementation of disability-inclusive DRM, many of which have been adopted or updated in the past several years. The disability-inclusive nature of these frameworks reflects robust engagement of persons with disabilities and DPOs during the negotiation of these instruments.¹⁸ These policy frameworks do not operate in isolation, but rather are interconnected, sometimes explicitly so. For example, some of the documents cross-reference other frameworks. At a minimum, the frameworks complement each other, such that successful implementation of one can promote or reinforce effective implementation of others.¹⁹ Indeed, one of the most innovative aspects of the frameworks is the way in which many of them seek to reduce the divide between development, DRM, and humanitarian policies, strategies, and programs. The interrelation between the frameworks offers opportunities to avoid “siloeing” of topics, instead promoting collaboration and mutual learning, while facilitating mutually reinforcing monitoring efforts.

During the development of some of these policy frameworks, conferences and events were held to discuss aspects of financing for of these issues. Among these were the Third International Conference on Financing for Development (Addis Ababa, Ethiopia, July 2015) and the Grand Bargain discussions of the World Humanitarian Summit (Istanbul, Turkey, May 2016). One of the goals of such discussions has been to simplify funding mechanisms and improve efficiency and efficacy of response. Facilitating financing, as well as creating environments where issues can be addressed across the various policy frameworks, will be important as countries face increasing types, numbers, and durations of crises, so that negative impacts of disasters can be minimized, existing development gains can be safeguarded, and the economic and social well-being of all people can be supported.

1.3.1. SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals²⁰ represent the internationally agreed development agenda through 2030. They build upon the prior Millennium Development Goals (MDGs), which

established measurable, universally agreed objectives for the international development agenda for 2000–2015. Adopted by the UN General Assembly in September 2015,²¹ the SDGs consist of 17 goals and 169 targets that not only affirm the international community’s commitment to end poverty, but do so in a way that is sustainable, and that leaves no one behind—including persons with disabilities. All the development goals are interrelated and interconnected, such that success in achieving one can affect the successful achievement of others. In this manner, achievement of any of the 17 goals can improve the resiliency of persons with disabilities to withstand disasters. To realize the transformative potential of the 2030 Agenda for Sustainable Development, governments and stakeholders have affirmed that DRR needs to be a core issue for sustainable development.²² Sustainable development cannot be attained while disasters continue to undermine economic growth and social progress.²³ Achievement of the objectives of the SDGs (to end poverty and hunger, protect the planet, ensure prosperity, foster peace, and develop partnership), will contribute to decreased hazard risks, and ensure that governments and communities together reduce the risks of disasters and build their capacities to face and recover from shocks.

Two goals are relevant to those engaged in disability-inclusive DRM:

- **Goal 11: Make cities and human settlements inclusive, safe, resilient, and sustainable.** In addition to promoting safe, affordable, inclusive, accessible, and sustainable housing and basic services (including transport systems), Goal 11.5 and 11b cite the need to reduce losses and improve resilience to disasters, consistent with the Sendai Framework. Goal 11 also identifies at-risk populations, including women, children, older persons, and persons with disabilities.
- **Goal 13: Take urgent action to combat climate change and its impacts.** Addressing a topic not included in the MDGs, SDG Goal 13 discusses the need to strengthen resilience and adaptive capacity to climate-related hazards and disasters in all countries. It also addresses education, awareness raising, mitigation, adaptation, impact reduction, and early warning, as well as implementing the commitments undertaken by developed-country parties to the United

¹⁸ For example, at the World Conference on Disaster Risk Reduction, which led to the adoption of the Sendai Framework, there was robust advocacy space for disability inclusion organizations, led by the Disability Stakeholder Group. This group brought together hundreds of persons with disabilities and representative disability organizations worldwide. For more on the work of the Disability Stakeholder Group, see: <http://www.preventionweb.net/organizations/17064/profile>

¹⁹ For an illustration of this kind of complementarity, see the UNISDR examination of how the Sendai Framework contributes to realization of the SDGs and vice-versa. http://www.unisdr.org/files/50438_implementationthesendaiframeworktoach.pdf

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Nations Framework Convention on Climate Change. It also promotes raising capacity for effective climate change-related planning and management that includes women, youth, and local and marginalized communities—all of which would include persons with disabilities.

1.3.2. SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION 2015–2030

The Sendai Framework,²⁴ a voluntary, nonbinding agreement, was adopted by United Nations Member States in March 2015 at the Third United Nations World Conference on Disaster Risk Reduction in Sendai City, Japan. The framework was developed using a broad consultative process²⁵ and took stock of progress made in implementing the Hyogo Framework for Action, identifying gaps, challenges, and lessons learned. The objective of the framework is “the substantial reduction of 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.” The framework, sets four priorities for action to guide the development and implementation of policies on DRR. These priorities are informed by seven global targets (with indicators²⁶) and 13 guiding principles.

- **Priority 1: Understanding risk factors.** This priority addresses the imperative to assess risks in all their dimensions, from hazards to social, economic, and environmental risks, and to do so at all levels, from local (individual) to national and regional levels. It also recognizes the need for global and regional cooperation, as disasters by nature do not respect jurisdictional borders.
- **Priority 2: Strengthening disaster risk governance to manage disaster risk.** This priority addresses the need to build political commitments, leadership, and coherence in managing disaster risk, with a multisectoral approach that will strengthen stakeholder coordination mechanisms.
- **Priority 3: Investing in disaster risk reduction for resilience.** This priority implies a strong interrelationship between the Sendai Framework and the SDGs and highlights that DRR investments can themselves be drivers of innovation, growth, and job creation, bolstering community resilience beyond the immediate DRM gains.

- **Priority 4: Enhancing disaster preparedness for effective response and to “build back better” in recovery, rehabilitation, and reconstruction.** In the past 10 years, major disasters (such as the 2004 Asia Tsunami, Haiti and Japan earthquakes, major cyclones in the Pacific, and record-breaking Atlantic hurricanes) have demonstrated that preparedness and response capacities need to be strengthened to help ensure easier and more efficient response and recovery. This priority addresses the need to include DRR in preparedness, response, and recovery programs, to ensure sound and effective investments and save lives and assets.

These priorities are also informed by guiding principles that set the broader conditions for implementation of the framework. Accordingly, the four priorities should be implemented consistent with the guiding principles, as well as considering the preamble and other relevant elements of the framework.

Two of the 13 guiding principles in the framework refer to persons with disabilities:

- **Guiding principles Para. (19)(d):** “Disaster risk reduction requires an all-of-society engagement and partnership. It also requires empowerment and inclusive, accessible and non-discriminatory participation, paying special attention to people disproportionately affected by disasters, especially the poorest. A gender, age, disability and cultural perspective should be integrated in all policies and practices, and women and youth leadership should be promoted. In this context, special attention should be paid to the improvement of organized voluntary work of citizens.”
- **Guiding Principles, Para. (19)(g):** “Disaster risk reduction requires a multi-hazard approach and inclusive risk-informed decision-making based on the open exchange and dissemination of disaggregated data, including by sex, age and disability, as well as on easily accessible, up-to-date, comprehensible, science-based, non-sensitive risk information, complemented by traditional knowledge.”

These principles respond to one of the lessons learned from implementation of the Hyogo Framework, that “Governments should engage with relevant stakeholders, including women,

20 <http://www.undp.org/content/undp/en/home/sustainable-development-goals.html>

21 UN General Assembly Resolution A/Res/70/1 http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E

22 “Implementing the Sendai Framework to achieve the Sustainable Development Goals,” UNISDR. https://www.unisdr.org/files/50438_implementingthesendaiframeworktoach.pdf

23 Ibid.

24 <http://www.unisdr.org/we/coordinate/sendai-framework>

25 See the website on post-2015 DRR framework: <https://www.preventionweb.net/posthfa/>

26 <http://www.preventionweb.net/drr-framework/sendai-framework-monitor/indicators>

children and youth, persons with disabilities, poor people, migrants, indigenous peoples, volunteers, the community of practitioners and older persons in the design and implementation of policies, plans and standards.” (Sendai Framework Section I(7)) This approach necessitates that effective implementation of the four priorities for action must ensure inclusion of a disability perspective in the development and implementation of all DRR policies and practices. It is therefore important to encourage consultation with, and participation of, persons with disabilities and their organizations to truly adopt the envisioned all-of-society approach. Similarly, adoption of a multi-hazard approach and risk-informed decision-making in the implementation of the four priorities requires access to, use of, and consideration of sound and reliable disability-inclusive processes.

1.3.3. CONVENTION ON THE RIGHTS OF PERSONS WITH DISABILITIES

The Convention on the Rights of Persons with Disabilities²⁷ was adopted by UN Member States in December 2006, entered into force in May 2008, and has been ratified by more than 175 parties. The CRPD represents the first core international human rights treaty to comprehensively address the full array of civil and political, economic, social, and cultural rights in the context of disability. The CRPD is legally binding upon the States Parties but does not seek to create new rights for persons with disabilities. Rather, it elaborates and clarifies existing obligations for parties within the disability context.

CRPD Article 11 (Situations of risk and humanitarian emergencies) is of particular relevance for disability-inclusive DRM. The 2004 Indian Ocean earthquake and tsunami occurred during the CRPD negotiations and affected the understanding of delegates that disasters could, but ideally should not, disproportionately affect the lives and well-being of persons with disabilities. Article 11 thus calls on the parties to the CRPD “to take, in accordance with their obligations under international law, including international humanitarian law and international human rights law, all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk, including situations of armed conflict, humanitarian emergencies and the occurrence of natural disasters.”²⁸ Although

effective implementation of the CRPD in its totality has the potential to build the resilience of persons with disabilities to withstand disasters, beyond Article 11, several articles are relevant for those engaged in disability-inclusive DRM:

- **Article 3 General principles.** This article sets forth the principles of the CRPD,²⁹ which are not only relevant to the interpretation and implementation of the CRPD but also offer helpful guidance in any policy context where effective disability inclusion is sought.
- **Article 4 General obligations.** Article 4(3) encapsulates the international disability community’s rallying cry of “nothing about us without us,” by requiring that “in decision-making processes concerning issues relating to persons with disabilities, States Parties shall closely consult with and actively involve persons with disabilities, including children with disabilities, through their representative organizations.”
- **Article 9 Accessibility.** To ensure that persons with disabilities can live independently and participate fully in all aspects of life, Article 9 includes broad coverage of issues of accessibility, not only of the built environment, but also of information, communications, and other services, including electronic services and emergency services.
- **Article 31 Statistics and data collection.** Responding to the historic dearth of disability data, Article 31 highlights the need to undertake collection of appropriate information, including statistical and research data, to enable the formulation and implementation of policies to give effect to the CRPD. Such activities should not only include disaggregation and accessibility of the data, but also ensure confidentiality and respect for the privacy of persons with disabilities.
- **Article 32 International cooperation.** Reflecting a 21st century appreciation for the interrelationship between human rights and international development, Article 32 promotes international cooperation, including international development programs that are inclusive of, and accessible to, persons with disabilities.

²⁷ <http://www.ohchr.org/EN/HRBodies/CRPD/Pages/CRPDIndex.aspx> For an examination of the CRPD and its relevance to the World Bank, see “Convention on the Rights of Persons with Disabilities: Its Implementation and Relevance for the World Bank,” World Bank SP Discussion Paper No. 0712, June 2007.

<http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Disability-DP/0712.pdf>

²⁸ Article 11; CRPD. <http://www.ohchr.org/EN/HRBodies/CRPD/Pages/ConventionRightsPersonsWithDisabilities.aspx#11>

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1.3.4. DHAKA DECLARATION

The Dhaka Declaration on Disability and Disaster Risk Management³⁰ was adopted at a Dhaka conference that included participants from 18 countries, including representatives of governments, the United Nations Office of Disaster Risk Reduction (UNISDR), regional and international NGOs, academics, DPOs, bilateral and multilateral development agencies, and other development sector representatives. The declaration notes with concern the relatively higher rates of mortality experienced by persons with disabilities compared with other community members. Highlighting the importance of the active contribution of persons with disabilities and DPOs, and the need to implement and recognize the linkages between the CRPD, Sendai Framework, and the SDGs, the declaration calls on all governments and other stakeholders to:

- Ensure a people-centered approach
- Strengthen governance, partnership, and cooperation
- Integrate gender, age, and disability-disaggregated data
- Promote empowerment and protection
- Act at local to national to global levels.

For each of these issues, the declaration includes concrete, action-oriented indicators against which to measure progress. The declaration was endorsed during the 2017 Global Platform on DRR and was included among the outcomes of the conference.³¹

1.3.5. WORLD HUMANITARIAN SUMMIT

The World Humanitarian Summit convened in Istanbul in May 2016,³² bringing together 9,000 participants from governments, civil society, academia, and the private sector to address the needs of people caught up in humanitarian crises and support a “new Agenda for Humanity.” The Platform for Action, Commitments, and Transformation³³ was launched as a hub to track progress toward implementation of the more than 3,500 commitments to action launched at the summit. One of those initiatives was the “Charter for Inclusion of Persons with Disabilities in Humanitarian Action.”³⁴ A nonbinding document, the charter seeks not only to ensure that persons with disabilities can fully benefit from humanitarian aid during emergencies but also that they are participants in the development, planning,

and implementation of humanitarian programs. The charter has been endorsed by more than 150 stakeholders, including governments, UN agencies, other international organizations, and NGOs.³⁵ Charter signatories commit to ensuring that their future humanitarian actions will be inclusive of persons with disabilities based on five principles:

- Non-discrimination and recognition of the diversity of persons with disabilities
- Involvement of persons with disabilities in developing humanitarian programs
- Ensuring that services and humanitarian assistance are equally available for, and accessible to, all persons with disabilities
- Implementation of inclusive global policies
- Cooperation and coordination among humanitarian actors to improve inclusion of persons with disabilities.

1.3.6. PARIS CLIMATE CHANGE AGREEMENT

In 1992, the international community adopted the United Nations Framework Convention on Climate Change (UNFCCC), which seeks to limit global temperature increases and related climate change, as well as cope with the inevitable impacts. Since then, countries have sought to build upon and strengthen the UN climate change regime. The Paris Climate Change Agreement,³⁶ adopted in December 2015, represents the latest effort to address climate change on a global level. In addition to seeking to limit global temperature rise this century to below 2 degrees Celsius above pre-industrial levels, the Paris Agreement also aims to strengthen the ability of countries to address the impacts of climate change. Of relevance in this context, is the acknowledgment in the preamble that climate change is a “concern of humankind,” and that in taking action on climate change, parties should also consider their obligations with respect to the human rights of people in vulnerable situations, including persons with disabilities. In addition, Article 8 addresses a range of areas of cooperation and facilitation, including across such DRM-related activities as early warning systems; emergency preparedness; comprehensive risk assessment and management; risk insurance facilities, climate risk pooling, and other insurance solutions; and resilience of communities, livelihoods, and ecosystems.

²⁹ Article 3 states that “The principles of the present Convention shall be:

- Respect for inherent dignity, individual autonomy including the freedom to make one’s own choices, and independence of persons;
- Non-discrimination;
- Full and effective participation and inclusion in society;
- Respect for difference and acceptance of persons with disabilities as part

of human diversity and humanity;

- quality of opportunity;
- Accessibility;
- Equality between men and women;
- Respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities.”

1.3.7. HABITAT III AND THE NEW URBAN AGENDA

The United Nations Conference on Housing and Sustainable Urban Development—better known as “Habitat III”³⁷—builds upon previous international conferences to address sustainable human settlements and urbanization, starting in 1976 with Habitat I, and continuing in 1996 with Habitat II. Following extensive regional and thematic dialogues, Habitat III culminated in the October 2016 adoption of the Quito Declaration on Sustainable Cities and Human Settlements for All, otherwise known as the New Urban Agenda, which was formally adopted by the UN General Assembly in December 2016. In setting forth its vision for livable, accessible, inclusive, and sustainable communities, the New Urban Agenda includes numerous references to intersecting populations, including persons with disabilities. In addition to promoting equitable and affordable access to sustainable physical and social infrastructure, the New Urban Agenda also cites the need to empower and ensure the contributions of all relevant stakeholders, including persons with disabilities. Improving resilience and strengthening capacity in all phases of disaster and climate risk management are themes that run throughout the New Urban Agenda.

1.3.8. WORLD BANK REGULATORY FRAMEWORKS

It is beyond the scope of this report to provide an in-depth examination of the totality of the World Bank’s internal regulatory frameworks, including the myriad financing mechanisms and operational and Bank policies. However, the following are policy frameworks that are relevant to some DRM-related activities.

Environmental and Social Safeguard Policies and the new Environmental and Social Framework.³⁹

For the past 20 years, the World Bank has used its Environmental and Social Safeguard Policies to ensure that people and the environment are protected from potentially adverse impacts arising from the projects it finances.⁴⁰ The 11 operational policies require borrowing governments to address certain environmental and social risks in order to receive World Bank support for investment projects. Within the Safeguard Policies, OP 4.01 (Environmental Assessment), OP 4.10 (Indigenous Peoples), OP 4.12 (Involuntary Resettlement), and

OP 4.20 (Gender and Development) have provided opportunities for inclusion of disability into World Bank activities with country clients, even though disability is not expressly referenced in the Safeguards.

In 2016, The World Bank’s Board of Executive Directors approved a new Environmental and Social Framework (ESF), which will go into effect in early 2018 and operate in parallel with the existing Safeguards for approximately seven years, ultimately replacing the Safeguard Policies. The new ESF moves beyond the prior approach of trying to ensure that projects “do no harm,” to promoting inclusion that empowers all people to participate in, and benefit from, the development process, including disadvantaged or vulnerable individuals or groups. Under the ESF, which includes obligations for both the World Bank and its borrowers, persons with disabilities are explicitly referenced in the “Vision for Sustainable Development” as one of the groups for whom barriers to the development process should be removed; Environmental and Social Standard (ESS) 2 (Labor and Working Conditions); ESS10 (Stakeholder Engagement and Information Disclosure); and in the World Bank Directive “Addressing Risks and Impacts on Disadvantaged or Vulnerable Individuals or Groups,” in which persons with disabilities are included in the definition of those individuals or groups who are “disadvantaged or vulnerable.”⁴¹

In the “Vision for Sustainable Development,” climate change and DRM activities are cited as examples of the kind of global engagement in which the World Bank is committed to environmental and social sustainability. For any DRM and climate change activities funded by investment project financing, the new ESF arguably lays a strong foundation for robust, accessible, and inclusive engagement of the disability stakeholder community, so that persons with disabilities are equal and active contributors to, and beneficiaries of, the World Bank’s engagement.

Disability-Inclusion and Accountability Framework.

The World Bank is also preparing a resource platform on disability inclusion that will offer guiding principles and technical guidance for staff to ensure that a disability inclusion lens is adopted across the World Bank’s engagements and project cycle. This framework will lay out a road

30 <http://www.preventionweb.net/english/professional/policies/v.php?id=47093>

31 <http://www.preventionweb.net/publications/view/53989>

32 <http://agendaforhumanity.org/summit>

33 <http://agendaforhumanity.org>

34 <http://agendaforhumanity.org/initiatives/3827>

35 <http://humanitariandisabilitycharter.org>

36 http://unfccc.int/paris_agreement/items/9485.php

37 <http://habitat3.org>

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map for (a) including disability in the World Bank's policies, operations, and analytical work; and (b) building internal capacity for supporting clients in implementing disability-inclusive development programs. This framework will offer further impetus to ensure that disability inclusion is not overlooked in DRM activities and investments, while also advancing the creation and sharing of evidence and knowledge in this space.

Although not policy frameworks per se, the World Bank also has two financing mechanisms that can assist in streamlining financing for emergencies:

Rapid Response to Emergencies and Crises, OP/BP 8.00. Adopted in March 2007, and updated in July 2014, OP/BP 8.00 is intended to enhance the speed, flexibility, and effectiveness of the World Bank's crisis and emergency response policies and procedures. Consistent with four guiding principles,⁴² OP/BP 8.00 allows emergency operations to be processed under faster and more simplified procedures, which also streamline requirements that would typically be necessary in fiduciary and safeguards (in future, ESF) areas. The rapid response is triggered by a member country's request for urgent assistance "in respect of an event that has caused, or is likely to imminently cause, a major adverse economic and/or social impact associated with natural or man-made crises or disasters."

Assistance may be in the form of immediate support or restructuring of existing, or provision of new, investment project financing. For example, rapid response may support various objectives, including such DRM-related activities as rebuilding and restoring physical assets; preserving or restoring essential services; establishing and/or preserving human, institutional, and/or social capital, including economic reintegration of vulnerable groups; longer-term reconstruction, disaster management, and risk reduction; and supporting measures to mitigate or avert potential effects of imminent or future emergencies or crises in countries at high risk. The policy highlights the need for collaboration and coordination with other development partners, including recognizing the lead role of the United Nations or other international institutions regarding activities that may fall outside the World Bank's core competencies, such as relief, security, and specialized peace-building.

International Development Association (IDA) crisis financing mechanisms.⁴³ For countries assisted by loans/credits and grants from IDA, two crisis financing mechanisms were created in 2011 to assist countries affected by disasters and other crises:

- **Immediate Response Mechanism** – This mechanism allows IDA countries rapid access to up to 5 percent of their undisbursed investment project balances following a crisis. Small states, or countries with small undisbursed balances, can access up to \$5 million. Accessing funds in this manner following a disaster could facilitate, for example, the scaling up of social safety nets to mitigate the impact on vulnerable groups, such as persons with disabilities, or the repair or restoration of basic physical assets.
- **Crisis Response Window (CRW)** – Intended to be accessed as a last resort, and linked to country-specific circumstances, this mechanism provides IDA countries with additional resources to respond to crises and return to their long-term development paths. With respect to natural disasters, CRW financing is available only for events that are "exceptionally severe." Additional financing in such circumstances would complement other efforts (for example, by the United Nations) to provide emergency relief, and like the Immediate Response Mechanism, could be used to support social safety nets for affected populations, or to restore basic physical assets.

(These projects were previously governed by OP/BP10.00 "Investment Project Financing," which was updated by the most recent policy in August 2017.)

41 World Bank Directive "Addressing Risks and Impacts on Disadvantaged or Vulnerable Individuals or Groups" Section II(1) defines "disadvantaged or vulnerable" as "those individuals or groups who, by virtue of, for example, their age, gender, ethnicity, religion, physical, mental or other disability, social, civic or health status, sexual orientation, gender identity, economic disadvantages or indigenous status, and/or dependence on unique natural resources, may be more likely to be adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a project's benefits. Such an individual/group is also more likely to be excluded from/unable to participate fully in the mainstream consultation process and as such may require specific measures and/or assistance to do so. This will take into account considerations relating to age, including the elderly and minors, and including in circumstances where they may be separated from their family, the community or other individuals upon whom they depend."

42 The four principles guiding the World Bank policy on rapid response to crises and emergencies are:

- Application of the rapid response policy to address major adverse economic and/or social impacts resulting from an actual or imminent natural or man-made crisis or disaster;
- Continued focus of the World Bank's direct assistance on its core development and economic competencies and always in line with its mandate, including in all situations where the Bank supports peace-building objectives and relief to recovery transitions;
- Close coordination and establishment of appropriate partnership arrangements with other development partners, including the United Nations, in line with the comparative advantage and core competencies of each such partner; and
- Appropriate oversight arrangements, including corporate governance and fiduciary oversight, to ensure appropriate scope, design, speed, and monitoring and supervision of emergency operations.

43 <http://ida.worldbank.org/financing/crisis-financing>

38 A/Res/71/256* available at: <http://habitat3.org/wp-content/uploads/New-Urban-Agenda-GA-Adopted-68th-Plenary-N1646655-E.pdf>

39 <http://www.worldbank.org/en/programs/environmental-and-social-policies-for-projects>

40 These are projects to which World Bank Policy "Investment Project Financing" applies.

PART 2:

APPROACHES TO DISABILITY-INCLUSIVE DRM

The core mission of GFDRR includes “facilitating implementation of the Sendai Framework for Disaster Risk Reduction” as well as the achievement of the SDGs by ensuring that climate and disaster resilience becomes integral to development investments and efforts. This chapter describes how disaster resilience efforts across different phases and sectors can become disability-informed and disability-inclusive. The Sendai Framework priorities offer an appropriate framework to dissect aspects of disaster resilience that occur at local, national, regional, and global levels. The following sections are mapped to the four Sendai priorities described in Section 1.3.2.

2.1. UNDERSTANDING DISASTER RISK FACTORS

Understanding risk factors is the first step of DRR programs. The Sendai Framework promotes the collection, analysis, management, and use of data and practical information to assess vulnerability, capacity, exposure, hazard characteristics, and their possible effects based on national, local, or community contexts (Para. 24(a) and (b)). It is important to highlight that this assessment should consider physical, social, economic, and environmental factors or processes that increase the susceptibility of an individual, a community, assets, or systems to the impacts of hazard events.⁴⁴

Thinking about risk factors in this context may be limited to identification of hazards that have the potential for negative impacts, especially large loss of life or considerable loss of assets. Though this is important, risk identification should be broader and consider high-frequency and low-intensity hazards, such as fire or heavy rain, which can have highly destructive impacts on the poor—among whom persons with disabilities are disproportionately represented—who may be less able to recover from repeated shocks. Beyond natural hazards, underlying risk factors⁴⁵ such as poverty, poor-quality housing, limited

family income earning capacity, and others pose additional risks to individuals, families, and communities, increasing their potential losses and decreasing their capacity to recover even from small shocks. For persons with disabilities who may experience marginalization even within the community, and/or discrimination on multiple bases (for example, persons with cognitive, developmental, and psychosocial disabilities, or women and girls with disabilities who face discrimination on the basis of disability and gender), such discrimination and resulting marginalization should be considered as part of underlying risk factors. Beyond broadening its scope, risk identification should be conducted at the national level, the sub-national level, and especially at the local community level⁴⁶ where it should be complemented by a vulnerability and capacity assessment.

Community perceptions of disasters and risks should also be taken into consideration. The disempowering effects of disability stigma and discrimination may affect persons with disabilities’ concept of disasters and risks, causing them to incorrectly assume that such events and their aftermath are inevitable, and that they have no societal role to play in mitigating their effects or reducing the chances of occurrence. Although women have an important role in mitigating disaster risks, women with disabilities are rarely considered to have the necessary skills and resources to contribute, and therefore often will not be invited, or not be permitted, to join education or community meetings on DRR.

Combatting disability-based discrimination and the compounding effects of poverty can empower persons with disabilities and their families to employ strategies that improve their resilience to disasters. For example, ensuring access to inclusive education can facilitate school attendance by children with disabilities, which improves the income earning potential of the family and their ability to withstand economic

⁴⁴ Vulnerability definition according to UNISDR: “The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.” <https://www.unisdr.org/we/inform/terminology#letter-v>

⁴⁵ Underlying disaster risk drivers as defined by UNISDR include poverty and inequality; climate change and variability; unplanned and rapid urbanization; the lack of disaster risk considerations in land management and environmental and natural resource management; as well as compounding factors such as demographic



Mr. Rizal Assor, DPO representative from North Maluku, discusses disability-inclusive practices at DRR Month National Commemoration 2016. ASB Indonesia and the Philippines, Technical Assistance and Training Teams (TATs) Program. Photo copyright: ASB Indonesia & the Philippines 2017.

shocks. Similarly, ensuring access to agricultural training programs for persons with disabilities can increase their awareness and ability to invest in climate-resistant crops, both as a source of food and as a means of income generation. Part of the heightened risk faced by persons with disabilities can be related to their functional capacities. Thus, access to rehabilitation services, assistive devices, and information adapted to their needs can facilitate increased self-sufficiency, enabling them to contribute to DRR, and enabling family members and their social support networks to dedicate more time to mitigating risks.

Understanding and considering risks related to persons with disabilities will assist in ensuring a more comprehensive understanding of the risks faced by the whole community. Such understanding can support the development of more comprehensive DRR plans. Sendai Priority 1 includes references to disability-related

concepts, including accessible information and communication. Paragraph 24(m) highlights the importance of considering specific audiences and their needs in sharing knowledge and information on DRR. Dissemination of risk information, and information about national policies, strategies, and programs, is another area where adaptations can tangibly benefit persons with disabilities. Such information is often shared with communities via formal and informal education channels, such as community meetings, women's groups, and youth clubs. Such forums historically have not been inclusive of, or accessible to, persons with disabilities. Ensuring that such groups, and the information they disseminate, are fully accessible will help to ensure that persons with disabilities and their families have access to the information on an equal basis with other community members.

Generation of risk information should also be

change, non-disaster risk-informed policies, the lack of regulations and incentives for private disaster risk reduction investment, complex supply chains, the limited availability of technology, unsustainable uses of natural resources, declining ecosystems, and pandemics and epidemics. <https://www.unisdr.org/we/inform/terminology>
46 "Global risk identification program; disaster risk assessment: understanding the process," Dr. Jiaping Yan.
47 Aligned with the CRPD Article 3; General Principles.

BOX 2.**BANGLADESH—COMMUNITY-BASED DISABILITY-INCLUSIVE DISASTER RISK REDUCTION (CBDIDRR)**

The Centre for Disability in Development, together with its partner Gana Unayan Kendra, implement CBDIDRR projects in Gaibandha district. CBDIDRR goes beyond adopting a community-based approach to DRR to ensure that all activities and techniques include a disability component—it involves persons with disabilities in all activities and at all levels. Gaibandha is prone to disasters, particularly annual floods from the Brahmaputra River. To support communities to reduce the impacts of the floods, a participative process for risk, vulnerability, and capacity assessment was developed. The first step consisted of organizing meetings with community members, including persons with disabilities, and with local authorities, to capture their knowledge about the hazards faced, challenges in coping, and their demands. Training was then organized with self-help groups of persons with disabilities, community members, and local authorities, focused on understanding DRR, learning about the risk assessment and assessment techniques, and understanding disability issues. In one technique, participants drew a village map indicating critical infrastructure, evacuation routes, and water points, as well as the location of persons with disabilities, elderly persons, livestock, and assets. The completed map was used to develop strategies and plans to minimize the impacts of the floods. For example, evacuation shelters and roads were identified based on previous flood levels; evacuation priorities were defined; the roles and responsibilities of different community members were decided; and plans were made to shelter livestock and ensure the safe conservation of foods, seeds, and related community assets. In this way, persons with disabilities were able to substantively and meaningfully participate in the protection of the whole community.

BOX 3.**NEW ZEALAND—SYMPOSIUM ON DISABILITY**

A year after the 2011 earthquake in Christchurch, New Zealand, the Office for Disability Issues, Civil Defense, and CBM organized a symposium on persons with disabilities and emergency preparedness, bringing together persons with disabilities, their families, local service providers, and international guests. The objective was to enable cross-sector learning regarding the Christchurch earthquake response between persons with disabilities and responders. As a result, the New Zealand Civil Defense and Emergency Management (CDEM) department developed partnerships with persons with disabilities and published an information note on “including persons with disabilities.”⁵¹ In the foreword to the document, the director of CDEM wrote:

“The message from people with disabilities in Canterbury is very clear: ‘Nothing about us without us.’ This means full participation in all aspects of CDEM, not just consultation. There is a strong willingness among people with disabilities to work with local authorities to ensure that CDEM is delivered in disability-inclusive ways. By partnering with people with disabilities and their wider networks, CDEM organizations can gain not only an understanding of the requirements of these members of the community, but also their strengths.”

inclusive of persons with disabilities. Not only should persons with disabilities be part of the groups working to identify risks, they should be empowered to meaningfully contribute to risk or vulnerability and capacity assessments, such that their knowledge, opinions, and voices are valued by others.⁴⁷ Including persons with disabilities (considering gender and cross-disability representation) in assessment teams can also help to facilitate participation in and contribution to DRM-related activities by persons with disabilities.

Data collected for risk, vulnerability, and capacity assessments should be disaggregated by sex, age, and disability, or at least ensure that existing disability data (from social protection registers, national census, service provision data, or other sources) is used and integrated in the key elements of assessments. A variety of techniques may be used to develop community-based risk, vulnerability, and capacity assessments, such as community mapping, transect walks, and seasonal calendars, and such approaches should ideally include gender and cross-disability perspectives. Risk assessment should leverage existing information that can be used to identify persons with disability in the community.

Persons with disabilities are often invisible in vulnerability and capacity assessments; not only missing from the findings but also missing as a voice and presence in the process.⁴⁸ By combatting the types of societal barriers often faced by persons with disabilities, persons with disabilities can become more visible to the community, local authorities, and other stakeholders involved in DRR. Those stakeholders can, in turn, undertake assessments that are more comprehensive and benefit the whole community. For example, community mapping that indicates where persons with disabilities live can not only facilitate a better preparedness plan but also inform decisions on measures that have the potential to reduce risks and save lives and assets for the overall community. Identification of persons with disabilities may be the most important change that needs to happen in DRR to ensure the implementation of Sendai and to achieve its commitments to inclusion.

In 2013, the Disability Stakeholders Group, together with UNISDR, launched an online survey

48 Disability-Inclusive Community-Based Disaster Risk Management Toolkit, Handicap International, Technical Resources division, October 2012.

49 http://www.unisdr.org/2013/iddr/assets_resources

50 “Technical Note on Data and Methodology to Estimate the Number of Affected People to Measure the Achievement of Target B of the Sendai Framework for Disaster Risk Reduction,” UNISDR, December 2017.

51 <http://www.civildefence.govt.nz/assets/Uploads/publications/is-13-13-including-people-with-disabilities.pdf>

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to help address the lack of data and information related to disability in the context of DRR.

The results⁴⁹ of the survey contributed to the inclusion of disability in the Sendai Framework. For example, only 17 percent of the respondents were aware of a disaster management plan for their area. Despite the results of the survey, the inclusion of disability in the framework, and negotiation of targets and indicators, inclusion of disability in DRR, especially with respect to data collection, has not yet materialized to the extent needed. For this reason, the Sendai Monitoring Framework notes that for some indicators, measurement and collection of data disaggregated by disability is desirable.⁵⁰

Owing to the pervasive failure to disaggregate data by sex, age, and disability, most reports on losses related to disasters do not include information on the numbers of persons with disabilities affected by disasters or exactly how they are affected. Some countries, including Australia, Bangladesh, Ecuador, Indonesia, New Zealand, and the United States, have begun to work more effectively with persons with disabilities to promote disability-inclusive DRM. These countries are taking measures to identify and mitigate risks and build community resilience, including by reviewing policies, developing guidelines, amending handbooks, and related interventions. However, these are isolated examples, and much more needs to be done in more countries to strengthen evidence-based interventions, and to facilitate information exchange between stakeholders on practical approaches to ensuring disability-inclusive DRM.

2.2. STRENGTHENING DISASTER RISK GOVERNANCE TO MANAGE DISASTER RISK

Persons with disabilities should be involved and empowered to participate in the development, implementation, and monitoring of DRR policies, regulations, strategies, and plans.⁵² In addition, development sectors need to mainstream DRR and disability in their policies, strategies, plans, and programs. This “twin mainstreaming” ideally should be coordinated and involve all stakeholders, through implementing a risk-informed development agenda that creates linkages between sectors.⁵³ Unfortunately, while

BOX 4.

Ecuador—HIGH-LEVEL REGIONAL MEETING ON INCLUSIVE DRM, INCLUDING PERSONS WITH DISABILITIES IN THE RESPONSES TO EMERGENCIES AND DISASTERS (2016)

Following adoption of the Sendai Framework, a regional plan for Latin America was developed to comply with the framework. The government of Ecuador, under the leadership of the prime minister, organized a high-level meeting to identify actions that should be included in the regional plan to include persons with disabilities. The meeting brought together DPOs from the region, international experts, and representatives of several Latin American countries. One outcome from the meeting was a declaration about the importance of regional integration for the management of risk that also expressed openness to creating a network of experts for inclusive management of risks, focusing on the approach and empowerment of persons with disabilities.

BOX 5.

Indonesia—ARBEITER-SAMARITER-BUND (ASB) AS PART OF THE TECHNICAL ASSISTANCE AND TRAINING TEAMS (TATTS) CONSORTIUM

The ASB program aims to sustainably enhance the skills and technical capacity of Local Disaster Management Offices (LDMOs) in eight provinces in Indonesia, enabling the LDMOs to provide technical and operational support before, during, and after disasters occur, as well as promote best practices. The TATTS program, meanwhile, promotes more proactive, inclusive, and effective policy and planning processes at national, provincial, and district levels. Local DPOs are involved with this process to ensure local resources on disability-inclusive DRR (DiDRR) are available, and that strengthened DPOs are able to partner with LDMOs to sustain their capacity in DiDRR planning and delivery. Through the TATTS program, DPOs benefit from technical training on DRR and their participation in national and local DRR forums enables them to better influence DRR policy and planning, share good practices, and learn from other stakeholders. The program promotes DPO leadership in DRR, especially in contributing to training of LDMO staff. DPOs are involved in developing national DRR training curricula, module review, and trials, ensuring that the DRR training content is inclusive of disability issues and that the training methodology is disability-inclusive.

Building on the mutual understanding that has developed between the LDMO and DPOs, the program has facilitated the creation of a Disability Inclusion Service Unit for Disaster Management within LDMO in Central Java. The unit personnel are representatives of LDMO officials, DPOs, and nongovernment DRR actors. The function of the unit includes monitoring and evaluation, as well as disaggregated data management to support DiDRR realization and scaling up, including replication of good practices at district level.

Source: Arbeiter-Samariter-Bund (ASB), Yayasan Mercy Corps Indonesia, Perkumpulan Lingkar, and Indonesia University Forum for DRR and CARDNO, funded by the United States Agency for International Development (USAID).

⁵² Sendai Framework, paragraph 27 (a)

⁵³ Sendai Framework, paragraph 27 (b)

⁵⁴ Sendai Framework, paragraph 19 (i) “While the enabling, guiding and coordinating role of national and federal State Governments remain essential, it is necessary to empower local authorities and local communities to reduce disaster risk, including through resources, incentives and decision-making responsibilities, as appropriate.”

BOX 6.**UNITED STATES—FEELING SAFE BEING SAFE ACCESSIBLE EMERGENCY PREPAREDNESS MATERIALS DEVELOPED BY AND FOR PERSONS WITH DEVELOPMENTAL DISABILITIES**

In 1992, the director of the California Department of Developmental Services (DDS) created the Consumer Advisory Committee (CAC), to give its consumers (people with developmental disabilities receiving services) a voice in the work of DDS. Made up entirely of persons with developmental disabilities, the CAC articulates priorities of concern to the developmental disabilities community in California. It also provides information to assist consumers, including resources to promote independent living and community inclusion.

Mindful of the wide array of natural hazards to which California is prone, the CAC sought to develop resource materials for consumers that would increase personal safety and community connections and assist them in creating individualized emergency preparedness plans and kits. In addition, the CAC wanted to counter the stereotype of persons with developmental disabilities as incapable of contributing to DRR activities or having to rely on staff, and instead empower consumers to help themselves and others in their communities.

With funding from the U.S. Department of Homeland Security, the CAC worked collaboratively with DRR experts and consultants to create accessible, plain language, emergency preparedness materials designed by and for persons with developmental disabilities. The colorful, easy to read materials were extensively tested with end users at community meetings and conferences, with 2,400 persons from the developmental disabilities community providing evaluations. The materials were then revised in response to the feedback received. For example, the title “Feeling Safe, Being Safe” was chosen because consumers related that it made them feel empowered about the topic, rather than fearful or panicked.

To promote sustainability, additional grant funding was obtained to facilitate the development of train-the-trainer courses. Through such training, persons with developmental disabilities could become certified trainers. Some trainers used their certification to engage in income-generating activities, whereby they would be paid to deliver community training using the Feeling Safe, Being Safe materials. The materials have also been adopted in other jurisdictions. To date, 15 other U.S. states have used versions of the materials to promote emergency preparedness by people with and without developmental disabilities.

Note:

Feeling Safe Being Safe materials are available here: <http://www.dds.ca.gov/ConsumerCorner/EmergencyPreparedness.cfm>
For more information about the process used to develop the materials, see: http://brcenter.org/lib/lib_pdf/SP_IN_FSBS_Story.pdf

global initiatives, such as safe schools, safe hospitals, and resilient cities, are contributing to the mainstreaming of DRR in all sectors, disability is not being systematically included. Nevertheless, in some countries, governments or other stakeholders have been implementing pilot programs that include disability. For example, the Global Risk Award 2014 was given to a project that includes disability in a resilient city initiative. “Peñaflo town inclusive safe community: Resilience for all,” aimed to remove barriers, enabling community members to better use services and contributing to saving lives and assets during disasters. Such initiatives remain isolated though and are typically not well documented or developed enough to be used as models or considered a standard.

Perhaps the most effective progress in the realm of strengthening risk governance has been with decentralization of DRM and engagement of communities. Pilot programs involving local authorities, civil society organizations, NGOs, and communities have been implemented worldwide using a community-based approach. The advantage of such approaches in DRM is widely accepted. The Sendai Framework Guiding Principles (Para 19 (f)) recognizes the need to empower the local authority and community to reduce disaster risks.⁵⁴ However, few efforts have been made to ensure the inclusion and empowerment of marginalized groups to participate, including persons with disabilities. The persistent perception of persons with disabilities as passive recipients of assistance, rather than as agents of change with valuable contributions to make, negatively impacts the willingness of many local authorities and others to make their meetings and services accessible to persons with disabilities. To ensure successful and inclusive risk governance, much greater awareness about DRM is needed within the disability community, and much greater awareness of disability is needed among governments and other stakeholders. To the extent that community-based DRM projects have benefitted the whole community, they need to be documented, shared, and scaled up for national and regional replication.

Information and evidence sharing is also critical to improving disability-inclusive disaster risk

⁵⁵ “The Global Platform recognized the importance of the Dhaka Declaration on Disability and Disaster Risk Management as practical guidance for inclusive implementation of the Sendai Framework. Countries were urged to implement the Declaration and report progress on its implementation when reporting progress of the Sendai Framework in 2019.” http://www.preventionweb.net/files/53989_chairsummaryofthe2017globalplatform.pdf

⁵⁶ Paragraph 30(k) recognizes the heightened impacts of disasters on people with life-threatening and chronic diseases, promoting their participation in their specific risk assessments, and design of policies and plans that will mitigate them.

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governance. For example, every two years, governments meet during the “Global Platform” and report on progress in implementing the Sendai Framework. In 2017, the Chair’s Summary (paragraph 59) promoted the inclusion of the 2015 Dhaka Declaration on Disability and Disaster Risk Management as an implementing guidance and monitoring tool.⁵⁵

National, regional, and global forums to report on successful inclusion of disabilities should promote replication and empower DPOs and others in their advocacy for disability-inclusive implementation of the Sendai Framework with their governments. Regional and global DRR platforms could also be used as a venue for governments to demonstrate innovative disability-inclusive DRR programs that can then be used as models or adapted and replicated in other countries.

Finally, one of the most significant gaps regarding disability, is its invisibility in coordination mechanisms across DRR. Although in some countries, DPOs are invited and involved in coordination mechanisms, few government bodies are responsible for ensuring inclusion across all DRR programs. Thus, the responsibility to ensure contribution of persons with disabilities is often forgotten. In many countries, disability as a policy issue is situated within ministries of social welfare, which are often not adequately included in DRR discussions. An alternative approach would be to nominate a focal point for disability-inclusive DRR within the DRR management and coordination body, to ensure responsibility and accountability for disability inclusion.

2.3. INVESTING IN DISASTER RISK REDUCTION FOR RESILIENCE

The third priority of the Sendai Framework is defined in Section IV(29):

“Public and private investment in disaster risk prevention and reduction through structural and non-structural measures are essential to enhance the economic, social, health and cultural resilience of persons, communities, countries and their assets, as well as the environment. These can be drivers of innovation, growth and job creation. Such measures are cost-effective and instrumental to save lives, prevent and reduce losses and ensure effective recovery and rehabilitation. Priority 3 encompasses

BOX 7.

UNISDR—AN IMPORTANT ALLY IN DISABILITY-INCLUSIVE DRR

The UN Office for Disaster Risk Reduction has been a key ally in raising the voices of persons with disabilities in the DRR context, including in the negotiation and adoption of the Sendai Framework. During the negotiations, UNISDR used a commonly employed UN practice of soliciting input from “major groups.” Given the lack of space available for persons with disabilities to advocate, and conscious of the need to ensure equal opportunities to disability stakeholders, UNISDR set up the Disability Stakeholders Group and worked with it alongside the other major groups. UNISDR invited the group to all meetings, providing opportunities to make statements and comment on all drafted documents. UNISDR also organized the first online survey to ask persons with disabilities about DRR and their coping capacity in a disaster event. The survey results were released for International Day for Disaster Risk Reduction in 2013, the theme of which was “Living with Disability and Disasters.”^a

With the support of the Nippon Foundation, UNISDR also committed to making the Sendai conference accessible to participants with disabilities. Drawing on that experience, UNISDR worked to make its Regional Platform meetings and the 2017 Global Platform in Cancun even more accessible. One of the most notable features of Cancun was the facilitation of remote participation via a web-based conference system and telepresence robots, with the technical support of the Institute on Disability and Public Policy at American University. Persons with disabilities from four regions were able to log into the telepresence robot and attend sessions, ask questions, or otherwise interact with other participants.

UNISDR will continue to promote the inclusion of persons with disabilities by mainstreaming disability concerns across the organization and including disability in the development of guidelines and training, as well as in discussions with governments. UNISDR has nominated two focal persons who will continue to work with the Disability Stakeholders Group, including facilitating access for persons with disabilities to participate. Currently, UNISDR is working with partners to develop disaggregated data for the national loss accounting databases, an important tool that will provide more accurate information on the impact of disasters on persons with disabilities.

Note: a.

“The Global Platform recognized the importance of the Dhaka Declaration on Disability and Disaster Risk Management as practical guidance for inclusive implementation of the Sendai Framework. Countries were urged to implement the Declaration and report progress on its implementation when reporting progress of the Sendai Framework in 2019.” http://www.preventionweb.net/files/53989_chairsummaryofthe2017globalplatfor.pdf

⁵⁵ Sendai Framework Paragraph 30 (j).

BOX 8.**NIGER—CBM/KARKARA INVESTMENTS IN “SURVIVAL YARDS”**

Niger is one of the poorest countries in the world and faces climate-related disasters such as severe droughts alternating with heavy rainfall, which have affected people's livelihoods, health, and access to food. Conflict in northern Nigeria, and an influx of refugees, constitute additional stressors on Niger's capacity to cope. Inflation of food prices and loss of value of livestock can have dramatic consequences for poor people, including persons with disabilities, who rely on agriculture and livestock.

CBM, with its partner Karkara, is targeting poor communities with a project that supports food security, health, water and sanitation, and efficient cooking stoves, among other components. Under the project, persons with disabilities are given land by the community to establish vegetable and fruit gardens that are drought-resistant. These gardens provide the direct benefit of good and varied nutrition, as well as a financial benefit derived from selling surplus crops on the market. The land is chosen carefully, so that sufficient water is available without compromising the other water consumption needs of the community. An accessible water well is built that can be used by the entire community.

A cart and a donkey are lent to the garden owner to transport extra produce to the local market. The cart is also a community asset and is often used to support a diversity of transportation needs. The cart has improved community access to health centers, which has helped improve health outcomes. The project also demonstrates that financial empowerment can lead to greater recognition of persons with disabilities as active contributors in their communities. Furthermore, it increases local food production that can improve the community's capacity to cope, as vegetable and fruits are chosen to ensure production of food across the seasons. Lastly, the garden waste is used to feed small animals. Investing in developing such “survival yards” not only helps the community to cope with climate-induced hazards but also improves overall living conditions.

many persons with disabilities via Paragraph 30(k)'s reference to people with life-threatening or chronic diseases.⁵⁶ In this context, and consistent with the Sendai Framework's Guiding Principles, persons with disabilities should have the opportunity to contribute to both risk assessment and risk reduction activities. Priority 3 is also of particular relevance to persons with disabilities in its focus on finances, and social safety nets in particular. Social safety nets, to the extent that they are available, are often the only source of income for persons with disabilities, and are thus a critical resource for many in the disability community.⁵⁷ While enhancing financial protection and reduction of financial losses, Priority 3 should of course be implemented consistent with the Guiding Principles (Section III(19)), and the role of stakeholders.” (Section V(36)(iii))

Persons with disabilities often have very limited incomes, in part because their livelihoods are frequently in the informal employment economy or rely on social protection mechanisms. This means that a large portion of the population is unable to contribute to investment for resilience. At household and community levels, persons with disabilities are more likely to be identified as a “financial burden” than as a “financial asset.” With Priority 3 of the Sendai Framework calling for investment in building resilience at all levels,⁵⁸ ensuring access to more diversified and sustainable livelihoods for persons with disabilities offers the opportunity for a high return on investment through enhanced resilience for persons with disabilities and their families. Vocational training and skills training initiatives and programs that include persons with disabilities are effective strategies to improve resilience at household and community levels. Removing barriers to formal employment and ensuring access to financial mechanisms such as savings accounts, loans, and credit for persons with disabilities should be thought of as innovative and sustainable ways to build the resilience of a whole society.

Social protection, where available, can be another source of income for persons with disabilities. However, requirements to access social protection and social safety mechanisms are often such that these options are inaccessible to persons with

⁵⁸ Sendai Framework paragraph 30 (o).

⁵⁹ Qualification for such benefit cards often requires a medical examination to define the level of disability. Such consultations often take place in country capitals or other urban areas and necessitate persons with disabilities having the financial resources to travel to the assessment site, stay for several days, and pay for the medical examination. Many persons with disability do not have the requisite resources to undertake such a trip and, even if they do, may not have transportation that is accessible to them.

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disabilities. For example, persons with disabilities frequently do not possess identification cards, or they will not be aware that they are entitled to receive a disability benefit card or perhaps understand how to obtain one. Consequently, they may experience barriers to qualification or registration to access poverty schemes or social benefits. Such barriers can be particularly acute for women with disabilities and persons with psychosocial or cognitive disabilities (who may lack access to accessible information materials about the programs, and/or access to supported decision-making to help them navigate those systems).

Even if persons with disabilities are qualified and registered for social protection or other safety net mechanisms, the means to access the funds are often not directly accessible to them (such as bank accounts, mobile transfers, receiving cash, or in-kind) creating dependency on others. For example, the use of mobile phones for funds transfers is common in many countries, but is often not accessible to persons with vision disabilities absent availability of adapted mobile phone technologies. Similarly, receiving in-kind food assistance may create transportation expenses for people with physical disabilities, creating abuse risks, or generating inequalities in the amounts received. For women with disabilities, being entitled to cash that they cannot directly access or otherwise use independently, can create a high risk of abuse and gender-based violence.

There are very few examples where specific effort has been made to enroll persons with disabilities in investment programs that build resilience, even where the intention is to include them. For example, cash-for-work programs may plan to provide unconditional cash to people who are unable to physically perform the work. However, lack of disability data and no plan to otherwise identify persons with disabilities can prevent them from benefitting from such programs.

In addition, the assumption that persons with disabilities cannot work, or do not want to, is often inaccurate. Cash transfer programs of all sorts should ensure that persons with disabilities who are the most marginalized, such as women with disabilities, persons with psychosocial or cognitive disabilities, and others,

BOX 9.

ETHIOPIA—WORLD BANK GROUP PRODUCTIVE SAFETY NET PROGRAM INTEGRATING DISASTER AND CLIMATE RISK MANAGEMENT

Ethiopia's Productive Safety Net Program is a large national social safety net program that responds not only to chronic food insecurity among Ethiopia's poor but also to shorter-term shocks, mainly droughts. The program finances labor-intensive public works and social services infrastructure. Cash is paid for up to five days of work a month per household member, for six months a year, until the recipient household graduates from the program by accumulating an asset and income level that enables them to meet 12 months of food needs and to withstand modest shocks. In addition, about 20 percent of the participating households with members unable to work receive unconditional cash or food transfers. The program's Risk Financing Mechanism and contingency budget helps to protect the income and assets built up by program beneficiaries from being eroded by recurring shocks. Chronically food-insecure households that cannot provide labor to public works are given an unconditional cash or food transfer of equivalent value to that received by labor-contributing households. The Direct Support beneficiaries have included orphans, pregnant and nursing women, people with disabilities, the elderly, chronically ill individuals, and female-headed households that are labor poor (lack time, mobility, or members to work on project sites). A 2011 impact evaluation found that households receiving Direct Support had considerably lower average income and asset values and owned and cultivated less land than households participating in the Public Works component, highlighting the need to develop mechanisms to ensure that such program benefits accrue equally to all member of the community.

Source:

<http://documents.worldbank.org/curated/en/893931468321850632/pdf/806220WPOP12680Box0379812B00PUBLICO.pdf>

BOX 10.**HAITI EARTHQUAKE—STATE SECRETARY FOR INCLUSION OF PERSONS WITH DISABILITIES**

Following the 2010 earthquake in Haiti, and the massive reconstruction needed, the state secretary for inclusion of persons with disabilities, in partnership with local DPOs and international organizations, worked to establish standards for making all reconstruction accessible. Resource documents have been published and training on universal design to engineers and university students has been implemented. The state secretary, in conjunction with other governments bodies, developed an accessibility law to ensure that all Haitian buildings (new and rebuilt) are accessible. On June 30, 2017, this law was approved by the Council of Ministers; it was ratified in August by the Senate. The objective of the law is to build an inclusive society and to ensure that persons with disabilities have better capacity to cope with disasters, escape routes from public buildings, or access to shelters in time of disasters. If the law is successfully implemented, it will greatly improve the overall resilience of Haitian society.

Sources:

<http://www.haitilibre.com/en/news-21967-haiti-politics-good-news-for-people-with-disabilities.html>; <http://www.sgc.gov.ht/communiqu-projet-de-loi-sur-les-normes-daccessibilite-de-lenvironnement-bati/>

BOX 11.**CAMBODIA–THAILAND–PHILIPPINES–UNIVERSITY OF SYDNEY’S DISABILITY AND DISASTERS PROJECT**

This project takes a holistic approach to the challenges of persons with disabilities in responding to disasters and risk in South East Asia and identifies resilience-building solutions for mainstreaming DiDRR planning and action. To achieve this, the project takes three main approaches: increasing knowledge and skills of persons with disabilities and DRR stakeholders on risk and DiDRR; changing attitudes and beliefs about persons with disabilities and demonstrating their value to the DRR process; and facilitating inclusive governance processes by providing tools and mechanisms that demonstrate best practice. Main activities and outputs designed to foster greater inclusion include:

- Creation of an empirical knowledge base on what support persons with disabilities need and how DRR actors can best work with persons with disabilities to ensure this support.
- Development of a toolkit that guides users on how to do DiDRR. The toolkit was developed in collaboration with main stakeholders to ensure relevance. It includes risk awareness and preparedness training modules for persons with disabilities; train-the-trainer manuals that train persons with disabilities how to lead DiDRR training sessions; inclusive emergency response training for emergency responders; the Inclusive Resilience Scorecard that enables persons with disabilities, women’s groups, other minority groups (such as the LGBTQI community), DPOs, and government, to identify opportunities for inclusion within their cities; and the Inclusion Road Map, a step-by-step guide on how to support stakeholders in designing more inclusive practices.

are identified and included. It is also important to make provisions for mothers of children with disabilities, as their family obligations may not leave them with sufficient free time to access cash-for-work programs.

Another key element of Priority 3 of relevance to persons with disabilities is the resilience of strategic infrastructures and sectors via the enforcement of building codes or investments ensuring continuity of services.⁶⁰ Few building codes comprehensively integrate both safety and accessibility issues. Consequently, basic accessibility standards may not be incorporated when building or rebuilding critical infrastructure such as schools, hospitals, health centers, and public buildings. This creates a barrier to inclusion of disability issues in DRR and resilience building, as it prevents them from building their resilience, either leaving them to maintain the status quo, or worsening the capacities of persons with disabilities to cope with disasters and contribute to their individual, family, community, and country resilience. At present, there is a clear gap in investment for resilience strategies and programs that are inclusive of persons with disabilities and benefit all equally, both in building critical infrastructure and services resilience, as well as building individual, household, and community resilience.

2.4. ENHANCING DISASTER PREPAREDNESS FOR EFFECTIVE RESPONSE AND TO “BUILD BACK BETTER” IN RECOVERY, REHABILITATION, AND RECONSTRUCTION

Undertaking a people-centered approach across preparedness, response, recovery, and reconstruction is important to ensuring the contribution and protection of persons with disabilities. Priority 4 of the Sendai Framework calls for the empowerment of persons with disabilities to lead and contribute to all aspects of DRR. However, implementation relates to the management of residual risks, so it is important to ensure that persons with disabilities can contribute to implement the three other priorities as well. Persons with disabilities and their organizations are critical in the assessment of disaster risk and in designing and implementing

⁶¹ Sendai Framework; paragraph 36 (iii).

⁶² As example: “All Under One Roof: Disability inclusive shelter and settlements,” IFRC.

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plans tailored to specific requirements, taking into consideration the principles of universal design and other factors.⁶¹ Priority 4 also emphasizes the need to prepare for the recovery and reconstruction phases, while “building back better.” Read in light of Priority 2, the approach to “build back better” should include universal design as part of the regulatory framework, to ensure increased resilience of community, assets, and infrastructure.

Although there is increasing evidence of governments and other stakeholders consulting with DPOs during disaster preparedness, response, recovery, rehabilitation, and reconstruction, most current efforts fall short of the kind of leadership and empowerment envisioned by the Sendai Framework. This is especially true for women with disabilities, who remain excluded from many of these initiatives, despite Priority 4’s call for women and persons with disabilities to play a leadership role. Persons with disabilities often have not had access to education or professional opportunities on an equal basis with other members of society, which can make it difficult for them to confidently take up leadership roles and participate fully in planning and coordination mechanisms. This is generally true in non-emergency settings, and can be even more pronounced in times of disaster, when information may be even less likely to be shared in accessible formats, or meeting locations may not be accessible.

The involvement of persons with disabilities in emergency preparedness will assist in eroding barriers to their contribution in emergency response. Several countries have developed clear preparedness plans that are reviewed and drilled regularly. This is an area where great progress has been made in including persons with disabilities, as it is more widely recognized that it helps emergency services personnel to understand and plan for the needs of persons with disabilities if they are involved in such drills. However, too often persons with disabilities are invited to role-play disaster victims, rather than being included in the coordination cells to support inclusion, not only in search and rescue but also in the whole humanitarian response cycle.

For those who have committed to disability inclusion, one challenge can be ensuring

BOX 12.

BANGLADESH—CBM INCLUSION MATTERS: MAKING DIFFERENCES

On August 29, 2017, at around 11:00 am, hundreds of flood-affected people, mostly women and older men, were gathering around a village home yard on the bank of the river Tista. Another hundred were on their way there. They were gathering to collect referral tokens and complete biometric registration for emergency relief support from an international NGO. Surprisingly, the gathering place was not the residence of any influential local politician. Instead, people gathered in front of the house of Badsha Miah, who is jointly coordinating the emergency response with local Union Parishad Member. Badsha Miah is a wheelchair user and leader of a self-help group and their local network body.

During the August 2017 flooding across Horipur, group members were highly visible and proactive. They volunteered in early warning, rescue operations, and beneficiary selection for emergency response. In recent years, persons with disabilities have begun to be seen not only as beneficiaries but also as key stakeholders, actors, and contributors in DRR and emergency responses programs. Group leaders have been demonstrating this kind of leadership, management capacity, and knowledge-based decision-making in addressing issues related to the pre-, mid-, and post-flood situation. The group is making changes, showcasing the benefits of inclusion, and contributing to societal transformation. Their vibrant presence and organized efforts in emergencies have earned recognition locally, and the group members are praised for their contribution in building resilience.

BOX 13.

THAILAND – THAILAND-CAMBODIA JOINT AND COMBINED EXERCISE ON HUMANITARIAN ASSISTANCE

Following CBM’s campaign to make disaster management exercises inclusive of persons with disabilities, the Royal Thai Armed Forces invited government bodies, the private sector, and civil society organizations, including the Council of Persons with Disabilities Thailand, to join the Thailand-Cambodia Joint and Combined Exercise on Humanitarian Assistance and Disaster Relief in 2012. The purpose of the exercise was to identify areas for improvement, enhance coordination between several stakeholders in Thailand, and strengthen the relationship between Thailand and Cambodia.

The Council of Persons with Disabilities participated in this exercise for the first time, and nine representatives with disabilities inspired the training participants to move their practices to inclusive disaster management. One representative worked as a liaison officer to support the Commanding Post Unit; others were acting with other civilians as disaster victims in storm surges, tsunamis, landslides, and collapsed buildings.

Source:

[https://www.cbm.org/article/downloads/54741/Disability Inclusive Disaster Risk Management.pdf](https://www.cbm.org/article/downloads/54741/Disability%20Inclusive%20Disaster%20Risk%20Management.pdf)

BOX 14.**DENMARK—SAFE AND ACCESSIBLE TO ALL BUILDING**

Disabled People's Organizations Denmark has taken the challenge to construct a building that included accessible and universal design perspectives right from the start. The objective was to create an office building without barriers for people with disabilities so that everyone can feel welcome. The vision demanded an inclusive approach to all types of disability. Before laying the first brick, it was important to have a thorough user involvement process, so that all demands and wishes could be balanced in the construction. The core accessibility challenges were addressed early on, partly because to do so was more cost-effective, but also because the quality of the solutions are higher when they are a part of the design strategy from the beginning. This building aims to show that it is possible to make universal solutions that are both beautiful and practical.

Lights, venting, navigation, lifts, handles, toilets, meeting rooms, emergency evacuation, and many more have been thoroughly examined to ensure they are fully accessible and inclusive. The fire evacuation strategy considers needs for safe evacuation of everyone. It includes three fire-resistant safe zones and the possibility to use lifts, even in case of fire, which is particularly important for the safety of people using wheelchairs or with mobility limitations.

Today the office building is home to approximately 20 organizations of persons with disabilities, as well as the umbrella organization of the Disabled People's Organization Denmark. The building is not only fully accessible and inclusive but also safe and resilient.

BOX 15.**ETHIOPIA – GAYO PASTORAL DEVELOPMENT INITIATIVE**

The Gayo Pastoral Development Initiative is an Ethiopian indigenous development organization active in Teltele in Borana district. Together with Intermon Oxfam they worked on inclusive food security and early recovery during a drought crisis in the early 2000s. Key components of this work were to improve access to drinking water through rehabilitating ponds or digging new ponds, improve the livestock for the poorest and more vulnerable households, and provide drought-resistant seeds for farmers.

It proved less difficult than expected to include persons with disabilities during the targeting process. Village leaders and local authorities agreed to include persons with disabilities as a priority group for cash-for-work activities, as well as for receiving livestock. Throughout the project, persons with disabilities participated alongside their neighbors in digging ponds and rehabilitating roads, and many of them could restock with goats. The people that could not physically carry out these rather heavy jobs could complete other tasks, or one of their family members could work instead.

These activities have contributed to improving the communities' resilience to drought and food insecurity. Recovery mechanisms are in place, and persons with disabilities are now not only more visible but also active members of community water management committees and are looking for possibilities to set up cooperatives.

representation of a cross-disability perspective and avoiding limiting disability inclusion to those with the most visible disabilities. Some sectors have developed guidance on including persons with disabilities in emergency preparedness, response, and reconstruction.⁶² However, even these efforts must consider dissemination strategies and face the challenge of competing agendas between cross-cutting issues, such as gender, ethnic minorities, and older persons, which need to be addressed simultaneously.

Emergency settlements that are not accessible can lead persons with disabilities to exclude themselves from mainstream relief. For example, following the Haiti earthquake, some persons with hearing disabilities pushed for segregated camps as the only solution to ensure information flow, secure access to relief goods, and provision of an environment in which they could mentally recover. Similarly, in Nepal following the earthquake, an independent living center set up a separate camp for persons with disabilities to ensure accessibility, especially one where women with disabilities felt safe and protected from abuse and could access facilities and goods with dignity. It is not difficult or costly to have accessible latrines and bath areas in a camp that are safe for everyone.

Distribution of relief goods is often organized using a central location where people must register and potentially queue for extended periods, then carry back heavy bags of goods. Especially in the initial stages of an emergency, response mechanisms are not typically in place to facilitate organized distribution. In such scenarios, persons with disabilities, older persons, and others are frequently left behind and unable to access critical supplies. Addressing these types of issues through disability inclusion in emergency preparedness and response, will help ensure not only greater resilience, but also greater efficacy of the overall response.

“Building back better” should include accessibility to develop and strengthen resilient communities. Yet, initiatives to do so remain isolated. Universal design and accessibility are not typically included as criteria for approval or clearance of reconstruction plan and designs. Often, the designs and plans are developed with great urgency after a disaster and with very little consultation of community members, and



Evacuation in process in Bangladesh. Photo copyright: Centre for Disability in Development.

certainly not with persons with disabilities. Though in some cases specific attention is given to households with disabled persons, such interventions are rare. Moreover, such an approach only addresses accessibility of the house and not the wider societal context in which the person lives. Although an admirable start, such restrictive approaches fall short of achieving the vision of “building back better.”

Disasters often create barriers to inclusion that make persons with disabilities even more invisible in society. With appropriate preparation though, emergency preparedness and response can help make even the most marginalized group visible. Contingency plans and stockpiling of goods can readily include specific disability-related actions or items. For instance, persons with disabilities are often separated from their assistive devices, unable to access important

medicines, or require power to charge their assistive device(s). A disability-inclusive contingency plan would include power provision for persons with disabilities, and stockpiling initiatives would include assistive devices that could be distributed as relief items. Furthermore, the recovery and reconstruction phase should ensure the restoration of disability-specific services and, ideally, ensure improved access to such services. For example, improvements could include better physical accessibility of services, better transportation infrastructure to reach services, or developing community-based services that promote inclusion in all sectors, including rehabilitation, psychosocial and mental health, education, health, and livelihoods.

PART 3: RECOMMENDATIONS

GFDRR and the World Bank are well positioned to assist countries and the international disability community by incorporating disability into their DRM-related development portfolios, using their convening ability to bring together relevant stakeholders and experts, and providing technical and analytical assistance. The Environmental and Social Framework, as well as the proposed Disability Inclusion and Accountability Framework, offer guiding principles for the World Bank's engagement in disability inclusion and an approach to including disability in the institution's policies, operations, and analytical work.

This chapter addresses specific lines of effort that should be undertaken to improve the inclusion of persons with disabilities in the DRM investments of the World Bank and GFDRR. The recommendations are consistent with the prevailing international policy frameworks, particularly the Sendai Framework priorities, and are informed by current gaps in practice, as well as challenges experienced by persons with disabilities and countries seeking to implement disability-inclusive DRM (detailed in Chapters 1 and 2). In many cases, the recommendations reflect “force multipliers,” which have the potential to expand the positive impacts of existing lines of effort, ensuring that persons with disabilities can benefit from DRM interventions on an equal basis with others.⁶³ Where recommendations imply new lines of effort, positive systemic outcomes from those interventions have the potential to benefit not only persons with disabilities but also the communities in which they live. For each recommendation, and where relevant, an indication is provided regarding which of the Sendai Framework priorities would be affected by implementation of the recommendation. Some recommendations have the potential to meaningfully bolster effective implementation across multiple priorities.

The recommendations are in four sections:

- General recommendations that cut across DRR initiatives or projects supported by the GFDRR and the World Bank
- Recommendations regarding specific entry points in GFDRR areas of engagement
- Recommendations regarding specific entry points in World Bank processes
- Recommendations for how the internal capacity of the World Bank and GFDRR could be enhanced to facilitate more robust and effective engagement in disability-inclusive DRM.

3.1. GENERAL RECOMMENDATIONS

The general recommendations reflect an inclusive and all-of-society DRR approach. They should be implemented across all DRR initiatives or projects supported by the GFDRR and the World Bank.

- **Ensure that persons with disabilities and DPOs are included as contributing stakeholders.** As stated in the Sendai Framework, Part V: Role of Stakeholders, Paragraph 36 (iii), persons with disabilities and DPOs have relevant knowledge and expertise to support the development, implementation, monitoring, and evaluation of disability-inclusive DRR.
- **Identify potential strategic partnerships that can be used to address accessibility standards at the national level.** Work with DPOs and sector experts in construction, communication, and other areas, and seek the support and guidance of international organizations with expertise in accessibility standards. Promote international cooperation with, and technical support from, institutions such as the International Organization for Standardization, the International Telecommunication Union, the World Wide Web Consortium, the Global Alliance on Accessible Technologies & Environments, the Global Initiative for Inclusive ICTs, and those with expertise in accessible architecture, construction, and design standards.
- **Collaborate with partners to improve data.**⁶⁴ A partnership with the Washington Group on Disability Statistics, for example, would facilitate the use of existing data collection tools and tools yet to be developed to address disability data needs, particularly risk information.

⁶³ Such an approach would be consistent with the “Vision for Sustainable Development” of the World Bank's new ESF. <http://www.worldbank.org/en/programs/environmental-and-social-policies-for-projects/brief/the-environmental-and-social-framework-esf>

⁶⁴ https://www.cdc.gov/nchs/washington_group/index.htm

⁶⁵ <https://www.gfdr.org/sites/default/files/publication/gfdr-strategy-2018-2021.pdf>



Fery Naldi, a deaf facilitator from West Sumatera (in blue shirt) facilitating a session in Inclusive DRR Training for LDMO's Pool of Facilitators ASB Indonesia and the Philippines, Technical Assistance and Training Teams (TATTs) Program. Photo copyright: ASB Indonesia & the Philippines 2017.

3.2. ENTRY POINTS IN GFDRR AREAS OF ENGAGEMENT

The recommendations in this section relate to the provision of GFDRR knowledge, funding, and technical assistance to support DRM projects worldwide. The recommendations correspond to the thematic areas of engagement identified in the GFDRR Strategy 2018–2021. The recommendations also recognize the importance of GFDRR's Inclusive Communities Resilience (ICR) program as a vehicle to support a twin-track approach to disability inclusion. The ICR program can accelerate the mainstreaming of disability inclusion across GFDRR investments through targeted resource allocation and knowledge sharing, while also undertaking targeted and focused efforts to develop technical guidance and knowledge materials on how to operationalize disability inclusion.

3.2.1. PROMOTE OPEN ACCESS TO RISK INFORMATION

In assisting communities to map their hazard exposure, GFDRR mapping activities could promote disability inclusion in the following ways:

- **Disaggregate data by disability.** GFDRR's research, mapping, and other data collection activities are an opportunity to gather necessary information on persons with disabilities. Existing data collection tools, or tools yet to be developed, could be used to identify disability data needs, particularly risk information. Collaboration with groups such as the Washington Group on Disability Statistics⁶⁶ and incorporation of disability assessment questions can help to narrow the data gap. Personal data should be collected, stored, shared, and used according to data protection laws and with the informed consent of the individuals providing their data.

66 <http://www.washingtongroup-disability.com>

- **Empower and include persons with disabilities and DPOs in mapping activities.** Drawing on the unique knowledge and perspective of persons with disabilities will facilitate greater awareness of risks that may have unique or disproportionate impacts on persons with disabilities and their families. Mapping activity participants with disabilities may benefit from capacity building to facilitate their participation in such activities on an equal basis with other stakeholders. Consistent with the Sendai Framework’s all-of-society approach, including a disability perspective in risk assessment will support the development of safer and more resilient communities.
- **Ensure that all tools and methods for collecting, analyzing, and disseminating risk information are accessible to persons with disabilities.** Accessibility is essential if persons with disabilities are to be able to effectively participate in information mapping, or to use disaster risk information that is available.

Sendai priority impacted – 1

3.2.2. PROMOTE RESILIENT INFRASTRUCTURE

In providing technical assistance to governments to improve the design, operation, and maintenance of infrastructure, as well as contingency planning for new and rehabilitated infrastructure, GFDRR could help to advance disability inclusion through the following approaches:

- **Assist countries in the adoption and implementation of accessibility standards.** In addition to promoting infrastructure that is resilient to natural hazards, GFDRR should assist countries with adopting and effectively implementing accessibility standards, so that evacuation centers, temporary shelters and settlements, housing, transportation, schools, health care, drinking water, sanitation, telecommunications, and other facilities and services are also accessible to persons with disabilities. This should include not only physical accessibility but also information and communication accessibility and should address the accessibility needs of persons with a range of disability types. Work should be undertaken collaboratively with national organizations to ensure locally appropriate standards are developed and implemented. International organizations and NGOs with expertise on accessibility standards should be consulted to ensure that globally

accepted standards are incorporated into projects financed by GFDRR.

- **Engage DPOs and persons with disabilities in identifying critical infrastructure.** This is especially important where existing infrastructure is old and in need of retrofitting to ensure accessibility. It may also be necessary to identify which infrastructure is critical for the disability community.
- **Include disability in the “making school infrastructure safe” initiative.** As the GFDRR works to ensure that schools and classrooms are made safer and more accessible, consideration should be given to both inclusive and disability-focused schools. Although the CRPD has catalyzed an international shift toward inclusive education, segregated and sometimes residential schools for students with disabilities remain, and it is essential that these students have access to resilient school infrastructure as well.

Sendai priorities impacted – 1, 3, 4

3.2.3. SCALE UP THE RESILIENCE OF CITIES

Including persons with disabilities and disability concepts (such as accessibility) in the program on urban resilience is essential if urban development practices are to change in a way that enhances resilience and reduces risk for all, including persons with disabilities. SDG 11 specifically refers to both disability inclusion and the Sendai Framework; thus, scaling up the resilience of cities has the potential to contribute to achievement of the SDGs, as well as the Sendai Framework and the CRPD. In this respect, it will be important for GFDRR to:

- **Engage DPOs in the piloting, monitoring, and evaluation of resilient cities projects.** In principle, and in line with the Sendai Framework, data disaggregated by disability, and accessibility audits should be used in decision-making processes to determine what urban resilience investments and policy changes should be made.
- **Include accessibility in resilient city construction and policy reforms.** Urban resilience should encompass aspects of physical and information and communication accessibility, for the benefit of persons with a wide variety of disabilities.

Sendai priorities impacted – 1, 3, 4

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3.2.4. STRENGTHENING HYDROMETEOROLOGICAL SERVICES AND EARLY WARNING SYSTEMS

In offering technical expertise and capacity building to governments on forecasting and warning systems GFDRR should:

- **Encourage and promote the use of accessible early warning and weather forecasting systems.** For investments in hydrometeorological and early warning systems to be maximally effective, they should aim to ensure provision of essential information to as many people as possible. Working with DPOs and accessibility experts to build accessibility into such systems should ensure that they are effective for persons both with and without disabilities. This should enhance the number of lives and assets saved in the event of a natural hazard event. Where necessary, research should be undertaken to investigate new and innovative warning systems that could benefit all users.

Sendai priority impacted – 4

3.2.5. DEEPEN FINANCIAL PROTECTION

In its work with governments to develop comprehensive financial protection strategies, including direct and indirect insurance programs, the GFDRR could promote disability inclusion by taking the following actions:

- **Address the inclusion of persons with disabilities in financial protection schemes.** Through collaboration with governments and DPOs, GFDRR could facilitate the enhanced inclusion of persons with disabilities in financial protection schemes, including identification of relevant qualifying criteria; promoting opportunities for persons with disabilities to contribute to social protection and poverty alleviation programs; and ensuring that government contingency funds for the scaling up of social protection schemes in times of emergency can include or target persons with disabilities as necessary.
- **Address the implementation of financial protection schemes to ensure access and inclusion of persons with disabilities.** Beyond qualifying for such schemes, persons with disabilities often experience barriers in the form of inaccessible information about the schemes, inaccessible registration procedures,

or inaccessible distribution mechanisms. GFDRR is well positioned to work with governments to address such barriers, so that persons with disabilities can benefit from financial protection programs on an equal basis with others.

- **Engage DPOs and employers in identifying activities in which persons with disabilities could participate as part of cash-for-work programs.** Although some programs will exempt qualifying beneficiaries from the work requirement, many persons with disabilities would nevertheless like to be able to contribute by working. By working with DPOs and potential employers, income-generating activities may be better identified, along with possible reasonable accommodations that would facilitate the participation of persons with disabilities.
- **Facilitate research on the costs of exclusion.** This would include identifying the return on investment for social protection systems, risk financing, and contingency funds, to enhance understanding of the importance of including persons with disabilities in such mechanisms. Research on the benefits of inclusion of persons with disabilities will support the identification of investments benefitting not only persons with disabilities but also their families and communities.

Sendai priorities impacted – 3, 4

3.2.6. DEEPEN ENGAGEMENTS IN RESILIENCE TO CLIMATE CHANGE

In supporting integration of resilience to climate change in its program, GFDRR's activities in this area would be strengthened through the following actions:

- **Ensure that persons with disabilities and DPOs are included as contributing stakeholders.** Efforts should be undertaken to ensure that the disability community is aware of such activities such as climate change assessments and consulted to facilitate their inputs.
- **Ensure that small island initiatives are disability-inclusive.** The greater exposure of small island nations to hydrometeorological events and sea level rise means that initiatives in such regions are necessarily an important component of GFDRR's engagement on this theme. The specific risk(s) of climate change to persons with disabilities, as well as the potential

impacts of responsive measures to persons with disabilities, should be taken into account to ensure that such measures benefit persons with disabilities on an equal basis with others.

Sendai priorities impacted – 1, 3, 4

3.2.7. BUILD RESILIENCE AT THE COMMUNITY LEVEL

Working through its Inclusive Community Resilience initiative, GFDRR can:

- **Ensure that lessons learned documentation includes disability-inclusive scalable DRM models.** Existing promising practices should be assessed for disability-inclusive DRM elements, identifying key components that could be incorporated, replicated, and scaled up in community resilience programs. Where disability-inclusive DRM elements do not exist, assessments should address what disability-inclusive components could have been undertaken, so that opportunities for disability inclusion in similar projects are not missed in the future.
- **Engage DPOs and DRM actors.** Facilitating cross-sector learning, training, and capacity building will assist persons with disabilities to better identify risks, barriers, and solutions, and DRR actors in working collaboratively with community members with disabilities to achieve disability-inclusive DRM solutions.

Sendai priority impacted – 3

3.2.8. ENABLE RESILIENT RECOVERY

GFDRR will be drawing on its extensive experience in post-disaster recovery to help train government officials on post-disaster needs assessment and recovery planning, as well as strengthening its own standby response capacity to help coordinate and support post-disaster assistance. In these activities, it will be important for GFDRR to:

- **Ensure that damage and impact assessments include disability perspectives.** Actively engage persons with disabilities and DPOs to ensure that disability-related issues (such as access to assistive devices, rehabilitation services, accessible shelter and housing, and accessible life-sustaining supplies such as food and water) are addressed as part of damage and impact assessments. General damage and impact assessments on housing, livelihoods,

and other common topics should use disability-disaggregated data and information that will enable the development of inclusive response strategies.

- **Ensure that recovery plans are inclusive of persons with disabilities.** The recovery process offers an opportunity to engage the input of persons with disabilities through consultation and dissemination of accessible information materials related to recovery planning. It also offers an opportunity to promote the long-term recovery and resilience of persons with disabilities, including through giving full effect to what it means to “build back better.” Accessibility and universal design could readily be included alongside more traditional issues of seismic, flood, fire, and other construction safety considerations. In addition, “building back better” encompasses not only the restoration of physical infrastructure but also incorporation of DRR measures into societal systems and the revitalization of livelihoods, economies, and the environment, with the intention of increasing the resilience of nations and communities. By addressing the full scope of “build back better,” measures need not be exclusive to physical infrastructure, but could also include other community-based supports, such as access to rehabilitation services, mental health supports, supported decision-making, independent living, and myriad other supports that promote the ability of persons with disabilities to assume or resume their place as fully included and actively contributing to building increased societal resilience.

Sendai priorities impacted – 3, 4

3.3. ENTRY POINTS IN WORLD BANK PROCESSES

The following recommendations relate to components of the World Bank’s development work with its country clients. While implementation of these recommendations would enhance the World Bank’s work on disability-inclusive DRM, bolstering overall disability inclusion across a variety of thematic portfolios should assist in building the capacity and resilience of the disability community to withstand the impacts of natural hazards by raising them out of poverty.

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3.3.1. COUNTRY STRATEGY

The World Bank's Country Partnership Framework (CPF), which is informed by analysis and stakeholder consultations reflected in the Systematic Country Diagnostic (SCD), guides the World Bank's support to a country. Analysis of current CPFs found none that refer to disability in the context of DRR, and many refer to persons with disabilities sparingly or not at all. This correlates with the relative lack of profile that persons with disabilities have in the SCDs. Of SCDs completed in FY17, most have limited, if any, references to persons with disabilities, with many focusing only on disability within the social protection framework of a country. Other references tend to be medicalized, referencing people "suffering" from disabilities, and in some cases focusing on the societal "burden" of disability. Only the SCDs for Kosovo and Vietnam included more developed information about the situation and context of persons with disabilities, including the type of marginalization and discrimination experienced. To ensure that the CPFs are disability-inclusive, the development of SCDs should:

- **Engage the disability community, including DPOs, in meaningful consultations that comply with accessibility guidelines.** Where public consultations will be held (either in-person or online) specific outreach should be made to persons with disabilities and their representative organizations, to ensure that they are aware of the opportunity to participate, as they may not have familiarity or prior experience with such activities.
- **Build disability expertise into staff review processes.** Including staff with disability and social inclusion expertise (including staff with disabilities) in review processes would afford additional opportunities to enhance disability inclusion in the SCDs.
- **Counter data gaps.** Disability-disaggregated data and statistics can be difficult to obtain, but this should not mean that disability cannot be meaningfully included in the SCDs. In addition to encouraging governments to collect such data, additional analytical work can be jointly developed through strategic partnerships with government entities, DPOs, academics, and others. Furthermore, some information need not

be dependent upon the availability of statistics. For example, the Vietnam SCD addresses current government legal and policy initiatives to address persons with disabilities, as well as the conditions faced by disability advocacy groups that affect the efficacy of their advocacy. Such information can help to provide a more nuanced framing of the situation and context of persons with disabilities in a country.

3.3.2. FINANCING

A variety of financing instruments are available to contribute to World Bank activities that promote disability-inclusive DRM, including:

Investment project financing (IPF). Disability-focused projects, as well as incorporation of disability into larger projects through subproject interventions, can have positive impacts on the ability of persons with disabilities to be resilient to, and recover from, hazard events. As noted in Part 1, the existing Safeguards and the new Environmental and Social Framework should facilitate the inclusion of disability as part of the social assessment, so that persons with disabilities are meaningfully consulted and are protected from negative impacts and included in mitigation plans and actions. Where necessary, policies such as OP/BP 8.00 that may be used following a natural hazard event, should be engaged in a way that creates or restructures IPF to be inclusive of the needs of affected persons with disabilities. Examples of IPF projects that provide avenues for disability-inclusive DRM include:

- **Community empowerment and institutional development.** Projects that support participatory decision-making and community empowerment can support the active engagement and inclusion of persons with disabilities at the national, local, and village levels.

Sendai priority impacted – 2

- **Financing new construction, rehabilitation, and reconstruction.** Projects financing construction in anticipation of, or in the aftermath of, a natural hazard event, can ensure that accessibility standards are addressed. For example, construction of housing, medical facilities, municipal buildings, transportation infrastructure, schools, and other assets relied upon before and after natural hazard events offer opportunities

to ensure the building of structures that are not only environmentally sustainable and resilient to natural hazards, but that are accessible to persons with disabilities and safer for all. At present, some climate-resilient approaches (such as raising housing above the level of potential flood waters) do not fully promote access for persons with disabilities, although the two objectives are not mutually exclusive.

Sendai priorities impacted – 3, 4

- Financing development of accessible communications systems. Telecommunications infrastructure that is not only resilient to natural hazards but also accessible to persons with disabilities can be used as part of hazard warning systems that can reach more people. Such systems can also be used to communicate with people as part of recovery efforts, or in assessing risks and disseminating information, increasing the efficiency and efficacy of those efforts, including for persons with disabilities.

Sendai priorities impacted – 3, 4

- Disability-inclusive and resilient social safety net mechanisms. Projects that promote the establishment of social safety net mechanisms that are accessible to and inclusive of persons with disabilities on an equal basis with others can improve the resiliency of persons with disabilities and their communities and provide a ready mechanism for deployment of financial assistance after a natural hazard event. Such systems should consider qualification, registration, and disbursement, so that all phases are accessible to persons with a variety of disabilities.

Sendai priorities impacted – 3, 4

Development policy financing (DPF). This can provide a mechanism through which to fund the strengthening of a country client’s DRM policy through strengthening the institutional and legal framework for DRM and integrating DRR into development planning and decision-making. This mechanism will contribute to the achievement of Sendai Framework Priority 5, which calls for increasing the number of national and local DRR strategies. In the formulation and implementation of such projects, task teams can promote and facilitate the inclusion of persons with disabilities and DPOs in related stakeholder consultations. Such consultations have the potential to ensure

that the design of reforms, implementation processes, and monitoring and evaluation mechanisms are appropriately disability-inclusive.

Sendai priorities impacted – 2, 3

Program-for-Results financing (PforR). As the name suggests, PforR financing ties disbursement of funds to achievement of pre-agreed results. A relatively new financial instrument (approved in 2012), it has not yet been widely used for DRM. However, it offers the opportunity to engage in a wide variety of DRM-related activities, such as scaling up capacity to engage in DRR activities, improving disaster risk financing and insurance for targeted populations, and others. To ensure that such projects are disability-inclusive, the projects could include persons with disabilities as targeted beneficiaries in the program results and ensure that the needs, challenges, and impacts on persons with disabilities are considered in the social and environmental assessments, as well as technical assessments.

Sendai priorities impacted – 1, 2, 3, 4

Advisory services and analytics. These activities can include technical assistance, reimbursable advisory services, and economic and sector work. Broadly illustrative examples of disability-inclusive DRM-related activities that should be undertaken by the World Bank include:

- Using the convening role of the World Bank to bring together persons with disabilities and DPOs with other DRM experts at conferences, seminars, and in accessible online discussions for knowledge sharing and networking.
- Building the capacity of disability-inclusive DRM stakeholders, such as persons with disabilities and DPOs, government officials, DRM practitioners, and development practitioners.
- Promoting the contracting of persons with disabilities or representative organizations
- Advising countries on developing or adapting accessibility and universal design standards for hazard warning systems, accessible resilient housing, accessible transportation, and other facilities and services.
- Analytical work, such as desk reviews of country DRM policies and practices to assess the degree of disability inclusion.
- Primary data collection, to determine whether

67 Under the existing Safeguards, assurance that a project “does no harm” to a particular group or community may be sufficient, but under the ESF and its “Vision for Sustainable Development,” it will be important to show (at least for projects funded through IPF) that the “Vision for Sustainable Development” has been achieved, namely ensuring inclusion so that all people are empowered to participate in, and benefit from, the development process.

68 Consistent with the existing gender monitoring framework, operations would be considered “disability-informed” if a disability analysis or disability impact was either taken into consideration during project design or mentioned as an expected outcome.

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persons with disabilities are being served by social safety net programs, and by those unable to participate due to qualification, registration, or dissemination-related barriers.

- Connecting clients to information resources and international experts in the field of disability-inclusive DRM.

Sendai priorities impacted – 1, 2, 3, 4

3.4. ENHANCING INTERNAL CAPACITY

The following recommendations relate to enhancing the internal capacity of the World Bank and GFDRR to address disability-inclusive DRM across their portfolios, so that staff are better equipped to conceptualize disability-inclusive projects, engage with stakeholders (including the disability community), measure progress, and develop knowledge and share promising practices.

- **Enhance World Bank staff expertise.** Although the development of a project is necessarily an iterative process involving multiple consultations with country clients and other stakeholders (which should include persons with disabilities and DPOs), it is important that GFDRR and other Bank staff have the knowledge and awareness needed to address disability-inclusive DRM concepts right from the start. In addition to consulting the World Bank's Global Disability Advisor as appropriate, and ensuring that there is a corps of staff available for internal "just in time" consultation (including staff and experts with disabilities), guidance notes and other training, information, and professional development tools should be available to guide staff in ensuring that DRM-related projects incorporate disability from the earliest phases onwards.

Sendai priorities impacted – 1, 2, 3, 4

- **Monitor and report on disability aspects across the DRM portfolio.** At present the only way to identify DRM projects that are disability-inclusive is to analyze each project or activity. Even where projects have a tangible benefit for the disability community, failure to reflect that in project documents may give the impression that persons with disabilities have not benefitted from project-related activities. Consequently, there is no way to benchmark the degree to which projects are disability-inclusive, or measure progress over time in promoting disability-inclusive DRM, or

fully develop knowledge on this topic and promote information sharing of promising practices. In addition, for staff and stakeholders interested in learning from prior projects to inform disability inclusion in current and future projects, there is no ready mechanism for them to identify and track relevant projects. GFDRR's new system for screening gender as a cross-cutting theme in GFDRR-funded projects is a potential model for how disability could be similarly tracked and goes beyond simply "tagging" projects with a marker. Designating projects as "disability-informed" or including "disability actions" would greatly assist in identifying the degree to which disability inclusion is manifesting across the GFDRR portfolio. It is notable that international instruments, like the Dhaka Declaration, include concrete, action-oriented indicators against which to measure progress. The adoption of indicators to monitor and report on disability outcomes, to be embedded in GFDRR's program logic and its monitoring and evaluation framework, would similarly assist in assessing progress and identifying where disability inclusion could be improved. Indicators could include, for example, targeted numbers of projects that are "disability-informed" or include "disability actions."

Sendai priorities impacted – 1, 2, 3, 4

- Communicate engagement on disability-inclusive DRM. Enhancing public-facing information of the World Bank and GFDRR (including websites, policy statements, and publications) to more comprehensively discuss disability inclusion would greatly assist in educating country clients, other stakeholders, and the public at large about the World Bank's commitment to disability-inclusive DRM and how disability relates across GFDRR's portfolio—including how disability intersects and interrelates with other historically marginalized groups and with the overall social inclusion agenda of GFDRR. This would not only reflect the leadership of the World Bank and GFDRR on this issue, it would also help to catalyze consultations and create synergies for information exchange and engagement with persons with disabilities and other stakeholders.

Sendai priorities impacted – 1, 2, 3, 4

69 Consistent with the existing gender monitoring framework, operations would be considered to have "disability actions" when analyzed as being "disability-informed" while also having specific components/activities that seek to minimize mentioned disability gaps relevant to the project's development objective(s).

70 Dhaka Declaration on Disability and Disaster Risk Management
<http://www.preventionweb.net/english/professional/policies/v.php?id=47093>

ANNEX A: GLOSSARY

BARRIER. An aspect of society that intentionally or unintentionally excludes persons with disabilities from full participation and inclusion in society. Barriers can be physical, informational, legal, institutional, environmental, or attitudinal, among others.

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

BUILT ENVIRONMENT. That which is commissioned, designed, constructed, and managed for use by people and which includes external and internal environments and any component, facility, or product that is a fixed part of those environments.

CAPACITY. The combination of all the strengths, attributes, and resources available within an organization, community, or society to manage and reduce disaster risks and strengthen resilience. Capacity may include infrastructure, institutions, human knowledge and skills, and collective attributes such as social relationships, leadership, and management.

DISABILITY. An evolving concept, disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others. (This definition is consistent with the “social/cultural model” of disability, as distinct from the “medical/charity model” of disability.)

DISABLED PEOPLE’S ORGANIZATION. A nongovernmental organization managed and led by people with disabilities.

DISCRIMINATION ON THE BASIS OF DISABILITY. Any distinction, exclusion, or restriction on the basis of disability which has the purpose or effect of impairing or nullifying the recognition, enjoyment, or exercise—on an equal basis with others—of all human rights and fundamental freedoms in the political, economic, social, cultural, civil, or any other field. It includes all forms of discrimination, including denial of reasonable accommodation.

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

DISASTER MANAGEMENT. The organization, planning, and application of measures preparing for, responding to, and recovering from disasters.

DISASTER RISK. The potential loss of life, injury, or destroyed or damaged assets that could occur to a system, society, or community in a specific period, determined probabilistically as a function of hazard, exposure, vulnerability, and capacity.

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

DISASTER RISK GOVERNANCE. The system of institutions, mechanisms, policy and legal frameworks, and other arrangements to guide, coordinate, and oversee disaster risk reduction and related areas of policy.

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

DISASTER RISK MANAGEMENT. The application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk, and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses.

DISASTER RISK REDUCTION. Actions 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.

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

EVACUATION. Moving people and assets temporarily to safer places before, during, or after the occurrence of a hazardous event to protect them.

EXPOSURE. The situation of people, infrastructure, housing, production capacities, and other tangible assets located in hazard-prone areas.

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HAZARD. A process, phenomenon, or human activity that may cause loss of life, injury, or other health impacts; property damage; social and economic disruption; or environmental degradation. Hazards include (as mentioned in the Sendai Framework for Disaster Risk Reduction 2015–2030, and listed in alphabetical order) biological, environmental, geological, hydrometeorological, and technological processes and phenomena.

HAZARD EVENT. The manifestation of a hazard in a particular place during a particular period.

IMPAIRMENT. A concept that encompasses the full and diverse range of functional impairments, including physical, sensory, neurological, psychiatric, and intellectual—all of which may be permanent, intermittent, temporary, or perceived as impairment by society, but not necessarily by individuals.

INVESTMENT PROJECT FINANCING. The provision of loans, credits, grants, or guarantees by the World Bank from its resources or from trust funds financed by other donors and administered by the World Bank, or a combination of these.

MEDICAL/CHARITY MODEL OF DISABILITY. Now considered outdated and disempowering, this conceptual framework for disability emphasizes the impairment and functioning of the person as the central issue and focuses on treatment, cure, and charitable assistance as methodologies for improving the lives persons with disabilities.

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

MULTI-HAZARD. Means (1) the selection of multiple major hazards that a country faces, and (2) the specific contexts where hazardous events may occur simultaneously, cascading, or cumulatively over time, and taking into account the potential interrelated effects.

NATIONAL PLATFORM FOR DISASTER RISK REDUCTION. A generic term for national mechanisms for coordination and policy guidance on disaster risk reduction that are multisectoral and interdisciplinary in nature, with public, private, and civil society participation involving all concerned entities within a country.

PHYSICAL ACCESSIBILITY. A characteristic of the built environment, the quality of which is dependent on usability. That is, the means of access to, in, and within the environment, which can be determined by measurement or other agreed means.

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

PREPAREDNESS PLAN. Arrangements established in advance to enable timely, effective, and appropriate responses to specific potential hazardous events or emerging disaster situations that might threaten society or the environment.

PREVENTION. Activities and measures to avoid existing and new disaster risks.

REASONABLE ACCOMMODATION. Necessary and appropriate modifications and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms.

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

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

REHABILITATION. (In the disaster recovery context.) The restoration of basic services and facilities for the functioning of a community or a society affected by a disaster.

REHABILITATION. (In the disability context.) Refers to the regaining of skills, abilities, or knowledge that may have been lost or compromised as a result of acquiring a disability or due to a change in one’s disability or circumstances. Rehabilitation can enable persons with disabilities to attain and maintain maximum independence, full physical, mental, social, and vocational ability, and full inclusion and participation in all aspects of life.

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

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

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

RISK. The combination of the probability of an event and its negative consequences.

SOCIAL/CULTURAL MODEL OF DISABILITY. A rights-based approach to disability that understands disability as a social construct, not an inherent quality. In other words, “disability” is not something that people possess, nor is it inherent in a person or group; rather, it is the inability of society to recognize differences and remove barriers that inhibit the full inclusion and participation of persons with disabilities. The social model emphasizes the removal of societal barriers that exclude persons with disabilities, including environmental, institutional, and attitudinal barriers.

STRUCTURAL AND NONSTRUCTURAL MEASURES.

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

UNDERLYING DISASTER RISK DRIVERS. Processes or conditions, often development-related, that influence the level of disaster risk by increasing levels of exposure and vulnerability or reducing capacity.

UNIVERSAL DESIGN. The design of products, environments, programs, and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

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

ANNEX B: METHODOLOGY

Two expert consultations on August 30, 2017, initiated work on the report. The first consultation included individuals representing DRM practitioners, DPOs, civil society, academia, and first responders. Participants identified issues relevant to facilitating effective inclusion of persons with disabilities in DRM and to bridging the gaps identified between existing policies and their effective implementation.

The second consultation focused on experts from with the World Bank and GFDRR. The consultations included constructive dialogue on the implementation of disability-inclusive DRM, as well as to assess and define the role that GFDRR and the World Bank can play in filling the gaps in disability-inclusive DRM in practice. The team is grateful to the participants of both consultations, listed below.

External organizations:

1. Carlos Kaiser, Executive Director, ONG Inclusiva
2. Patrick Giblin, Program Associate, Membership & Standards & Chair, Disability Working Group, Interaction
3. Langdon Greenhalgh, Managing Director, Global Emergency Group
4. Marsha Mazz, Director, Office of Technical and Information Services, U.S. Access Board
5. Emi Kiyota, Founder, Ibasho
6. Derrick L. Cogburn, Executive Director, Institute on Disability and Public Policy (IDPP), American University
7. Jennifer Collins-Foley, Senior Advisor, Inclusive Development, Civic Engagement and Governance Unit, World Learning
8. Fred Schroeder, President, World Blind Union (Representing the International Disability Alliance)

9. Irina Zodrow, Programme Officer (Partnerships), UN Office for Disaster Risk Reduction (UNISDR)
10. Marcus Oxley, Executive Director, Global Network of Civil Society Organisations for Disaster Reduction
11. Marnie Peters, Disability and Development Consultant
12. John Twigg, Professor, Department of Civil, Environmental and Geomatic Engineering, UCL
13. Maria Kett, Assistant Director, Leonard Cheshire Disability and Inclusive Development Centre
14. Federico Batista Poitier, World Enabled
15. Mohamed Hilmi, Senior Coordinator and Technical Specialist, Shelter & Settlements and DRR, Interaction
16. Betty Dion, Founder and Past President, Global Alliance on Accessible Technologies and Environments
17. Vashkar Bhattacharjee, Vice President, Global Alliance on Accessible Technologies and Environments

Participants in the consultation with World Bank and GFDRR staff included Margaret Arnold (Senior Social Development Specialist), Fred Krimgold (Consultant), Tafadzwa Dube (Disaster Risk Management Specialist), Cristina Otano (Senior Operations Officer), Cindy Robles (Disaster Risk Management Specialist), Katie Giles (Consultant), Silke Heuser (Consultant), and Andres Gonzalez (Consultant).

The fruitful discussion and identification of the issues during the consultations provided clear guidance and outlines for the development of the report. This was followed by a desk review of published literature on interventions, strategies, approaches, case studies, policies, training programs, and relevant organizations. The review included about 40 documents and sources including thematic reports, research report, briefing papers, conferences outcome documents, tools and guidelines, GFDRR/World Bank project

documents, policy and frameworks, GFDRR action plan and other documents, and websites.

Key informant interviews were conducted to identify (i) emerging and innovative approaches to disability-inclusive DRM and (ii) unpublished monitoring and impact evaluation reports. Key informant interviews or email exchanges were conducted with the following individuals:

The World Bank: Niels Holm-Nielsen (Lead Disaster Risk Management Specialist), Elif Ayhan (Senior Disaster Risk Management Specialist), Lauri Sivonen (Senior Social Development Specialist), Alanna Leigh Simpson (Senior Disaster Risk Management Specialist), Vittoria Franchini (Consultant).

External Organizations: Karen Heinicke-Motsch, Emma Calgaro and Manuel Rothe (CBM), Melina Magaretha (ASB Indonesia), Rebecca Laberene (100 Resilient Cities), Fred Smith (Sightsavers), Mark Starford (Board Resource Center), Marcie Roth (Partnership for Inclusive Disaster Strategies), Nazmul Bari (CDD), Irina Zdrov, and Stefanie Dannenmann (UNISDR).

