Law and Disaster Preparedness and Response

Multi-Country Synthesis Report

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About the IFRC Disaster Law Programme

The International Federation of Red Cross and Red Crescent Societies (IFRC) Disaster Law Programme seeks to reduce human vulnerability by promoting effective legal frameworks for disaster risk reduction and legal preparedness for disasters. It works in three main areas: collaboration with National Red Cross and Red Crescent Societies and other partners to offer technical assistance to governments on disaster law issues; building the capacity of National Societies and other stakeholders on disaster law; and dissemination, advocacy and research. E-mail: disaster.law@ifrc.org.

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Cover: Countries face many challenges in managing the human, economic, environmental and material impacts of disasters. The purpose of this Multi-Country Synthesis Report is to inform the proposed Checklist on Law and Disaster Preparedness and Response (**DPR Checklist**), by identifying the key issues and providing detailed recommendations about how to develop law and policy to address those issues.

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Contents

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Acronyms

AADMER	ASEAN Agreement for Disaster Management and Emergency Response
ABI	Association of British Insurers
ADB	Asian Development Bank
AGLC	Australian Guide to Legal Citation
ALNAP	Active Learning Network for Accountability and Performance
ARC	African Risk Capacity
ASEAN	Association of Southeast Asian Nations
CCCM	Camp Coordination and Camp Management
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CCRIF SPC	Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company
CDEMA	Caribbean Disaster and Emergency Management Agency
CFS	Child-friendly spaces
CfW	Cash for work
CPP	Cyclone Preparedness Program of Bangladesh
CPWG	Child Protection Working Group
CRED	Centre for Research on the Epidemiology of Disasters
CTP	Cash transfer programming
DM	Disaster management
DPR	Disaster preparedness and response
DRFIP	Disaster Risk Financing and Insurance Program
DRM	Disaster risk management
DRR	Disaster risk reduction
DSWD	Department of Social Welfare and Development of the Philippines
EMMV	Emergency Management Manual of Victoria, Australia
EU	European Union
FbA	Forecast-based action
FbF	Forecast-based finance
FEMA	Federal Emergency Management Agency of the US
FONDEN	Fund for Natural Disasters of Mexico
FOPREDEN	Fund for Disaster Risk Reduction of Mexico
FSD	Swiss Foundation for Mine Action
GDP	Gross domestic product
GFDRR	Global Fund for Disaster Risk Reduction
GIS	Geographic information systems
HHI	Harvard Humanitarian Initiative
HISOPPD	Humanitarian Inclusion Standards for Older People and People with Disabilities
HIV	Human Immunodeficiency Virus
HLP	Housing, land and property

HPG	Humanitarian Practice Group
IASC	Inter-Agency Standing Committee
ICCPR	International Covenant on Civil and Political Rights
ICRC	International Committee of the Red Cross
IDRL	International Disaster Response Law
IFRC	International Federation of Red Cross and Red Crescent Societies
IGEM	Inspector General for Emergency Management of Australia
IHRL	International Human Rights Law
INEE	Inter-Agency Network for Education in Emergencies
IOM	International Organization for Migration
IPU	Inter-Parliamentary Union
IRL	International Refugee Law
ISO	International Standards Organization
IT	Information Technology
JRC	Jordanian Red Crescent
KRC	Kazakhstan Red Cross
M&E	Monitoring and evaluation
MGB	Mines and Geo-sciences Bureau of the Philippines
MHEWS	Multi-Hazard Early Warning Systems
MHM	Menstrual hygiene management
MHP	Menstrual hygiene products
MHPSS	Mental health and psychosocial support
MPG	Multi-purpose grants
MREG	Marginalised racial and ethnic groups
MSCP	Minimum Standards of Child Protection
NDRMF	National Disaster Risk Management Fund of Pakistan
NDRRMA	National Disaster Risk Reduction and Management
NRA	National Reconstruction Authority of Nepal
OAS	Organization of American States
ODI	Overseas Development Institute
OHCHR	Office of the United Nations High Commissioner for Human Rights
OIEWG	Open-ended Intergovernmental Expert Working Group on Indicators and Terminology Related to Disaster Risk Reduction
OPSIC	Operationalising Psychosocial Support in Crisis
PACRAFI	Pacific Catastrophe Risk Assessment and Financing Initiative
PAGASA	Philippine Atmospheric, Geophysical, and Astronomical Services Administration
PDNA	Post-Disaster Needs Assessment
PHIVOLCS	Philippine Institute of Volcanology and Seismology

PICs	Pacific Island Countries
PSA	Philippine Statistics Authority
RECU	Reach Enter Circulate and Use
RER	Racial, ethnic and religious
RFL	Restoring Family Links
SEA	Sexual exploitation and abuse
SEADRIF	Southeast Asia Disaster Risk Insurance Facility
SGBV	Sexual and gender-based violence
SGM	Sexual and gender minorities
SHR	Sexual and Reproductive Health
SoD	State of Disaster
SoE	State of Emergency
SOPs	Standard Operating Procedures
SRHR	Sexual and Reproductive Health Rights
STI	Sexually transmitted infection
TAHC	Texas Animal Health Commission
UAS	Unmanned Aircraft Systems
UASC	Unaccompanied and separated children
UAV	Unmanned Aerial Vehicle
UK	United Kingdom
UN	United Nations
UNDG	United Nations Development Group
UNDP	United Nations Development Program
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNDRR	United Nations Office for Disaster Risk Reduction (formerly UNISDR)
UNFCCC	United Nations Framework Convention on Climate Change
UNGRD	Unidad Nacional de Gestion de Riesgos de Desastres (Colombia)
UNHCR	United National High Commission for Refugees
US	United States
VAT	Value Added Tax
WASH	Water, Sanitation and Hygiene
WB	World Bank
WFP	World Food Program
WGSS	Washington Short Set of Questions on Disability
WMO	World Meteorological Organization
XCF	Extreme Climate Facility

Terminology

Children refers to people under 18 years of age. This category includes infants (children up to 1 year old) and adolescents (persons aged 10 to 18 years old).[1]

Child protection refers to 'the prevention of and response to abuse, neglect, exploitation and violence against children'.[2] The term 'child protection' does not, therefore, refer to the protection of all children's rights, but refers instead to a subset of these rights.[3]

Disaster refers to 'a serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts'.[4]

Disaster preparedness refers to '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'.[5]

Disaster preparedness and response activities (DPR activities)[6] is an umbrella term for any facilities, services, processes, distributions, resources, training, education or information that are conducted or provided for the purpose of preparing for and/or responding to disaster. The term 'regular DPR activities' refers to activities that are designed for the general public, rather than specifically for one or more of the vulnerable groups discussed in Chapter 9.

Disaster preparedness and response actors (DPR actors) is an umbrella term for all actors that are involved in providing DPR activities including governmental and non-governmental actors, and domestic, foreign and international actors. DPR actors include (but are not limited to) government disaster management institutions, sectoral agencies (e.g. health, housing), the military and the police, United Nations entities, civil society organizations (**CSOs**), National Red Cross or Red Crescent Societies (**National Societies**), private sector entities, academic or research institutions, and foreign government entities.

Disaster response refers to 'actions taken directly before, during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected'.[7]

Emergency shelter assistance is an umbrella term for any activities designed to assist disaster-affected persons to access safe and dignified shelter in the immediate aftermath of a disaster. It includes the provision of cash grants, tools, materials and technical support for repairs or reconstruction. It also includes access to evacuation centres, rental assistance and host family programs.

Migrant means 'persons who leave or flee their habitual residence to go to new places — usually abroad — to seek opportunities or safer and better prospects. Migration can be voluntary or involuntary, but most of the time a combination of choices and constraints are involved'.[8] This definition includes (but is not limited to) labour migrants, stateless migrants, and migrants deemed irregular by public authorities. It also includes refugees and asylum seekers, notwithstanding the fact that they constitute a special category under international law'.[9]

Protection refers to 'all activities aimed at obtaining full respect for the rights of the individual in accordance with the letter and the spirit of the relevant bodies of law (i.e. International Human Rights Law (**IHRL**), International Humanitarian Law, International Refugee law (**IRL**)'.[10]

The term **sexual and gender-based violence (SGBV)** is a composite term used within the Red Cross Red Crescent Movement to refer to two distinct but overlapping phenomena: (i) sexual violence; and (ii) gender-based violence.[11] This Report adopts the Red Cross Red Crescent Movement's working definitions of these phenomena, as outlined below.[12]

- **Sexual violence** refers to '[a]cts of a sexual nature committed against any person by force, threat of force or coercion. Coercion can be caused by circumstances such as fear of violence, duress, detention, psychological oppression or abuse of power. The force, threat of force or coercion can also be directed against another person. Sexual violence also comprises acts of a sexual nature committed by taking advantage of a coercive environment or a person's incapacity to give genuine consent. It furthermore includes acts of a sexual nature a person is caused to engage in by force, threat of force or coercion, against that person or another person, or by taking advantage of a coercive environment or the person's incapacity to give genuine consent. Sexual violence encompasses acts such as rape, sexual slavery, enforced prostitution, forced pregnancy or enforced sterilization'.[13]

- **Gender-based violence** refers to 'any harmful act that results in, or is likely to result in, physical, sexual or psychological harm or suffering to a woman, man, girl or boy on the basis of their gender. Gender-based violence is a result of gender inequality and abuse of power. Gender-based violence includes but is not limited to sexual violence, domestic violence, trafficking, forced or early marriage, forced prostitution and sexual exploitation and abuse'.[14]

Sexual and gender minorities (SGM) is an umbrella term for people with diverse sexual orientation, gender identity/expression, and sexual characteristics.[15] SGM is an alternative to the 'LGBTIQ+' acronym, which refers to Lesbian, Gay, Bisexual, Transgender, Intersex, Queer (or Questioning) and all other persons whose identities or practices are not included within those defined terms.[16] This Report uses the term 'SGM' because it is more inclusive than the 'LGBTIQ+' acronym, which privileges sexual and gender identities from the Global North/West, thereby obscuring local sexual and gender identities.[17]

Unaccompanied and separated children (UASC) is a composite term that encompasses two groups of children: (i) unaccompanied children; and (ii) separated children.

- **Unaccompanied children** are children who have been separated from both parents and other relatives and are not being cared for by an adult who, by law or custom, is responsible for doing so.[18]

- **Separated children** are children separated from both parents, or from their previous legal or customary primary caregiver, but not necessarily from other relatives. Separated children may, therefore, be accompanied by other adult family members.

Introduction

A. Context

Disasters cause massive human suffering and economic loss. In 2017 alone, 318 natural disasters occurred in 122 countries resulting in 9,503 deaths, affecting 96 million people and causing US$314 billion in economic damage.[19] The International Federation of Red Cross and Red Crescent Societies (**IFRC**), through its Disaster Law Programme, aims to reduce human vulnerability to disasters by promoting effective legal and policy frameworks for disaster management. The Disaster Law Programme works in three main areas: providing technical assistance to governments to strengthen their laws; building the capacity of National Societies and other stakeholders on disaster law; and conducting research and advocacy, including developing and disseminating guidance on best practice.

B. Existing guidance on best practice

In 2007, after years of intensive research and consultations, the IFRC released the *Guidelines for the Domestic Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance* (the **IDRL Guidelines**).[20] The IDRL Guidelines are a set of recommendations to governments on how to prepare their disaster laws and plans for the common regulatory problems in international disaster relief operations. The IDRL Guidelines were unanimously adopted by the states party to the Geneva Conventions and the International Red Cross Red Crescent Movement on 30 November 2007 at the 30th International Conference of the Red Cross and Red Crescent.

In 2008, the UN General Assembly adopted three resolutions encouraging states to make use of the IDRL Guidelines;[21] In the subsequent decade, the IDRL Guidelines have been frequently referred to in UN General Assembly resolutions and have been used extensively in domestic disaster law and policy making processes.[22] The Guidelines have subsequently been supplemented with a Model Act, a Model Emergency Decree and a Checklist, all designed to ease the task of implementing the Guidelines at the domestic level.[23] Since 2007, nearly 40 countries have adopted new laws or procedures drawing on the IDRL Guidelines, and National Societies provided their advice and support to implement the recommendations of the IDRL Guidelines in over 100 countries.[24]

In 2012, the IFRC and the United Nations Development Programme (**UNDP**) embarked on a joint initiative to study and develop guidance on law relating to disaster risk reduction (**DRR**). In October 2015, they released the final version of *The Checklist on Law and Disaster Risk Reduction* (the **DRR Checklist**).[25] IFRC and UNDP also released a more detailed *Handbook on Law and Disaster Risk Reduction* to provide detailed guidance on how to answer the Checklist questions.[26] The DRR Checklist was informed by a multi-country report on the DRR-related legislation of 31 countries, and extensive consultations on a pilot version of the DRR Checklist.[27]

The Disaster Law Programme has received many requests from Red Cross Red Crescent National Societies to aid them in providing technical assistance to their authorities to develop laws relating to disaster preparedness and response. The existing guidance documents do not, however, address these aspects of disaster management. In 2017, in order to address this significant gap, IFRC embarked on a project to develop a Checklist on Law and Disaster Preparedness and Response. The purpose of this Report is to inform the proposed Checklist, by identifying the key issues that should be included and providing detailed recommendations about how to develop law and policy to address those issues.

C. Methodology

IFRC commissioned two inputs to inform this Report: first, a literature review on 10 topics that are integral to disaster preparedness and response (the **Literature Review**); and second, 20 country desktop reviews of domestic laws relevant to disaster preparedness and response (the **Desktop Reviews**). Both the Literature Review and the Desktop Reviews are available on IFRC's website. The Literature Review identifies and briefly summarizes the key resources on each topic including: international legal materials; academic books and articles; reports and case studies; and existing guidelines, standards and recommendations. The Desktop Reviews respond to a template containing a series of questions, which is also available on IFRC's website.

The 20 countries selected for the Desktop Reviews were: Australia, Brazil, Colombia, Ecuador, Finland, Italy, Jordan, Kazakhstan, Kenya, Korea, Kyrgyzstan, Madagascar, Mexico, Palestine, Paraguay, Philippines, South Africa, Senegal, the United Kingdom and Viet Nam (together, the **Sample Countries**). The Sample Countries represent the full spectrum of disaster risk levels, including 8 of the top 30 countries most at risk from disasters.[28] They also represent most geographic regions of the world and the full spectrum of the human development index, from low through to very high human development.[29]

This Report is based on an analysis of the 20 Desktop Reviews and the literature on disaster preparedness and response, as identified by the Literature Review. The Report contains ten thematic chapters, each of which addresses a cluster of related issues in disaster preparedness and response. Each chapter discusses the issues in depth and, using the 20 Desktop Reviews, analyses the extent to which those issues are already adequately addressed by domestic law in the Sample Countries. The chapters also draw on the Desktop Reviews to provide examples of good practice in the Sample Countries. Each chapter concludes with a 'Recommendations' section that provides domestic decision-makers with guidance about how to develop domestic disaster law and policy. Here, the term 'domestic decision-maker' is used as shorthand for any government or non-governmental actor that is involved in domestic law and policy making processes.

For some of the issues discussed in this Report, the international community has already developed comprehensive principles, guidelines, standards and tools that draw on extensive research and experience. These documents are an invaluable resource for domestic decision-makers. This is true even for resources that are designed by and for international humanitarian actors, as the content of such sources is often relevant for domestic government actors. To the extent that high-quality guidance already exists in relation to a particular topic, this Report avoids 'reinventing the wheel'. Instead, it briefly summarizes key points from the guidance and recommends that domestic decision-makers refer directly to the guidance to inform law and policy making. In relation to many other issues there is, however, no such guidance. In these cases, the Report draws on the information and insights from the literature and the Desktop Reviews to provide detailed recommendations to domestic decision-makers.

Executive summary

1. Legal and institutional frameworks

A strong legal and institutional framework is vital to effective disaster preparedness and response. Chapter 1 discusses five aspects of legal and institutional frameworks for disaster preparedness and response: (i) the existence of institutions that have a clear legal mandate for disaster preparedness and response; (ii) the presence of such institutions at sub-national levels; (iii) whether the law mandates, or permits, *all* stakeholders to participate in disaster preparedness and response institutions; (iv) whether the law establishes coordination mechanisms for DPR actors; and (v) whether disaster laws contain, or import by reference, human rights and humanitarian principles that are relevant to disaster-affected persons.

The Desktop Reviews reveal that the vast majority of the Sample Countries have dedicated institutions with a legal mandate for disaster preparedness and response. Most Sample Countries also have disaster preparedness and response institutions at sub-national levels. A key finding from the Desktop Reviews is, however, that institutions often suffer from a lack of clarity about the nature of their mandate. In some of the Sample Countries, this is due to the existence of a large number of disaster preparedness and response institutions with overlapping roles and responsibilities.

Almost all of the Sample Countries' laws provide for a wide range of governmental actors (e.g. sectoral agencies, sub-national authorities) to participate in disaster preparedness and response, including through coordination bodies. A finding from the Desktop Reviews is, however, that non-governmental actors generally have weaker participation rights and are often excluded from coordination bodies. Further, the law often fails to clearly define non-governmental actors' roles or to grant them a high degree of responsibility.

Another finding from the Desktop Reviews is that it is relatively uncommon for domestic disaster laws to include, or import by reference, relevant human rights and humanitarian principles. Further, the few examples of rights and principles identified in the Desktop Reviews tend to be broadly-worded and aspirational, rather than framed as legal rights, obligations or prohibitions that are capable of enforcement. While these types of provisions do often exist in constitutional and human rights legislation, without specific mention in disaster laws and policies, their implementation in disaster setting may be ad hoc.

2. Disaster risk finance

Funding is a critical requirement to support disaster preparedness and response activities, as well as those which fall within the whole disaster risk management spectrum. The *Sendai Framework* and other key international instruments emphasize the importance of ensuring adequate and timely access to resources for managing disasters, including through the adoption of legal and policy measures. They encourage funding across the full spectrum of disaster risk management beyond response, and emphasize the importance of the availability of funding at local government and community levels, as well as the participation of a broad range of actors, from government and scientific services, humanitarian and development actors and the private sector. Recognizing that disaster risk management is a stretch for the budgets of most countries, and the international donor community is not able to meet all critical gaps, the development of innovative approaches for risk financing is a growing field which is yet to be fully analysed and established.

Findings reveal that there is great diversity in disaster risk management approaches from country to country, which span the full range of mechanisms available. Most governments are now allocating funds for disaster from their national and local budgets, although the

levels are far from adequate and tend to address response rather than risk reduction and preparedness. New initiatives such as special disaster investment funds, insurance schemes and risk pooling at national and regional levels are increasing in popularity, again with no single model or approach dominating the market.

From a legal perspective, the common findings are that national legislation is yet to keep pace with the ever-changing risk finance landscape and either provides inadequate detail to facilitate the rapid release of funds where needed, or in some cases positively delays, restricts or prevents it. Legal and policy development is also not keeping pace with some of the more innovative finance-based response tools used within the humanitarian sector, such as cash transfer programming (**CTP**), forecast-based financing (**FbF**) and Adaptive Social Protection.

Given the changing financial landscape and emergence of new, and often commercially driven, solutions to disaster risk financing, more research is needed to fully understand the legal and policy implications for governments. The need to do so is all the more urgent, as many new regional and international insurance and risk pooling schemes are closely examining the legal, institutional and policy frameworks of governments for disaster risk management (**DRM**) as well as the fundamental considerations of DRM capacities, good governance, financial competence and stability. This provides an important advocacy opportunity for the strengthening of those legal and policy frameworks, as a means to ensure that disaster-prone communities are not negatively affected by the inability of their government to access these resources.

3. Contingency planning, education and drills

Contingency planning can be defined as a critical activity for organizations and communities that allows them to prepare to effectively respond to a disaster event and its potential impacts. It relates to the concrete actions that are necessary to take when a major emergency is predicted or begins to unfold, despite best efforts to reduce risk and mitigate the effects of hazards before they occur. Simply put, the contingency planning process can be broken down into three questions: what is going to happen; what are we going to do about it; what can we do ahead of time to prepare.

Contingency plans are usually based on specific events or known risks at local, national, regional or even global levels, such as earthquakes or disease outbreaks, and they establish operational procedures for response, based on anticipated resource requirements and capacity. They should ideally be multi-hazard and use risk analysis and assessments to inform the content of the plan. Developing scenarios is a good way of thinking through the possible impacts. Based on sensible scenarios, it is possible to develop a plan that sets out the scale of the response, the resources needed and the practical management tasks that will be needed. As contingency planning is an on-going process, these scenarios offer an opportunity to test and update the plans regularly considering the prevailing situation.

From the Desktop Reviews, contingency planning is seen as an important step in disaster preparedness efforts and this is reflected by countries legislating on this process. Countries have provided a clear mandate for and allocated resources to the development of contingency plans. In some cases, some private organizations might have a unique burden of responsibility to develop these plans on their own due to the nature of their business.

The Desktop Reviews also reflect a need for inclusivity in the development of contingency plans. The process is reflected to have input from all relevant sectors at national and local

level (inclusive of the community) as well as both public and private sector depending on the context and the nature of the disaster being planned for. Recognizing the importance of restoration of family links in an effort to speed up a community's recovery from a disaster, plans on how families are to be reunited are not expressly mentioned in legislation or provided for in most countries.

Education and trainings on any developed contingency plan go a long way to enhancing the effectiveness of the plan as the community and the relevant authorities are made aware of their roles, rights and responsibilities. These training programmes, particularly when they are inclusive of simulation exercises allow for the contingency plan to be seen in action and evaluate its workability in a specific context. The education and training programmes, particularly those targeted at the community allow for the ease in assigning responsibilities to members of the community and building a volunteer network to support the implementation of the plan in the event of a disaster.

From the Desktop Reviews, like the contingency planning process, the primary responsibility for offering trainings to disaster rescue and relief personnel lies with the national government. They are however also supported by universities and private institutions. Most countries offer training programmes to professionals involved, in one way or another, in the preparedness efforts but there is room for improvement when it comes to provision of education programmes to the community and school going children. Additionally, most legislation does not offer minimum standards that should be maintained with respect to training and education programmes. As regards simulations and drills, those countries that have legislated them have mainly focused on their availability to rescue and relief professionals and not the community and school going children.

4. Early warning, early action

Since the mid-2000s, there has been growing international recognition of the importance of early warning systems and early action to enhance effective disaster response. Early warning systems have four key interrelated components: developing and implementing disaster risk knowledge; monitoring and forecasting hazards; disseminating authoritative, timely, accurate and actionable warnings; and preparedness at all levels to respond to the warnings received. Each of the four components of early warning systems is vital: a failure in relation to any element can lead to failure of the system as a whole.

Between 2005 to 2015, there was a paradigm shift away from single hazard to multi-hazard early warning systems, and an increasing emphasis on providing at-risk populations with impact information, rather than simply hazard information. At its most basic level, providing impact information rather than hazard information means providing information about 'what the weather might do', rather than simply 'what the weather might be'.[30] The Desktop Reviews and the literature indicate that, although there has been significant progress towards implementing domestic multi-hazard early warning systems, gaps and challenges remain in relation to all of the four key components of early warning systems. This is especially true for developing and least-developed countries. These gaps and challenges are discussed in detail in Chapter 4.

The concept of 'early warning early action' is now a fundamental tenet of disaster response. It refers to taking action *prior* to a hazard materializing *on the basis of* warnings, rather than responding only once the hazard materializes. The practical manifestation of 'early warning early action' is forecast based action (**FbA**) mechanisms that release funds

and initiate early actions when a forecast event surpasses a pre-determined magnitude and probability. The underlying rationale for FbA is that pre-emptive, rather than responsive actions, are generally more effective at mitigating the impacts of disasters.

The literature indicates that governments and humanitarian actors are moving away from pilot and small-scale programs and beginning to 'scale up' early action initiatives. It emphasizes that, as this change occurs, it is important to integrate early action into existing planning processes and early warning systems, rather than creating parallel processes and systems.

Evacuation is an important form of early action that is already commonly addressed in disaster laws and policies. The Desktop Reviews indicate that, although the vast majority of the Sample Countries' laws provide for emergency evacuations, very few Sample Countries' laws contain measures to ensure that people with impaired, limited or restricted mobility are assisted to evacuate. Further, the Desktop Reviews indicate that very few Sample Countries' laws address the evacuation of domestic animals and livestock. This is a serious deficiency as failing to assist people to evacuate their animals during disasters can directly endanger human life, and have detrimental psychosocial and economic impacts on disaster-affected populations.

5. States of emergency and states of disaster

States of emergency (**SoE**) and states of disaster (**SoD**) are legal mechanisms for initiating disaster response. The declaration of a SoE/SoD causes a switch to an emergency legal modality characterised by special emergency powers and/or governance arrangements. The power to declare an SoE is usually established by a country's constitution and vested in persons or entities at the highest level of government. SoEs are generally designed for extreme and/or unforeseeable situations that pose an existential threat, such as threats to national security, public order or the constitutional order. In contrast, SoDs are generally provided for in legislation, and the power to declare a SoD is often vested in sub-national governments or sectoral agencies.

The Desktop Reviews indicate that SoEs/SoDs are common among the Sample Countries. From the 20 Sample Countries, 14 have laws that provide for both SoEs and SoDs,[31] while the remaining six appear to only have SoEs.[32] There is, however, enormous variation in the nature of the SoEs/SoDs of the Sample Countries in relation to: the legal triggers for declaring an SoE/SoD; the identity of the person or entity that is empowered to declare an SoE/SoD; the consequences of a declaration; and the types of safeguards implemented during an SoE/SoD. To a significant extent, these variations reflect differences in the political and constitutional structures and the disaster risk profiles of the Sample Countries.

Although it is not possible or appropriate to strictly prescribe the form that SoEs/SoDs should take in all countries, the literature emphasizes the importance of developing a range of SoDs that are tailored to differing degrees and types of risk, rather than relying solely on an SoE. This approach promotes proportionality by ensuring that changes to governmental powers and governance arrangements correspond to the nature and magnitude of the disaster. Equally, the literature underlines the importance of safeguards, including judicial and/or legislative supervision of the declaration of an SoE/SoD and decisions or actions taken during an SoE/SoD.

6. Legal facilities

Effective disaster preparedness and response requires a legal framework which facilitates the work of humanitarian actors and removes unnecessary cost burdens and bureaucratic barriers which may deter individuals and organizations from participating in this essential work. Much of the literature in this area focusses on facilities available for international actors in large-scale disaster situations, but many also apply to domestic organizations and in small-sale disaster settings. The key issues explored here are the legal frameworks concerning volunteers, professional licensing, tax exemptions, liability, the use of Unmanned Aerial Vehicles (**UAVs**) and privacy and data protection.

In most of the topics addressed, domestic legal and policy frameworks are under-developed or have not been adapted for the specificities disaster situations. In the area of volunteering for example, legislation in many countries still lack clarity on issues such as health and safety, liability, insurance and employment status, while in others where volunteering legislation has been enacted, it does not address situations of disaster. The recognition of professional qualifications is generally less problematic, except in federal countries such as Canada and the US where different registration requirements for medical professionals can create unnecessary delays in the provision of urgent assistance across state borders. Legislation is also inadequate in providing clarity on the extent to which individuals and organizations may be protected from civil and criminal proceedings during the course of preparedness and response activities, when accessing and using personal data or using new technologies such as UAVs necessary to fulfil their duties.

The diversity of approaches used across different countries, such as those relating to tax exemptions for goods, services and organizations engaged in disaster preparedness and response, make it difficult to offer detailed recommendations beyond general principles and considerations for integration into legal and policy frameworks. Much of the work on principles and standards in these areas have been developed by the humanitarian community and provide useful guidance for policy-makers in developing their legislation.

7. Disaster-related human mobility

Disasters and disaster risk have always been catalysts for human mobility. Disaster-related human mobility is, however, increasing due to the exacerbation of meteorological hazards caused by climate change. Some movement, such as internal or cross-border migration, may be voluntary in nature, whereas others are involuntary, such as displacement after a sudden disaster impact. This Chapter discusses two other forms of disaster-related human mobility: planned relocation and disaster displacement. Situations of emergency evacuation are addressed in Chapter 4.

Although the *Sendai Framework* recognizes relocation as a method of managing disaster risk and calls on states to develop policies governing relocation of human settlements in disaster risk-prone zones,[33] the Desktop Reviews indicate that few of the Sample Countries have laws or policies that specifically address planned relocation. Further, the literature indicates that the experience of communities with relocations has, thus far, been predominantly negative due to a lack of community participation, the selection of inappropriate sites and under-budgeting of relocation costs.

The Desktop Reviews do not comprehensively investigate the specific protection and assistance needs of disaster-displaced persons. The literature identifies, however, that, at both

national and international level, there are legal gaps in the protection of disaster-displaced persons. Further, it emphasizes that displacement, whether internal or cross-border, can have severe negative impacts on family and community life, economic livelihoods, and education and health outcomes.

8. Emergency shelter and housing, land and property rights in disasters

Disasters have a propensity to both create and aggravate problems relating to housing, land and property rights (**HLP**). Chapter 8 discusses three common HLP-related issues that arise during disasters: (i) inequitable access to emergency shelter assistance due to DPR actors using eligibility criteria that exclude vulnerable and disadvantaged groups; (ii) a lack of available land and buildings for emergency and transitional shelter assistance due to the absence of laws permitting government to temporarily requisition land and buildings during disasters; and (iii) educational disruption due to the use of schools as evacuation centres or post-disaster shelters.

In relation to the first issue, the vast majority of the Sample Countries' laws do *not* require potential beneficiaries to provide proof of 'secure tenure' in order to receive emergency shelter assistance, however the literature nonetheless provides many examples of governmental and humanitarian actors applying this criterion, leading to the exclusion of vulnerable groups. The literature also indicates that humanitarian actors are, however, increasingly adopting a more inclusive approach by using the less stringent requirement of 'secure *enough* tenure'.

In relation to the second issue, the Desktop Reviews indicate that it is uncommon for domestic governments to possess powers that specifically permit them to temporarily requisition land following a disaster. Many countries' laws do provide government with powers to permanently requisition land, however these types of powers are generally not practicable during disasters because they establish lengthy procedures designed to protect private property rights from unjust or arbitrary interference.

In relation to the third issue, it is important to note that children's right to education prevails even during emergency situations of armed conflict and violence. Moreover, educational continuity during disasters not only protects the right to education, but also provides children with vital physical and psychosocial protection. The Desktop Reviews indicate, however, that only two of the Sample Countries have laws or policies providing that schools may only be used as evacuation centres or temporary shelters as a last resort, where there is no feasible alternative.

9. Protection and inclusion of particular vulnerable groups

The following groups have been identified in the literature and potentially subject to disproportionate impacted by disasters: women and girls; children, particularly unaccompanied and separated children; older persons; persons with disabilities; migrants; indigenous groups; racial and ethnic minorities; and sexual and gender minorities. Chapter 9 discusses the protection and inclusion of these groups in disaster preparedness and response. For brevity, these groups are collectively referred to as 'vulnerable groups'.

The literature illustrates that there are (at least) four underlying factors that cause vulnerable groups to experience disproportionate disaster impacts. These four causes are:

(i) direct and indirect discrimination in DPR activities due to pre-existing social marginalisation; (ii) vulnerable housing and livelihoods due to pre-existing economic marginalisation; (iii) physical, intellectual, psychosocial and sensory impairments that make it harder to escape, or take shelter from, physical hazards during a disaster; and (iv) exposure to a heightened risk of violent, exploitative or otherwise harmful behaviours during disasters.

The Desktop Reviews indicate that domestic laws and policies do not sufficiently protect and include vulnerable groups in disaster preparedness and response. Indeed, the majority of the Desktop Reviews explicitly recommend amending the law to protect vulnerable groups. Even where domestic laws and policies do include measures to better protect vulnerable groups during disasters, they often do so unevenly by addressing the needs of some but not all groups. Further, high-level statements recognizing vulnerability often do not translate into concrete, tangible protection measures.

Chapter 9 also discusses mental health and psychosocial support (**MHPSS**), which is an important need for all disaster-affected populations, not only for vulnerable groups. The Desktop Reviews did not directly address MHPSS. This Report does not, therefore, analyse the extent to which the Sample Countries have laws and/or policies that address MHPSS in disaster preparedness and response.

10. Quality, accountability and prevention of fraud and corruption

Chapter 10 analyses the following three issues: first, the quality of assistance provided during disaster response; second, the monitoring and evaluation of DPR activities; and third, the prevention of fraud and corruption in DPR activities. The urgency and chaos created by disasters poses serious challenges in each of these three areas.

In relation to the issue of quality, the *Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response* (**Sphere Minimum Standards**)[34] are capable of providing governments with a quality benchmark to strive towards, as well as clear, practical guidance about how to achieve that benchmark. The *Sphere Minimum Standards* may be used by both governmental and non-governmental actors. Indeed, the literature illustrates that there are several examples of countries that have either adopted the *Sphere Minimum Standards*, or have used them to inform the development of national standards for humanitarian response.

The literature emphasizes that rigorous monitoring and evaluation is vital to generating the information and analysis that is necessary to: (i) hold actors accountable to stakeholders for the impacts and results of their activities, policies or programmes; and (ii) improve future policy and practice drawing on the lessons from past experience. The Desktop Reviews indicate that the majority of Sample Countries have some form of monitoring and evaluation of DPR activities. There is, however, significant variation in relation to *who* conducts monitoring and evaluation, the *scope* of monitoring and evaluation, and whether results are made publicly available.

The literature indicates that fraud and corruption can be a severe problem in disaster preparedness and response, with the effect of reducing the availability, speed and quality of assistance for disaster-affected persons. The Desktop Reviews indicate that domestic laws often do not contain provisions that specifically target fraud during disasters and that, instead, ordinary fraud prevention laws continue to apply. Although, a small number of the Sample Countries do have laws that contain disaster-specific anti-fraud and corruption provisions.

Summary of recommendations

1. Legal and institutional frameworks

In order to create an effective legal and institutional framework for disaster preparedness and response, decision-makers should consider developing law and/or policy that:

- clearly sets out the roles and responsibilities of each governmental institution that is involved in disaster preparedness and response — this is extremely important for disaster response institutions;
- provides sub-national governmental institutions with sufficient powers and resources to fulfil their disaster preparedness and response mandates;
- allocates institutional responsibility for:
  - all jurisdictions (national and sub-national);
  - all types of hazards (slow and sudden onset; natural and manmade);
  - all functions (policy, operations, monitoring and evaluation etc);
- establishes coordination mechanisms that include *all* governmental and non-governmental DPR actors, including national human rights institutions, ombudsmen and organizations that have a mandate to represent or advocate for vulnerable groups (e.g. women's rights commissions; disability rights organizations);
- clearly outlines the roles and responsibilities of non-governmental DPR actors;
- grants non-governmental DPR actors the highest degree of responsibility that is appropriate to their resources and capacity;
- requires coordination bodies to meet regularly, including when there is no active response; and
- includes, or imports by reference, humanitarian principles and human rights that are relevant to disaster-affected persons.

2. Disaster risk finance

While it will always be necessary for countries to develop funding mechanisms which are adapted to the specificities of each particular context, there are some general recommendations for policy and legislation in this area, which may help to ensure that such mechanisms are effective:

- develop an overarching risk financing strategy which includes ensuring adequate budget allocations for preparedness and response at all levels, as well as addressing low, medium and high levels of risk with appropriate risk financing mechanisms such as contingency funds, credit and risk transfer, based on a comprehensive analysis of risks, costs and the "risk appetite" of different stakeholders;
- recognize the importance of having a well-developed and well-functioning legal, institutional and policy framework for DRM as one of the essential criteria for eligibility to benefit from a range of international and regional insurance and risk pooling schemes and opportunities to access technical support to benefit from develop best-practice and knowledge;
- ensure that all funding mechanisms for disaster preparedness and response are: adequate, to cover the anticipated costs based on proper risk assessments; efficient,

to reduce costs, bureaucracy and other barriers; and that institutional responsibilities and procedures are properly defined and mandated by legislation;

- ensure that funding mechanisms include the availability of resources at local level and address all phases of the DRM cycle from risk reduction to recovery, recognizing that risk reduction measures are more cost effective than response;
- ensure that legislation establishing special funds for disaster or "climate finance readiness", which is accessible at all levels, includes provisions relating to its governance, sources of funding, record keeping, financial management, conditions of use and audit, as well as the capacity to receive contributions from external and international sources, supported by appropriate tracking mechanisms;
- consider establishing a mechanism for FbF, supported by legislation to define early action measures, institutional arrangements and levels of authority, communication procedures and rapid, streamlined and transparent disbursement procedures;
- amend or adopt legislation and policies to support efficient CTP which removes some of the common legal barriers, such as: access to personal identification documents; certainty of land tenure; the protection of personal information; lack of clarity around employment, work safety, and institutional and coordination arrangements; and
- develop laws and policies which ensure that CTP includes appropriate market assessments, technical guidance and minimum standards of quality as well as the specific requirements of cash for shelter programming, and establish linkages with other government payment schemes such as social security, for example through an "Adaptive Social Protection" approach.

3. Contingency planning, education and drills

Legal and policy frameworks play an important role in preparing for disasters specifically with regard to contingency planning education and drills.

With regard to contingency planning, decision makers ensure that policies and legislation include:

- minimum standards for contingency plans, developed through an inclusive and multi-stakeholder participatory process;
- risk mapping and/or risk assessments;
- responsibilities of government and other entities at all levels;
- sources and allocation of resources at all levels;
- logistics and communications plans; and
- processes to support social links, family reunification and tracing.

In this respect, decision-makers may find the IFRC *Contingency Planning Guide* and the *Emergency Management Guidelines for Incident Management* of the International Organization for Standardization useful references.

Laws and policies should also include requirements and standards for education, drills and training programmes in particular with respect to:

- responsibilities of government and other entities to offer training and drills at all levels, tailored to the needs of different audiences;
- minimum standards and content for such training, including refresher training;
- ensuring access for all individuals to such training;
- requiring mandatory first aid training for professionals, including disaster and rescue and relief personnel, local communities and school children; and
- establishing school-based programmes to undertake risk analysis and readiness for disaster.

4. Early warning, early action

In order to create an effective multi-hazard early warning system, law and/or policy should clearly stipulate the roles and responsibilities of all actors involved in: developing disaster risk knowledge; monitoring and forecasting hazards; and generating and issuing early warnings. Law and/or policy should also establish standards for the systematic collection, sharing and assessment of risk information and data relating to hazards, exposures, vulnerabilities and capacities. Further, it should establish coordination mechanisms for all relevant actors.

In relation to disaster risk knowledge, law and/or policy should:

- mandate hazard mapping and risk assessments for all hazards in all geographical areas;
- require risk assessments to address the exposure, vulnerability and capacity of people, infrastructure and economic sectors that may be affected by hazards; and
- mandate the creation of a standardized central repository of all disaster risk knowledge.

In relation to monitoring and forecasting, law and/or policy should:

- mandate monitoring and forecasting for all hazards in all geographic areas; and
- allocate sufficient funding to monitoring and forecasting agencies.

In relation to warnings, law and/or policy should:

- establish standard processes for generating and issuing warnings;
- require warnings to contain impact information and clear practical guidance;
- require the agencies that are responsible for issuing warnings to:
  - use a wide variety of communication channels to disseminate warnings;
  - develop and implement feedback mechanisms to verify warnings are received;
  - develop and implement plans to reach the most at-risk and remote populations; and
- mandate private telecommunications companies to disseminate warnings upon request and at no charge.

In relation to evacuations, law and/or policy should:

- mandate governmental DPR actors to develop comprehensive evacuation plans that specify:
  - evacuation routes;
  - modes of transport for evacuees (e.g. public or private; air, ground or sea);
  - the location of evacuation shelters or designated safe areas; and
  - the roles and responsibilities of all relevant governmental and non-governmental actors;
- require evacuation plans to contain measures to ensure that people with impaired, limited or restricted mobility are assisted to evacuate;
- require governmental DPR actors to include domestic animals and livestock in evacuation plans; and
- refer to the *MEND Guide*[35] as a useful resource for the development of legislation and policy in this area.

The positive results of pilot and small-scale FbA programs warrants decision-makers to give serious consideration to whether, and how, to facilitate FbA through law and policy. Decision-makers should consider developing policies that formally adopt 'early warning early action' as a guiding principle of their disaster management systems and identify FbA mechanisms as a key tool for implementing this principle. Decision-makers should also consider requiring relevant governmental actors to introduce FbA mechanisms into disaster contingency plans and Standard Operating Procedures.

5. States of emergency and states of disaster

As indicated above, the declaration of a state or emergency (**SoE**) or state of disaster (**SoD**) is a mechanism for switching to an emergency legal modality characterised by special emergency powers and/or governance arrangements. When developing or amending laws that govern SoEs/SoDs, decision-makers should endeavour to:

- establish a range of SoDs that are proportional and tailored to differing degrees and types of risk and a SoE that is to be used only in the most extreme and/or unforeseeable circumstances;
- clearly specify the legal trigger for making a declaration of an SoE/SoD, the person or entity that is responsible for making a declaration, and the consequences of the declaration;
- require a declaration of an SoD/SoE to stipulate the legal basis, territorial scope and duration of the declaration, and the emergency powers that will be available to government during the SoE/SoD;
- require government to give notice of a declaration of an SoE/SoD to the widest possible audience, in addition to publishing it in the public register of laws and decisions;
- only permit government to limit, or derogate from, rights during an SoE/SoD to the extent permissible under international human rights law; and

- establish safeguards designed to promote governmental transparency and accountability, to maintain the rule of law, to preserve democratic institutions, and to protect human rights, including:
  - judicial and/or legislative supervision of a declaration of an SoE/SoD and decisions or actions taken during an SoE/SoD; and/or
  - a time limit that provides for an SoE/SoD to terminate automatically once a specified period has elapsed, unless it has been extended with judicial and/or legislative approval.

6. Legal facilities

In order to facilitate the work of domestic organizations and individuals to engage in disaster response and preparedness activities, laws and policies should:

- provide clarity around the legal status, facilities, exemptions and training standards applicable to volunteers in disaster contexts;
- enable automatic recognition or fast-track procedures for the recognition of professional qualifications across sub-national boundaries;
- provide exemptions from VAT and other taxes associated with the conduct of both disaster preparedness and response activities of domestic organizations, particularly with regard to goods, equipment, property and services;
- consider ways that tax exemptions may be used to incentivise disaster preparedness and mitigate disaster losses for individuals and organizations;
- provide reasonable protection for individuals and organizations undertaking bona fide work in good faith, including limits on liability or placing a cap on damages or compensation, ensuring this is balanced with the ability for individuals and communities to seek reasonable recourse from loss and damage where this is justified;
- make use of the *Humanitarian UAV Code of Conduct and Guidelines* and the International Civil Aviation Organization *Circular on Unmanned Aircraft Systems* (**UAS**) to guide the development of domestic legislation with regard to the humanitarian use of UAVs; and
- provide further clarity about the use and protection of personal data in disaster situations, including permission for specific organizations, including National Societies, to use and store such data as part of their essential operations.

7. Disaster-related human mobility

In order to address the complex challenge of disaster-related human mobility, decision-makers should consider developing comprehensive legal and policy frameworks for undertaking planned relocations and for protecting internal and cross-border disaster-displaced persons.

Planned relocation may be initiated as a preventive or responsive measure to slow or rapid onset disasters. Legal and policy frameworks for planned relocation should:

- establish that planned relocation is a measure of last resort;
- entitle potentially relocated persons to legally challenge a planned relocation;

- mandate a participatory approach to planned relocation involving all affected persons, including relocated persons and host populations;
- require that all reasonable steps are taken so that planned long-term relocations improve, or maintain, the living standards of relocated persons and host populations; and
- require that planned relocation is conducted in a manner that mitigates adverse impacts on persons who live in close proximity to the areas from which persons are relocated.

Legal and policy frameworks for disaster displacement should:

- contain measures for identifying and reducing disaster displacement risk;
- mandate contingency planning for internal displacement during disasters;
- provide for the entry and stay of cross-border disaster-displaced persons;
- provide for cross-border disaster-displaced persons to receive assistance to meet their basic needs during the period of their stay; and
- set out criteria for the return of cross-border disaster-displaced persons, such criteria being consistent with international human rights law.

8. Emergency shelter and housing, land and property rights in disasters

In order to address common HLP-related issues that arise during disasters, decision-makers should consider developing law and/or policy that:

- provides for emergency shelter assistance to be provided to disaster-affected persons on the basis of need, rather than pre-disaster tenure status;
- provides for tenure to be ascertained using community verification and land mapping processes in circumstances where:
  - formal land title is not the predominant or only form of secure tenure; or
  - land title documents and property boundaries have been destroyed;
- establishes procedures to expedite the replacement of disaster-affected persons' land title and personal identification documents;
- empowers government to temporarily requisition land and buildings following a disaster, subject to strict controls designed to preclude arbitrary and unjust interference with private property rights;
- provides that schools may only be used as evacuation centres or post-disaster shelters as a last resort where there is no feasible alternative; and
- contains practical measures to promote educational continuity in situations where it is not possible to avoid the use of schools for emergency shelter.

9. Protection and inclusion of particular vulnerable groups

Chapter 9 provides two types of recommendations: (i) general recommendations that, except where otherwise stated, are applicable to all vulnerable groups; and (ii) specific recommendations that are tailored to individual vulnerable groups, some of which are more appropriate as general planning guidance. The specific recommendations are set out in Chapter 9, Section D. The general recommendations are, in summary, that law and/or policy should:

- prohibit discrimination in all aspects of disaster preparedness and response and obligate DPR actors to identify and fulfil the specific needs of vulnerable groups;
- mandate that risk, vulnerability and needs assessments identify vulnerable groups and their specific needs;
- mandate that contingency plans identify the specific needs of vulnerable groups and outline key actions for meeting those needs;
- mandate the collection and analysis of sex-, age- and disability-disaggregated data in risk, vulnerability and needs assessments;
- mandate the collection and analysis of sex-, age- and disability-disaggregated data in relation to:
  - participation in DPR activities;
  - disaster impacts (i.e. death, injury, livelihood, property);
  - the incidence of sexual and gender based violence (**SGBV**);
- mandate that all DPR actors — including sectoral agencies, the military and the police — are required to participate in training designed to improve their knowledge of vulnerable groups;
- promote participation of, and leadership by, vulnerable groups in disaster preparedness and response through:
  - legally guaranteed representation in disaster preparedness and response institutions;
  - active recruitment as civil servants in disaster preparedness and response institutions;
  - consultation in relation to all phases and aspects of DPR activities;
  - targeted training and other learning opportunities for vulnerable groups;
  - monitoring, evaluation and public reporting on participation and inclusion;
- mandate contingency planning for SGBV services during disasters, including related sexual and reproductive health services;
- mandate that post-disaster shelter is designed to prevent and mitigate SGBV; and
- mandate contingency planning for MHPSS during disasters.

10. Quality, accountability and prevention of fraud and corruption

In order to promote quality and accountability and to prevent fraud and corruption in disaster preparedness and response, decision-makers should consider developing law and/or policy that:

- sets out minimum standards for the provision of food, water, sanitation, shelter and healthcare during disasters — such standards should reflect the *Sphere Minimum Standards*;
- mandates DPR actors to use the minimum standards when developing and reviewing disaster contingency plans, and in monitoring and evaluating disaster response;
- sets out processes for managing mass casualties and prohibits, or at a minimum strongly discourages, rapid mass burials;
- mandates rapid and ongoing needs assessments, as well as assessments of damages and losses;
- requires DPR actors to conduct monitoring and evaluation at the activity and program levels;
- requires DPR actors to regularly commission and publish external evaluations of their activities in order to promote accountability to stakeholders;
- permits DPR actors to additionally undertake internal evaluations that do not need to be made publicly available in order to promote a process of continual institutional learning and improvement; and
- mandates DPR actors to adopt:
  - measures to promote organizational resilience to corruption and fraud;
  - function-specific controls to prevent fraud and corruption; and
  - measures to minimize the need for rapid hiring and procurement for DPR activities.

1. Legal and institutional frameworks

A. Introduction

This Chapter analyses five key components of legal and institutional frameworks for disaster preparedness and response.

- **Institutional mandate:** the existence of institutions that have a clear mandate for disaster preparedness and response.
- **Sub-national institutions:** the presence of such institutions at the provincial and municipal government levels, as well as the community level.
- **Participation and representation:** whether the law mandates, or permits, all stakeholders to participate and to be represented in disaster preparedness and response institutions.
- **Coordination:** whether the law establishes mechanisms for coordination of disaster preparedness and response between government entities at all levels, and between governmental and non-governmental entities.
- **Human rights and humanitarian principles:** whether disaster laws establish, or import by reference, human rights and humanitarian principles that are relevant to persons affected by disasters.

Sections B to F below discuss the findings of the 20 Desktop Reviews and the Literature Review in relation to each of the five topics above. Section G provides decision-makers with recommendations about how to design an effective legal and institutional framework for disaster preparedness and response.

B. Institutional mandate

i. The nature of institutional mandates

In 19 of the 20 Sample Countries, the law establishes institutions with a mandate for disaster preparedness and response.[36] The Desktop Reviews indicate, however, that there is significant variation in the content of institutional mandates for disaster preparedness and response. Viewed collectively, the Desktop Reviews illustrate that institutional mandate has three components that can be configured in many different ways:

- first, an institution's mandate is defined by the jurisdiction in which it operates and has authority. An institution typically operates either on a national level or at a specific sub-national level, such as a region, province, municipality or community;
- second, an institution's mandate is defined by the subject matter(s) that it is devoted to. An institution may solely have a mandate for disaster preparedness and/or response, or it may also have a mandate for other phases of the disaster management cycle (i.e. disaster risk reduction and recovery). Further, some institutions have a hazard-specific mandate, such as drought or nuclear incidents; and
- third, an institution's mandate is defined by its function, meaning its role and responsibilities in relation to disaster preparedness and response. Common institutional functions include policy-making and implementation, technical advice, operations, coordination, and monitoring and evaluation.

None of the 20 Sample Countries allocate the above components to institutions in the same way. For example, in Madagascar, the policy and operational aspects of disaster preparedness and response are managed by different institutions,[37] while in Kyrgyzstan a single institution handles both functions.[38] In Palestine, different phases of the disaster management cycle are managed by separate institutions,[39] while the Philippines' national and sub-national disaster management institutions focus on multiple phases of the disaster management cycle, from disaster risk reduction through to early recovery.[40]

ii. Clear and comprehensive mandates

The Desktop Reviews illustrate that each country's constitutional structure, political environment, history and disaster risk profile (amongst other factors) shapes how it assigns institutional responsibility for sub-national jurisdictions, hazards and disaster preparedness and response functions. For example, the Desktop Reviews show that federations are more likely to have strong sub-national institutions, while countries that experience one type of disaster much more frequently than others may create hazard-specific institutions.

The diversity of institutional mandates for disaster preparedness and response can, therefore, be interpreted partly as a natural result of constitutional, political and other types of variation between countries. In light of this diversity, it is infeasible to prescribe a single institutional structure that is appropriate for all countries. It is, however, important that, when viewed collectively, the mandates of a country's institutions are *comprehensive*. That is, they should collectively encompass all jurisdictions (national and sub-national), all types of hazards (slow and sudden onset; natural and manmade) and all functions (policy, operations, monitoring and evaluation etc).

In addition, experience demonstrates that it is critical for there to be clarity about the roles of different institutions in order to avoid confusion and unnecessary delays, particularly where immediate assistance is needed to save lives.[41] The Desktop Reviews indicate, however, that several countries' institutions suffer from a lack of clarity about the scope of their mandate, and how it relates to other institutions' mandates.[42] Both the Kenya Desktop Review and the Jordan Desktop Review note that the countries have a large number of disaster management agencies with overlapping and unclear mandates.[43] The Kenya Desktop Review also describes the system as 'fragmented', with a multitude of different government agencies handling different aspects of disaster preparedness and response.[44] Similarly, the Philippines Desktop Review, describes the allocation of responsibilities among government agencies as 'convoluted'.[45]

iii. Dedicated institutions

For many countries, establishing institutions that are solely dedicated to disaster management is an important step.[46] Establishing dedicated institutions may make disaster preparedness and response a public priority, attract dedicated funding, and create the momentum for improvements in policy and practice.[47] However, where a country has a relatively low disaster risk level and/or strong existing sectoral or sub-national government, it may be possible for existing governmental actors to effectively manage disaster preparedness and response.[48] For example, in Finland, a country with very low disaster risk, each governmental agency is responsible for its own contingency planning and disaster management procedures in its respective field of operation.[49] Finnish law does not establish inter-agency coordination mechanisms but, in practice, agencies share necessary information with one another.[50]

At the local level, there are arguments for and against disaster preparedness and response being mainstreamed into local governance, rather than implemented via dedicated institutions.[51] The most effective approach depends on the local context and method of resource allocation. The literature indicates, however, that if local government institutions are in place,[52] they may already represent a substantial investment of national resources, and it may be unnecessary or unsustainable to create separate dedicated disaster management institutions at the local level, especially in small communities where these institutions may in fact be made up of the same individuals.[53] The training of officials in their roles and responsibilities is also an important way of ensuring appropriate engagement in decision-making, as discussed in Chapter 3.

C. Sub-national institutions

In most of the 20 Sample Countries, the law establishes at least some sub-national institutions with a mandate for disaster preparedness and response.[54] This is consistent with a general trend towards decentralization in disaster management, whereby sub-national institutions have an increasing role in all aspects of disaster management.[55] The 20 Sample Countries indicate that, although there is a clear trend towards decentralization, there is also a high degree of variation in the amount of autonomy and responsibility granted to sub-national institutions.

On one end of the spectrum, sub-national institutions may have responsibility for, and control over, all aspects of disaster preparedness and response. In this situation, national institutions may play only a supplementary or coordinating role by, for example, providing operational support when the scale of a disaster overwhelms the sub-national institution's capacity, or coordinating different sub-national institutions when a disaster affects more than one sub-national jurisdiction.[56] On the other end of the spectrum, however, sub-national institutions may be an implementing agency for a national institution, with limited or no authority to make decisions about DPR activities. Thus, the existence of sub-national institutions does not necessarily equate to genuine sub-national governance.

There is a large body of literature propounding that decentralization is a key component of good governance and development.[57] Proponents of decentralization argue that local government has better information about citizens' needs and preferences and can, therefore, be more targeted, equitable and responsive.[58] This body of literature may suggest that law and policy makers should endeavour to establish disaster preparedness and response institutions at all sub-national levels of government, and at the community level. Importantly, however, the literature highlights significant risks and challenges associated with decentralization and indicates that the experience of decentralization has, in practice, been mixed.[59]

One key challenge highlighted in the literature is asymmetrical devolution, whereby responsibilities are granted to sub-national institutions without a corresponding increase in their resources and powers, or adequate education and training for their members.[60] A comparative study of four countries — El Salvador, Mozambique, the Philippines and Indonesia — found that sub-national institutions in those countries were under or poorly staffed, under-trained and had access to minimal budgets.[61] This finding applied even to the Philippines, whose main disaster law requires local authorities to set aside five per cent of revenue for a Local Disaster Risk Reduction and Management Fund.[62] By contrast, national institutions had greater access to financial resources, larger and better prepared staff, and easier access to training mechanisms offered by national and international actors.[63]

To the extent that responsibility for disaster preparedness and response is devolved to sub-national governments, this responsibility should, therefore, be accompanied by sufficient resources, powers and capacity-building support.[64] Additionally, the literature emphasizes the importance of establishing coordination mechanisms between sub-national institutions, and creating mechanisms that permit national governments to coordinate or assist sub-national institutions when a disaster exceeds their capacity or affects more than one sub-national jurisdiction.[65]

A further issue to consider is that the degree to which decentralization is feasible and appropriate depends on a country's political and constitutional structure. The Desktop Reviews indicate that sub-national institutions tend to have a high degree of autonomy and responsibility in countries with a federal government, or a unitary government with federal tendencies.[66] In Italy, for example, regional institutions are the main actors for disaster preparedness and response due to constitutional amendments passed in 2001 that partly devolved legislative competence for disaster management to the regions and autonomous provinces.[67] In countries with a very strong unitary government, decentralization may not be feasible or appropriate, and there may be significant legal barriers to symmetrical devolution.

D. Participation and representation

As acknowledged by the *Sendai Framework for Disaster Risk Reduction 2015–2030* (the **Sendai Framework**), an all-of-society and all-of-State approach is key to effective disaster preparedness and response.[68] An all-of-society and all-of-State approach involves sectoral agencies at all levels of government, the military and the police, CSOs, National Societies, the private sector, and academic or research institutions. Governmental actors that generally have an important role to play in disaster preparedness and response include agencies that are responsible for providing social services (i.e. health, education and housing authorities), the military and the police, meteorological institutions, national human rights institutions and ombudsmen. An all-of-society and all-of-State approach also requires representation of vulnerable groups, which may occur through representatives from CSOs or government institutions that have a mandate to advocate for particular vulnerable groups (e.g. national women's commissions, disability rights organizations).

The vast majority of the 20 Sample Countries have established at least one institution that permits a variety of stakeholders to participate in disaster management. There is, however, significant variation in relation to two factors: first, the *breadth* of stakeholders that are included in these institutions; and second, the *type of participation* they are granted. These two factors are discussed below.

i. Breadth of stakeholders involved

In relation to the first factor, in almost all of the 20 Sample Countries there are opportunities for sectoral agencies and sub-national governments to participate in disaster preparedness and response institutions. It is common for national disaster preparedness and response institutions to include representatives from relevant ministries, the military and the police, as well as provincial and municipal government. In contrast, from the 20 Sample Countries, only the Philippines' laws facilitated the participation of at risk communities and vulnerable groups in disaster preparedness and response institutions.[69]

For most, but not all, of the Sample Countries, the law provides for National Societies and/or CSOs to participate in disaster preparedness and response institutions.[70] National Societies benefit from a unique, legally enshrined role as auxiliary to government in the humanitarian field, which allows them to complement, support or supplement government humanitarian activities, while also remaining autonomous and committed to humanitarian principles.[71] Many National Societies also have tremendous experience and expertise in disaster management, and are able to rapidly mobilize volunteers at the community-level. These factors position National Societies to make a vital contribution to disaster preparedness and response, provided, however, that domestic laws facilitate their participation and grant them adequate resources.

Overall, the Desktop Reviews indicate that there is scope for countries to broaden the group of stakeholders that are represented in disaster preparedness and response institutions. This is especially true for vulnerable groups, who are severely underrepresented. The participation and inclusion of vulnerable groups in disaster preparedness and response is discussed in detail in Chapter 9. The laws of the Philippines provide an example of good practice in relation to laws that establish an all-of-society and all-of-State approach to disaster preparedness and response. The Philippines National Disaster Risk Reduction and Management Council comprises representatives from several national government departments, the military, the police, Philippine Red Cross, CSOs, the private sector and four levels of sub-national government.[72] Importantly, it also includes a representative from the Philippine Commission on Women.[73] The law requires this institution to be replicated in every province, city, municipality and barangay, ensuring stakeholder participation at all levels of government.[74]

ii. Types of stakeholder participation and representation

The Desktop Reviews indicate that there are many different kinds of stakeholder participation and representation in disaster preparedness and response institutions. The main types of participation and representation evident from the Desktop Reviews are:

- being a member of a consultation or information sharing forum;
- being a member of a body that develops and/or implements policy;
- being a member of an operational entity or response coordination mechanism; and
- being legally or formally designated as responsible for a specific role or function in disaster preparedness and response.[75]

The different types of stakeholder participation are listed above in ascending order of influence and responsibility. The Desktop Reviews indicate, however, that there are two additional factors that affect the degree of influence and responsibility associated with each type of participation.

First, stakeholder participation in disaster preparedness and response may be legally guaranteed, or it may be subject to government discretion. In Kazakhstan, for example, the Intersectoral State Commission for the Prevention and Liquidation of Emergency Situations (the **State Commission**) includes the President of the Kazakhstan Red Cross (**KRC**) and senior officials from major state-owned power and rail companies.[76] The KRC and company officials do not, however, have a legal right to membership of the State Commission because they are appointed by decree at the discretion of the Minister of Internal Affairs.[77]

Second, stakeholders may participate in disaster preparedness and response as an independent actor, or they may be required to submit to the government's authority. In Jordan, for example, the local civil defense committees include a representative of the local branch of the Jordanian Red Crescent (**JRC**).[78] When participating in the local committees, the JRC is treated as part of the executive branch of government and is required to align and coordinate with the Supreme Council for Civil Defense orders.[79] Although it is reasonable for stakeholder participation to be subject to conditions such as registration or accreditation, it is important that domestic law protects stakeholders' independence.

Many Desktop Reviews indicate that most domestic laws provide for National Societies and/or CSOs to participate in consultation or information sharing fora, although specific roles and responsibilities are not always assigned.[80] The *Emergency Management Manual Victoria* (**EMMV**) of the State of Victoria in Australia provides an example of good practice because it assigns clear roles and responsibilities to a wide range of non-governmental stakeholders, based on their areas of expertise. Further, the EMMV grants non-governmental stakeholders a high level of participation by making them responsible for coordinating discrete areas of emergency response. For example, the EMMV designates the Australian Red Cross as the lead coordinating agency for food and water, and the Salvation Army as the lead coordinating agency for the disbursement of material aid.[81] Further, each of the 60 stakeholders involved in preparedness and response activities in Victoria has a detailed 'agency role statement' that outlines its responsibilities in relation to each phase of the disaster management cycle.[82]

E. Coordination

Research indicates that inadequate coordination continues to be a serious problem in international and domestic disaster response operations. A recent IFRC survey of disaster management and humanitarian professionals identifies that inadequate coordination is the most common regulatory issue in international and domestic disaster response.[83] The survey also identifies inadequate coordination as the regulatory issue that has the greatest impact on the efficiency and effectiveness of disaster response operations.[84] The survey identifies two different types of coordination problems at the domestic level: gaps in coordination between different sectoral agencies and/or levels of government; and gaps in coordination between governmental and non-governmental actors, including international actors.[85] Both of these types of coordination are discussed below.

i. Coordination between government entities and with non-government actors

Effective disaster preparedness and response requires coordination both *horizontally* between different sectoral agencies, and *vertically* between different levels of government. The Desktop Reviews indicate that it is common for countries to have a single national institution that is responsible for coordinating emergency responses and that includes representatives from different sectoral agencies and levels of government. Many countries also have similar institutions at sub-national levels, especially in federal or quasi-federal governments. Overall, for the 20 Sample Countries, sectoral agencies and sub-national governments are well-represented in disaster response coordination bodies.

With regard to the inclusion of non-government actors such as CSOs, National Societies or private sector organizations, the Desktop Studies indicate that much of the legislation in this area does not contain binding provisions guaranteeing their participation.

Instead it is left to the discretion of the relevant authorities which organizations, if any, should be included at any given time. This may partly explain the persisting problem with coordination of domestic responses.

It was beyond the scope of the Desktop Reviews to analyse the extent to which these coordination bodies are effective in practice. It is clear, however, that simply establishing a coordination body through the law is not sufficient to ensure strong governmental coordination or the engagement of non-government actors. The literature further indicates that coordinating bodies should be required to meet regularly (including when there is no active response operation), and that participants should be assigned clear roles and responsibilities.[86]

ii. Coordination for technological and health emergencies

Technological and health emergencies are governed by specific international agreements and, at the domestic level, are often regulated under specific institutional and legal frameworks (rather than general disaster management (**DM**) institutional and legal frameworks).[87] As a result, coordination mechanisms that are established through disaster laws, or by disaster management institutions, may not apply to some technological emergencies, such as nuclear accidents, and health emergencies. Similar to other types of disasters, however, technological and health emergencies may give rise to a broad range of humanitarian needs that necessitates effective coordination between a broad range of governmental and non-governmental actors.

The literature underlines the importance of multi-stakeholder and multi-sectoral coordination mechanisms for technological and health emergencies.[88] Further, at the international level, a multisectoral approach is central to the *International Health Regulations* (2005),[89] while multi-sectoral *and* multi-stakeholder coordination is a central element of the WHO's *Strategic Framework for Emergency Preparedness* (2017).[90] The *Strategic Framework for Emergency Preparedness* emphasizes the importance of improving coordination between the ministry of health and all stakeholders at all levels of the system.[91]

Japan provides a good example of a multi-sectoral approach to nuclear emergencies. Japanese law provides for a multi-sectoral coordination body, entitled a Nuclear Emergency Response Headquarters, to be established in the event of a nuclear emergency.[92] Similar to Response Headquarters that are established for each major natural disaster, a Nuclear Emergency Response Headquarters includes all Ministers of State and the Deputy Chief Cabinet Secretary for Crisis Management.[93] The key difference is that a Nuclear Emergency Response Headquarters also includes the Nuclear Regulation Authority, which has primary responsibility for decisions on technical and specialized matters.[94]

F. Human rights and humanitarian principles

The importance of protecting human rights and respecting humanitarian principles in times of disaster is firmly embedded in the global literature. The right to humanitarian assistance has a long history of inclusion in key international standards such as the *Principles and Rules for Red Cross and Red Crescent Disaster Relief*[95], the *Code of Conduct for International Red Cross and Red Crescent Movement and Non-Governmental Organizations (NGOs) in Disaster Relief*[96] and the *Sphere Humanitarian Charter*[97]. More specific guidance on the application of human rights and humanitarian principles in disaster settings was developed by the Inter-Agency Standing Committee (**IASC**) in the *Human Rights and Natural Disasters Field Manual*.[98]

To further support the development of internal norms in this area, the International Law Commission has also developed *Draft Articles on the Protection of Persons in the Event of Disasters* which reaffirms that persons affected by disasters are entitled to respect for and protection of their human rights in accordance with international law, and also defines the duties of affected states.[99]

The Desktop Reviews consider whether the main laws governing disaster preparedness and response in each country contain, or import by reference:

- rights to humanitarian assistance (e.g. food, water, shelter, health services, etc.);
- a recognition of the specific needs of vulnerable groups;
- a prohibition of discrimination in DPR activities;
- other relevant human rights protections (e.g. freedom of movement, right to seek work, right to education, etc.); and
- guarantees of respect for the humanitarian principles of neutrality, independence and impartiality.

For ease of reference, these types of provisions are henceforth referred to collectively as Rights and Principles.

The Desktop Reviews indicate that it is relatively uncommon for domestic disaster laws to contain Rights and Principles. From the 20 Sample Countries, only 8 had any form of Rights and Principles in its disaster laws.[100] Further, the examples of Rights and Principles from the 20 Sample Countries tend to be broadly worded and aspirational, rather than framed as legal rights, obligations or prohibitions. For example, the Philippines' main disaster law contains provisions stating that it is state policy to 'adopt the universal norms, principles, and standards of humanitarian assistance' and to 'develop and strengthen the capacities of vulnerable and marginalized groups to mitigate, prepare for, respond to, and recover from the effects of disasters'.[101]

Some of the Desktop Reviews note that human rights, including the right to non-discrimination, are instead addressed by the relevant country's constitutional laws and human rights and anti-discrimination legislation.[102] In some cases, these are referred to directly in disaster legislation, for example Colombia's main disaster law incorporates the country's constitutional provisions regarding non-discrimination and equality by stating that these provisions apply to all disaster measures.[103]

Although the Sample Countries provide relatively few strong examples of Rights and Principles in domestic disaster laws, there are several examples from countries outside the sample group. For example, Indonesia's main disaster law provides that 'anybody affected by disaster shall have the right to receive aid for basic necessities',[104] Mongolia's main disaster law provides citizens with a right to receive support and assistance if they are exposed to disaster,[105] and Pakistan's main disaster law prohibits discrimination in relation to compensation and relief for disaster victims.[106]

While it is encouraging that Rights are Principles are included in some instances, it is also important that these provisions move beyond high-level policy commitments into clear and specific guidance on how those rights, principles and protections should be realized as part of preparedness and response activities. Furthermore, they must be supported by adequate resources and capacities for implementation, as noted in the Kenya Desktop Review.[107]

G. Recommendations

i. Institutional mandate

Decision makers should ensure that the mandates of disaster preparedness and response institutions have two key characteristics, clarity and comprehensiveness:

- clarity means that each institution that is responsible for disaster preparedness and/or response has a mandate that clearly describes its roles and responsibilities, and states how this relates to other institutions' roles and responsibilities. This is extremely important for institutions that have a role in disaster response; and
- comprehensiveness means that, when viewed collectively, the mandates of a country's institutions should encompass all jurisdictions (national and sub-national), all types of hazards (slow and sudden onset; natural and manmade); and all functions (policy, operations, evaluation etc).

ii. Sub-national institutions

Establishing sub-national institutions for disaster preparedness and response may offer significant benefits, including more responsive and targeted governance. The degree to which decentralization is feasible and appropriate, however, depends on a country's constitutional and political structure. Further, it is important to avoid establishing sub-national institutions that do not have sufficient resources, powers or capacity to fulfil their legal mandate for preparedness and response. When considering whether and how to establish or reform sub-national institutions, decision-makers should consider the political and constitutional context, including the powers and resources that will realistically be available at the sub-national level.

iii. Participation

When establishing or reforming disaster preparedness and response institutions, decision-makers should adopt an all-of-society and all-of-State approach that allows *all* stakeholders to participate in institutions. An all-of-society and all-of-State approach allows all available resources to be harnessed, and promotes the protection and inclusion of vulnerable groups.

Stakeholders that should be involved and represented in disaster preparedness and response include, but are not limited to: relevant governmental actors from all levels of government (e.g. meteorological institutions; health, education and housing departments; the military and the police; national human rights institutions; ombudsmen); National Societies; private sector entities (e.g. telecommunications and power companies); academic and research institutions; CSOs; religious institutions (where appropriate); and government or non-governmental organizations that have a mandate to represent or advocate for particular vulnerable groups (e.g. national women's rights commissions; disability rights organizations). Where there is an ongoing presence and need for support from international institutions, it may also make sense to include UN agencies and international non-governmental organizations.

There are many different types of stakeholder participation, which vary in terms of the degree of autonomy and responsibility accorded to each stakeholder. Decision-makers should grant stakeholders the highest degree of participation that is appropriate to their resources and capacity. The roles and responsibilities granted to National Societies should

be commensurate with their status as auxiliary to government in the humanitarian field and their experience in disaster management. Decision-makers should make stakeholders' roles and responsibilities as clear as possible, provide stakeholders with rights to participation (rather than leaving this at the discretion of government), and ensure that the law protects stakeholder independence.

iv. Coordination

Effective disaster preparedness and response requires coordination both horizontally between different sectoral agencies, and vertically between different levels of government. Further, it requires coordination between governmental and non-governmental actors, including international actors.

Given that coordination continues to be a serious problem in international and domestic disaster response operations, decision-makers should ensure that the law establishes coordination mechanisms that include representatives from all sectoral agencies, all levels of government and all types of non-governmental actor. In order to be effective, coordinating bodies should be required to meet regularly (including when there is no active response operation), and participants should be assigned clear roles and responsibilities.

Given that disaster laws and policies may not apply to some situations such as health and nuclear emergencies, decision-makers should also ensure that the law establishes multi-sectoral and multi-stakeholder coordination mechanisms for these types of emergencies.

v. Human rights and humanitarian principles

When developing or amending disaster legislation, decision-makers should strongly consider including, or importing by reference:

- a right to humanitarian assistance and access to essential relief supplies;
- a specific recognition of the needs of vulnerable groups;
- a prohibition on discrimination in disaster preparedness and response (**DPR**) activities; and
- other relevant human rights protections (e.g. rights to food, water and housing).

In deciding whether, and how, to include the above Rights and Principles, decision-makers should consider the feasibility and benefits of doing so in the specific country context. Some countries may have a legal tradition that is not accustomed to including human rights in sectoral laws, while other countries may realistically lack the resources to fulfil certain Rights and Principles.

2. Disaster risk finance

A. Introduction

Ensuring that adequate funding is available for undertaking preparedness measures and responding in the event of a disaster is essential for an effective DRM system, as highlighted in many prior studies.[108] While global mortality from disasters is declining, the number of persons impacted (e.g. by displacement or loss of livelihoods or property) is increasing, in part due to more extreme weather and climate events, and in part due to increased population numbers and concentrations of people in high risk areas. For example, Viet Nam is estimated to have lost at least 1% of Gross Domestic Product (**GDP**) per annum due to natural disasters from 1989 to 2008, and this is likely to be an underestimate.[109]

The *Sendai Framework* calls for action at the national and the local levels to adopt public policies that will establish or strengthen funding mechanisms for relief assistance, post-disaster recovery and reconstruction.[110] One of the recognized challenges in this area, is that the full extent of disaster financing (and costs) are not known, due a focus only on highly visible public funds, rather than the full range of resources that affected populations are able to mobilize for themselves, or through friends, family or other non-tracked sources.[111] Other critical challenges for financing within the humanitarian sector are that:

- **Funding is inadequate:** Many countries facing major disaster situations are often required to draw on international resources, and there are concerns about the viability of governments maintaining sufficient national reserves to meet their growing needs. At the same time "traditional" international sources of humanitarian assistance are overstretched, for example, in 2018 only 58.5% of requested funding needs from international humanitarian agencies were met.[112]
- **Funding arrives too late:** Many funding streams are activated only after a major event has occurred, and take time to process and become effective on the ground, missing a key window of opportunity to limit the impact and losses of a disaster.
- **Funding is inefficient:** The causes of inefficiency include overly-bureaucratic reporting requirements, short time frames for spending (many disaster response operations are based on six-month or annual funding cycles, regardless of operational requirements), and a lack of investment in prevention activities, despite its clear cost benefits as compared to response.[113]

Consequently there has also been increasing focus on "innovative" funding mechanisms under the wider rubric of "disaster risk financing" in addition to more traditional funding mechanisms and financial reserves.[114] Disaster risk financing looks at a range of options to provide financial protection against the sudden economic shocks to countries and communities that are caused by major disasters, and also against the longer term regular drain on national resources caused by disasters.

One way of understanding disaster risk financing is in terms of "layered risks" which are addressed through different types of finance mechanisms, ideally as part of a well-developed national disaster risk financing strategy.[115] The most commonly used mechanisms include:

- for the lower cost/risk layer, national budget allocations, reserves, special funds and insurance;
- for the medium cost/risk layer, contingent credit, loans and grants from external sources; and
- for the high cost/risk layer, international insurance or risk transfer instruments.

Example: the Philippines uses all three levels of risk financing:

- The Philippines DRRM Act makes provision for national and local government funds to be accrued from general revenue for the purposes of both quick response and DRR. This addresses the low risk layer, in the form of contingency budgets and national disaster reserves.
- The Philippines has also been participating since 2010 as the first Asian country in the Disaster Risk Financing and Insurance Program (**DRFIP**) of the Global Fund for Disaster Risk Reduction (**GFDRR**). In 2010 it secured a $500 million line of credit, known as a Catastrophe Deferred Drawdown Option. This is contingent credit addressing the medium risk layer.
- In 2017 a second loan of $500 million was provided and the Philippines launched a new catastrophe risk insurance program which provides US $206 million in coverage to protect national and local government agencies against financial losses from certain severe natural disasters. This is a risk transfer system to address the high risk layer.

These initiatives, though diverse, are established by legislation and require a broader enabling legal and policy environment to be effective. This chapter addresses these different mechanisms in the following way:

- **National funding mechanisms:** How legislation and policy address different financial strategies such as national budget allocations, special funds and insurance schemes, and the extent to which they balance response with risk reduction and channel funds to local government and community levels.
- **International financing mechanisms:** Provides an overview of current international disaster financing schemes ranging from "traditional" grants and loans, to more innovative risk pooling, transfer and insurance models to mobilize new funds, and the legislative implications of such schemes.
- **Innovative financial preparedness and response tools:** Considering the legal and policy aspects of cash transfer programming, forecast-based financing and adaptive social protection as important and innovative tools for preparedness and response.

Sections B to D below discuss the findings of the 20 Desktop Reviews and the Literature Review in relation to each of the three topics above. Section E provides decision-makers with recommendations about how to adapt or create legal frameworks to accommodate the changing disaster risk financing landscape and ensure adequate funding and resources for disaster preparedness and response, from both national and international sources, including the facilitation of finance-based preparedness and response tools.

B. National funding mechanisms

i. National budget allocations and special funds

Findings from the literature to date suggests there is great diversity in the type of funding mechanisms for disaster preparedness and response across different national contexts. Some of the variables include: the applicable legal instruments (which may be within specific DRM laws or integrated into financial regulations or other sectoral legal instruments);

sources of funding; the degree of specificity of provisions; and the institutional arrangements for decision-making and administration.

Despite significant variations, it is possible to identify some of the most common ways in which disaster preparedness and response is financed under national legislation, most of which is related to national budget appropriations or the creation of special funds. These include:

- annual budget allocations for general contingencies, which do not specifically refer to disaster situations, such as SoEs, but which have been, or could be, used in such situations;[116]
- annual budget allocations for emergencies, which expressly refer to disaster situations;[117]
- annual budget allocations specifically developed for disaster situations;[118]
- special disaster or climate funds which may include annual budget contributions and/or funding from other sources;[119] and
- a combination of two or more of the above measures.[120]

The overall conclusion is that most countries examined, regardless of their preferred financing modality, include very limited detail in their legislation as to the amount and sources of funding, and procedures for management and administration. Without clear and specific guidance, governments often struggle with the dilemma of balancing the urgency of a disaster situation with financial accountability and safeguards, which may hamper the release of funds for response.[121] Two examples of countries which have sought to alleviate some of these challenges through the development of more detailed financial provisions are Philippines and Nepal, which are described briefly in the case study boxes below.

It has also been observed that budget appropriations for DRM tend to be quite minimal especially as compared to overall needs and for situations of major disaster.[122] Indeed, the idea that governments can expect to manage all scales of disaster and reconstruction through budget allocations and reserve funds is becoming less realistic, and requires new approaches to disaster risk financing, as discussed further in this chapter. Moreover, even when financial provisions do exist there can be a disconnect between the requirements of the legislation and actual implementation, with the OAS report noting that some legislation simply *calls* for the creation of a budget line or special fund for DRM, but does not formally create one.[123]

Allocation of funding between risk reduction, preparedness and response

In recent years there has been a shift in focus towards ensuring that adequate funds are allocated not only for disaster response, but also for preparedness and disaster risk reduction. Key international frameworks, such as the *Sendai Framework*, highlight the importance of ensuring funding across the whole disaster risk management spectrum.[124]

A review of the 20 Sample Countries and the findings of the Caribbean and Association of Southeast Asian Nations (**ASEAN**) studies, indicate that many countries are now using terminology which is inclusive of the full spectrum of DRM. The OAS report observes that many of the countries examined make a distinction in their legislation and practice between financing for disaster response, and preparedness and risk reduction measures, as in Australia and the Philippines for example.

In most of the 20 Sample Countries and in the ASEAN region, it was noted that while the terminology may be inclusive of the full DRM cycle, the specific allocations between the

different phases remained unclear, relying instead on situational decision-making. In some ASEAN countries, the terminology suggests that funding is more focussed on response. As noted above, the Philippines law is an exception, which aims to ensure an allocation specifically for risk reduction and preparedness activities, as well as response and recovery.[125] Following the 2015 earthquake, Nepal also took the step of passing a separate law to establish the National Reconstruction Authority (**NRA**), with its own annual budget and funding sources (see the case study box below).

The IFRC and UNDP 2014 multi-country report on law and disaster risk reduction also notes that dedicated funding lines for preparedness and response may be easier to establish than for risk reduction, given that these activities tend to be more familiar to individuals and agencies. However the report also suggests this warrants further investigation before substantive conclusions can be made about the role of legislation in this area.[126]

Regardless of whether there are separate funds for response or whether the funding addresses DRM more broadly, it is apparent that more pressing budget concerns often stand in the way of maintaining a ready pool of funds, and it is often preparedness and risk reduction that suffer most from under-resourcing. As a result, even though broader DRM investment may be beneficial and more cost effective than response in the longer term, it generally remains a budgetary "extra" rather than a core component, representing a key gap in this area.

Local level funding

The *Sendai Framework* places particular emphasis on resources at the local level and calls for action at local levels to adopt public policies that will establish or strengthen coordination, funding mechanisms and procedures for relief assistance, and to plan and prepare for post-disaster recovery and reconstruction.[127]

Some eight out of the 20 Sample Countries have legislation which enables local level governance structures (such as states, councils or municipalities) to access national funding as and when required for preparing for or responding to disasters.[128] The OAS report also notes that national budget allocations and national disaster funds are the main source of funding for municipality governments, including the resourcing of institutional bodies.[129] Some countries, such as Brunei and Singapore, have a very centralized approach whereby the national disaster management agency takes full responsibility (and therefore funding) for preparedness and response at sub-national level through its own branches, rather than through local government structures.[130]

Five of the 20 sample countries had a more decentralized system, where local level governance must resource their own disaster risk management activities, sometimes through specific budget allocation requirements.[131] Korean legislation for example, requires local governments to allocate a minimum amount for disaster relief from their annual budgets.[132] Some countries, particularly in the ASEAN region, straddle both modalities, enabling local government to access national support, particularly for emergency relief, as well as requiring local level budget allocations, particularly for risk reduction or preparedness activities.[133] The Philippines for example requires local governments to allocate 5% of the their expected revenue for disaster risk management, of which 30% is designated for a Quick Relief Fund and the remaining 70% for other DRM activities.[134] The Australian government provides tax incentives rather than funding allocations to state governments for disaster risk reduction[135] and in a reversal of the general trend, Jordan requires states to contribute to national funding for disaster management.[136]

The *Sendai Framework* also calls for the empowerment of local authorities to coordinate with civil society and communities (including indigenous persons and migrants) in disaster risk management activities at the local level – including through both financial and regulatory means.[137] At the community level, at least seven sample countries have legislation which supports the allocation of resources to communities, local associations or individuals, but the modalities vary significantly.[138] In some cases, support is provided by way of tax exemptions or deductions for undertaking DRM activities[139], in other cases, national or local governments contribute resources through donations or grants.[140] In one country, Kenya, the legislation encourages the local private sector to voluntarily support the DRR activities of local organizations and families.[141] In general however, the provisions regarding resource allocation to local and community levels remain fairly ambiguous and non-mandatory.

***Example: Nepal Disaster Risk Reduction and Management Act 2017* (DRRM Act)**

- The DRRM Act establishes a National Council for Disaster Risk Reduction and Management, similar councils at province and district level, and a National DRRM Center as a repository for information. It also establishes the National Disaster Risk Reduction and Management Authority (**NDRRMA**), which is the Council Secretariat in the Ministry of Home Affairs.
- The law does not specify how the Government is to allocate the overall budget for the DRRM Councils and Center, but it gives the National DRRM Council the power to issue financial directives to its own Executive Committee and to the Center (s.5). Then the National DRRM Authority functions include making financial and technical assistance available for provincial and local levels (s.11)
- The law also establishes a separate Disaster Management Fund (Chapter 9, ss. 22-23), as well as providing for such Funds at province and local level (though the details of how the funds are to be used still have to be set out in a regulation). This replaces a range of disaster funds that existed previously.[142]
- The Fund can receive income from multiple sources, including from the national government, donations and international grants or loans with the approval of the Ministry of Finance. It is also to be audited each year by the Auditor General. The separate and transparent nature of Nepal's Fund signals that it is to be entirely separate from government recurrent spending. This is a first step for receiving external donations, grants and loans, as spending can be more effectively tracked and accounted for. This is significant, given that the Act was passed after Nepal's experience in handling international funds for the earthquake recovery.

Nepal National Reconstruction Authority **(NRA)**

- Following major earthquakes in April and May 2015, the country sought and received extensive international assistance with pledges of 2.2 billion in grants and 2.2 billion in loans.[143]
- Because of the magnitude of the recovery work needed, they passed a special law to establish the National Reconstruction Authority (**NRA**), with its own annual budget of approximately 1.25 USD in 2017/18.
- The NRA continued in 2018, as reconstruction has been slow, and is was also mandated to manage reconstruction following the 2017 floods.[144]

***Example: Philippine Disaster Risk Reduction and Management Act 2010* (DRRM Act)**

- Under the DRRM Act, the national budget for DRRM is appropriated under the annual General Appropriations Act, and is known as the National DRRM Fund. The amount must be approved by the President. The DRRM Act specifies that, of the amount appropriated for the National DRRM Fund, 30% is allocated as a Quick Response Fund for relief and recovery and the remaining 70% can be used for broader DRR, preparedness and recovery activities (Act s.22).
- The DRRM Act also requires local governments to establish Local DRRM Funds by setting aside at least 5% of their revenue from regular sources, to support all types of DRRM activities.
  - 30% of the Local DRRM Fund is automatically allocated as a Quick Response Fund for relief and recovery programs.
  - The remaining 70% can be used for pre-disaster measures. The Local DRRM Fund may also be used to pay premiums on calamity insurance (Act s.21).
- The State budget for DRRM includes the Office of Civil Defense annual budget allocation, provided for in the DRRM Act (s.23).
- Both the Act (s.22) and the Implementing Rules and Regulations also authorize all government agencies to use a portion of their appropriations on DRRM projects in line with the National DRRM Council guidance and in coordination with the Department of Budget (Act s.5, Rule 19).

ii. Other forms of national disaster risk financing

Beyond budget allocations and special funds, there are many other forms of national disaster financing, many of which involve some form of insurance-based model, established by national legislation. The examples below are intended to provide a snapshot of some of these different types of mechanisms:

Example: Mexico's FONDEN scheme

The Fund for Natural Disasters (**FONDEN**) was established under Mexico's Ministry of Finance in 1996 as a way to allocate funds on an annual basis to pay for expected expenditures for disaster losses. However it has since undergone a number of transformations which has placed Mexico at the frontline of disaster risk financing innovation. In 1999, the fund was re-established as the FONDEN Trust Fund, which gives financial assistance for public infrastructure and low-income households affected by disasters, and accumulates the unspent disaster budget of each year.[145] This is now a key component of the Disaster Risk Financing Strategy of the Federal Government and its asset base comprises:

- An annual budget allocation of 0.4 per cent of government expenditure (est at US$717m in 2011).
- Commercial reinsurance products, such as catastrophe bonds (**CatMex**), were first issued in 2006 at the value of US$160m to transfer Mexico's earthquake risk to the international capital markets (the first parametric cat bond issued by a sovereign

entity), followed later by a multi-peril catastrophe bond using the World Bank's newly established MultiCat Program.[146]

- Exceptional budget allocations from other Federal government reserve funds (such as the oil fund) when other funding is insufficient.

The FONDEN Trust provides the resource base for a range of other funding mechanisms:

- **State FONDEN Trusts:** Set up for each of the 32 states, manage the financial resources received from the Federal FONDEN Trust after a natural disaster.[147]
- **FONDEN Program:** Finances rehabilitation and reconstruction projects for public infrastructure (owned by municipalities, state governments and federal governments), and the restoration of natural areas and private dwellings of low-income households following a natural disaster.
- **Revolving Fund:** Finances emergency supplies to be provided in the aftermath of a natural disaster, such as shelters, food and primary health care. In the case of high probability of a disaster, or imminent danger, the local governments can declare a situation of emergency and obtain resources from FONDEN immediately. Doing so allows local governments to take measures to prepare for immediate relief needs.
- **FOPREDEN:** A separate fund for disaster risk reduction established in 2010 (although this receives much lower levels of funding).

Example: Pakistan's NDRMF scheme

In July 2018 the Government of Pakistan launched its new National Disaster Risk Management Fund (**NDRMF**), which was established for the combined purposes of funding disaster risk reduction and climate change adaptation measures, and disaster risk financing in the form of insurance.[148] In a legal and institutional sense, it has a very unusual, and somewhat experimental structure. While such funds in other countries have been established by legislation or decree, the NDRMF has been established as a government-owned "non-financial intermediary" not-for-profit company incorporated with the Securities and Exchange Commission of Pakistan, under the Companies Ordinance 1984.[149]

Its asset base of USD $205 million is comprised largely of a loan from ADB (**Asian Development Bank**), as well as smaller contributions from Australia and Switzerland, which have been provided through a grant to the NDRMF from the Government of Pakistan. These funds will support projects through onwards grants to both public and private sector implementing partners. The NDRMF will finance up to 70% of the cost of subprojects to enhance resilience to extreme weather events and other natural hazards, and will also enter into arrangements to develop markets for insurance, to allow the transfer of residual risks (those that cannot be prevented or mitigated).[150]

This model sees the Fund managed at arm's length from the political arena, but some governments may prefer not to give this level of control to an autonomous legal entity. As the NDRMF only began operation in 2018, it will be some time before the effectiveness of this model and its operation in Pakistan is evaluated and understood.

Example: UK's Flood Re scheme

Since 2000, flood insurance has been available to otherwise uninsurable properties through a series of voluntary agreements between the Government and members of the Association of British Insurers (**ABI**). However, these agreements did not address the affordability of such insurance, leading to the development of the Flood Re insurance scheme, established under the Water Act in 2014. This mechanism imposes an annual levy on home insurers and allows them to pass on the flood risk component of their policies to the Flood Re reinsurance scheme to reduce the insurance costs for households at the greatest risk of flooding. An important part of the Flood Re scheme is to provide information to consumers about how to increase their understanding of their level of flood risk and how they can take action to reduce that risk.[151]

Other examples

- The Government of Korea has the ability to subsidize insurance premiums, fees and expenses of local government and civilian owners of facilities.[152]
- Jamaica has a Banana Insurance Fund, established under the Banana Insurance Act of 1945 to protect the banana export industry from hurricanes and windstorms, by requiring farmers with export status to participate in a mandatory insurance scheme for a certain assessed number of units.[153]
- Senegal's national disaster financing relies on access to the African Risk Capacity, a regional risk facility, described further below.

Aside from those listed here, no other Sample Countries were noted to have legislation for disaster risk financing schemes, suggesting that such schemes are not widespread and further research is required to better understand their legal and policy aspects.

iii. Legal guidance

Regardless of the specific financial mechanisms adopted, the OAS report identifies a number of principles and "key imperatives" that should underpin for national disaster funding:

- **Adequacy:** Dedicated funds allocated on a routine basis for both mitigation and recovery, with further supplemental or contingency funding where the primary funding is surpasses, with the incorporation of private sector funding to fill any gaps.
- **Risk analysis:** Funds allotted for disaster recovery should be based on a realistic risk assessment, both pre and post disaster.
- **Risk pooling:** Countries should defray the costs of DRM by pooling risks between public and private sectors, as well as regional and international counterparts.
- **Elimination of risk/moral hazard:** The funding mechanism should incentivise risk mitigation programs and initiatives by key government and private sector stakeholders to reduce the financial burden on the national government.
- **Legislative entrenchment:** Disaster funding mechanisms should be supported by sound legislation that defines the parameters of the scheme, protects the funding from reallocation and penalising misappropriation.

Regarding the creation of special funds for disaster, the 2013 Caribbean Disaster and Emergency Management Agency, *Model Comprehensive Disaster Management Legislation and Regulations* (**CDEMA Model**), provides model legal provisions on the establishment of a National Disaster Management Fund which includes:

- the establishment of a funds committee;
- identification of the potential sources of funding;
- the keeping of proper records and reports relating to the administration of the fund;
- bank accounts and investments;
- conditions under which the funds may be accessed; and
- audit requirements.[154]

C. International financing mechanisms

i. International grants, loans and credit

For many countries whose own resources are overwhelmed by a disaster event, a common approach is to request or accept funding from other countries, international organizations and other external entities.

Countries may receive funds from external sources in a number of a different ways, for example as part of international humanitarian assistance in the wake of a major disaster; as a contribution to a dedicated disaster risk management fund; or supporting the operational costs of institutional arrangements. Such funds may be received as grants, loans or conditional credit for the purposes of conducting response and recovery activities.

In all such cases, there is a need to have procedures for the acceptance of external funds, monitoring, evaluation and reporting on expenditure, and other forms of transparency and accountability, in line with national requirements as well as those of humanitarian donors and development partners.[155] These may be developed on an *ad hoc* basis for a specific disaster, or included as part of DRM or disaster fund legislation.

For DRM laws specifically, key legislative provisions concerning the capacity to receive external funds may include:

- legal mandates for NDMAs;
- establishment of special DRM funds by law;
- specific mechanisms in line with national budget; or
- financial regulations through Ministries of Finance.

Within the ASEAN region, Cambodia, Indonesia, Philippines, Thailand, and Viet Nam have budget and finance provisions in their DRM laws which allow for the national DRM agency to receive international funds.[156] The Myanmar law also establishes a specific DRM fund that can also receive international funds[157], as does Nepal (described in the case study box).

In general however, the detail of how external funds are received and processed, or how specific DRM funds are established, is not found in the DRM laws themselves but dispersed in other legislation, or are yet to be developed.

The emergence of special funding mechanisms for climate change adaptation finance has highlighted the need in many developing countries to increase legal and functional capacity to receive such funds, now termed 'climate finance readiness'. This seems likely to be the arena where legal best practice emerges, as the same broad requirements would apply to DRM funding and there are areas of overlap.

ii. International risk financing

A recent report initiated by HPG, ODI, Numbers for Good and IKEA Foundation explores the current and future potential of innovative risk financing in humanitarian settings. While noting "[T]his is an emerging and rapidly changing area, so firm conclusions are premature…" it nevertheless describes some of the key innovative financing mechanisms and makes some important observations about the mechanisms which are best suited to address different challenges within the current funding environment (see Figure 1).

Many of these initiatives are relevant to preparedness and response in disaster situations and the report's analysis is highly relevant for governments and humanitarian organizations seeking understand the modalities, benefits and challenges of each different mechanism.

Challenge	Possible financial instruments
Not enough funding	Blended finance, equity investments
Funding arrives too late	Disaster risk insurance, displacement insurance
Inefficient funding	Impact bonds
Short-term solutions	Renewable investments
Development costs are too high	Advanced market commitments
Lack of economic opportunities	Job creation, microfinance, incubators

Figure 1 Source: Barnaby Willitts-King et al, New Financing Partnerships for Humanitarian Impact (Humanitarian Policy Group/Overseas Development Institute, January 2019), 11.

Disaster Risk Insurance

Of particular and specific relevance to disaster preparedness and response is disaster risk insurance. There are a number of examples already in place or under development, which provide an important means for governments to pool risk and access funds when national capacities are exceeded.

Example: Caribbean Catastrophe Risk Insurance Facility (CCRIF)

Established in 2007, the CCRIF is hailed as the world's first regional insurance fund, offering a parametric insurance facility for Caribbean governments (and since 2015 for Central American governments) in response to hurricanes, excess rainfall and earthquakes. Initially capitalized by the World Bank, Japan and other countries through a Multi-Donor Trust Fund, it has made 38 payouts totalling US$139m to 13 of its 19 member countries since its establishment in 2007 and 2018. A restructuring in 2014 resulted in a re-launch as CCRIF SPC (Segregated Portfolio Company), a virtual organization based in the Cayman Islands comprising a network of organizations providing a range of risk management, insurance and technology services. It has been estimated to save governments up to 40% as compared to commercial insurance markets.[158]

Example: African Risk Capacity (ARC)

The ARC was established as a means to enable African governments to prepare and respond more effectively to major drought situations. ARC is a specialized agency of the inter-governmental African Union which provides oversight and capacity building for countries, in partnership with an affiliate organization, ARC Insurance Company Ltd, which manages the risk pooling, asset management and risk transfer functions. Countries in the scheme must meet a number of criteria including capacity building commitments and a contingency plan in order to achieve a Certificate of Good Standing, and then choose the level of risk they seek coverage for, with premiums set on a case-by-case basis. Senegal, for example, pays an annual premium of between US$3.1-3.6m, and is entitled to receive up to US$30m if triggered, which occurred in 2014 when Senegal received US$16.5m for a drought situation to undertake food distribution and subsidize livestock feed. Plans are also in place to expand the range of hazards covered in future through a new Extreme Climate Facility (**XCF**).[159]

Example: Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI)

PCRAFI was established as a collaboration between a range of global and regional development organizations, inter-governmental organizations and donor governments[160] to support Pacific Island Countries (**PICs**) with disaster risk modelling and assessment tools. Phase II of the program focusses on disaster risk finance, involving the establishment of the PCRAFI Facility, an insurance company based in the Cook Islands, to provide insurance for PICs against cyclones, tsunamis and earthquakes, in partnership with other foreign insurance companies providing reinsurance. The first to join scheme in 2016 were the Cook Islands, Marshall Islands, Tonga, Samoa and Vanuatu, with a total coverage of US$38.2m. It is also paired with a technical assistance programme to support countries improve their risk management and preparedness.[161]

Example: Southeast Asia Disaster Risk Insurance Facility (SEADRIF)

The SEADRIF was announced by the ASEAN Finance Ministers at their May 2018 meeting "to provide climate and disaster risk management and insurance solutions to ASEAN member states, and helps to narrow the natural catastrophe protection gap within the region".[162] With the support from the World Bank and other donor countries, the SEADRIF is owned by ASEAN+3 countries and comprises three components: SEADRIF Trust (decision-making body of member countries); SEADRIF Sub-Trusts (subgroups of member countries for specific initiatives such as risk pooling); and SEADRIF Insurance Company, based in Singapore to provide insurance and other financial products and services to members. The first financial product is intended to pool the flood risk of Lao PDR, Myanmar and possibly Cambodia to reduce their individual insurance costs, allowing them to purchase insurance for three years, based on their specific profile and their specified level of coverage. This is also teamed with technical support from the World Bank to prepare each country to access this facility.[163]

iii. Legal guidance

Whether at national or regional level, accessing disaster risk finance will have an impact on a country's DRM system and associated legislation. The financial viability of providing parametric insurance for example[164], relies not just on an analysis of the hydrometeorological and environmental impacts, but also on the overall confidence in a country's legal and institutional arrangements, systems and tools for risk reduction, preparedness and response. Entering into an insurance arrangement places specific and binding contractual obligations on governments to meet certain standards and undertake certain activities and processes, to protect the interests of the insurer.

To this end the World Bank and ADB have developed guidance for countries to assess their disaster risk management systems and financing mechanisms, ultimately to increase their capacities to improve and access risk financing schemes.[165] The guidance recommends a comprehensive and in-depth review of many aspects of disaster risk management, from assessing the impact and cost of disasters, to financial arrangements for DRM, to government capacities and a review of the domestic insurance market.

Of particular relevance to this study is the examination of legal and institutional frameworks. The areas of review are wide-ranging and intended to identify areas of potential legal, institutional and financial reforms. A brief summary of the areas recommended for examination include:

Areas of review	
Laws and current practice on the budgeting process for disaster	• Roles and responsibilities of different actors in budget planning and response • Timeline and key steps for the budgeting process • Procedures for the reallocation of budgets after a disaster • Differences between legislation/formal processes and actual practice in allocating resources
Post-disaster budget execution	• Efficiency and timeliness of resource allocation and expenditure • Accountability mechanisms
Laws on DRM and disaster risk finance	• Means of distribution of funding (public investment, social welfare, sectoral expenditure) • Roles, responsibilities, institutional mandates • Coordination mechanisms • Emergency procurement • Disaster declarations (especially where these are requirements for accessing different types of finance • Methodology for assessing damage, losses and needs • Reserve funding mechanisms

continued overleaf

Areas of review	
Institutional set up for DRM and finance	• Capacities and coordination mechanisms between relevant institutions • Functioning of the Ministry of Finance and the overall state of financial management • Delegation of financial oversight to other ministries • Formal coordination mechanisms • Roles of development and humanitarian partners
Local government	• Role in response • Cost-sharing arrangements between local government and other partners • Speed and adequacy of national transfers to local government

D. Innovative financial preparedness and response tools

In addition to the ways in which funds are mobilized for preparedness and response, there are also some innovations in the way in which financial resources, predominantly cash, is made available directly to communities and households to undertake preparedness, response and recovery activities. Some of these are described further below.

i. Cash transfer programming

The use of cash or CTP in disasters is increasing, due largely to the fact that cash is less costly to deliver than in-kind assistance, it provides greater choice and dignity to affected communities, and creates more opportunity for transparency.[166] Although CTP is not a new phenomenon, it has not previously been undertaken on the same scale as today, such as the large-scale cash transfer programmes being delivered to refugees in Turkey, or to the displaced population in Cox's Bazar, Bangladesh.[167] Increasing the proportion of cash as part of international assistance has also been an objective of the Grand Bargain[168] as a result of the growing body of evidence as to its effectiveness in certain circumstances, discussed further below.

The legal and regulatory frameworks specifically designed to facilitate CTP remain comparatively under-developed. Of the 20 Sample Countries, only two were found have established systems specifically facilitating the transfer of funds to households in times of disaster or other emergency. In Madagascar, a system has been established to transfer funds to families affected by disaster for the purposes of meeting essential needs and paying school fees, which has been tested on one occasion by a range of organizations and found to be successful.[169] A program in Malagasy State also supports the transfer of cash to families facing poverty, although this system has not been used in a disaster setting.[170] Brazil has a different scheme where employees affected by disasters are given a special facility to draw down on their pensions (Guarantee Fund for Time of Service) ahead of their usual eligibility to access those funds. There are a number of regulations prescribing when and how this scheme can be used, including the need for a disaster to be officially declared by the Federal Government, a 90 day window in which to access the funds, identification and other documentation to prove identity and residency and a maximum amount which can be withdrawn which is prescribed in legislation.[171] In Kenya, the mobile phone banking system M-Pesa has been promoted and used extensively during disasters as a means for

families and friends to support each other financially, although this was not specifically designed as a disaster response tool.[172]

Conversely, cash transfer programming has frequently been beset with a range of legal and regulatory barriers which have hampered its effectiveness or pose challenges to the ways in which it can be administered. Those most commonly reported relate to identification requirements imposed by banking regulations for the opening of a bank account, which is required to receive the cash. Often described as "know your customer" provisions, the requirement to provide a certain amount of identification documentation is problematic for many people whose documents were destroyed or lost during the disaster, or were forced to flee without them, thus precluding them from receiving cash transfer assistance. Such cases have been widely documented including in Southern Turkey[173], Bangladesh (particularly for the Rohingya population in Cox's Bazar)[174], and in other refugee settings.[175]

Other legal issues include:

- ensuring adequate data protection and privacy (which is covered further in Chapter 6);
- domestic and international restrictions on cash transfers to combat anti-terrorism and money laundering;[176]
- restrictions on the amount of international currency which can be brought in and out of countries, which affect cash programming by foreign/international agencies[177] (it should be noted that the IDRL Guidelines state that "Assisting States and eligible assisting humanitarian organizations should be granted the right to freely bring the necessary funds and currencies in or out of the country through legal means and to obtain legal exchange rates in connection with their disaster relief or initial recovery assistance"[178]); and
- ensuring adequate accountability mechanisms to prevent fraud and corruption.[179]

There is also a noted perception that the use of cash poses a greater accountability risk, and that the diversion of cash is tolerated less as compared to in-kind assistance. This may result in donor reluctance to engage in cash programming or encourage the placement of more stringent requirements upon it.[180]

The literature review notes that a large number of IFRC IDRL country case studies and other resources on banking and cash transfer issues in international response are also a source of information on this topic but need further updating and comparative analysis. While guidance on CTP has been produced by agencies on specific issues such as risk mitigation and privacy[181], as well as on CTP more generally[182], it appears there is a general need for further research and analysis to identify a more comprehensive range of legal issues, legislative barriers and good practices.

ii. Cash for shelter

In 2016 the Global Shelter Cluster produced a literature review on the use of cash in shelter programming, which collected over 150 documents on the subject and interviewed a range of stakeholders.[183] These documents included guidelines, policies, position papers, evaluation reports and comparative studies. The findings of that review have been used as the primary source of information for this analysis.

CTP has been a part of shelter programming for decades and while it has been the subject of extensive research and evaluation, there are some limitations in the literature available:

many documents and discussions on CTP are from the perspective of food security and livelihoods rather than shelter; many evaluations have not been conducted by shelter experts; there are few studies that compare CTP with other shelter modalities; and there is a comparatively small range of guidelines and tools for policy-makers and practitioners.[184]

The literature covers a range of shelter CTP modalities, including:

- cash for emergency shelter;
- cash for work (**CfW**);
- cash for rent;
- cash grants for repair or reconstruction; and
- multi-purpose grants (**MPG**).

Each of these modalities have been found to present significant benefits and enhancements to overall shelter programming under certain conditions, but also come with a range of challenges to be addressed. Cash programming has also recently been integrated into the *Sphere Minimum Standards*, which includes an Appendix on delivering assistance through markets and a checklist of considerations for undertaking cash-based assistance.[185]

While much of the literature does not frame the analysis in terms of legal and policy frameworks for preparedness and response, there are a number areas where law and policy could play an important role in supporting or removing barriers to effective shelter CTP. These issues include:

- **Market assessments:** It is generally agreed that undertaking market assessments is an essential component of planning any CTP, to examine the availability and standard of required shelter items on the local market and assessing the potential economic impact that a shelter CTP may have.[186] Laws and policies could help to ensure that such assessments are a required component of any shelter CTP and further encourage pre-disaster assessments to see how local markets could be supplied with appropriate items in anticipation of such events.
- **Coordination mechanisms:** Laws and policies could ensure that governments identify appropriate counterparts and institutional arrangements to facilitate shelter CTP and establish a platform for multi-sector coordination.
- **Technical standards:** It has been observed that many shelter CTP evaluations have focussed more on the flow of cash and beneficiary satisfaction rather than ensuring that appropriate technical standards of shelters and housing have been met.[187] Laws and policies could play a role in establishing the minimum requirements for different shelter and housing typology and that technical monitoring and evaluation is included as part of shelter CTP, allowing of course for the specific exigencies of different disaster situations.
- **Land tenure:** As for other shelter programming, insecurity of land tenure has been noted as a challenge for the administration of shelter CTP, with a need to clarify land ownership before commencing cash distributions and construction.[188] The legislative aspects of this are addressed more comprehensively in Chapter 8 of this report).
- **Labour regulations and workplace safety:** Regulatory issues may arise when implementing shelter CfW programs, for example if prolonged use of daily labour gives rise to an employment relationship under local labour laws, or if construction sites do not

meet relevant workplace safety requirements. These are issues which could be anticipated and addressed ahead of time through having a better understanding of the legislative environment and/or the development of special provisions appropriate to disaster situations and shelter CTP.

- **Tenancy rights and duties:** Most countries have laws and policies relating to housing rental, which will be applicable to the provision of shelter cash for rent programmes. Legislation has the potential to provide important safeguards for both tenants and landlords, may be effective in preventing the situations of exploitation of tenants, as well as protection against unreasonable costs or loss of income as result of making property available for rent to displaced populations. Additionally, legislation and policies could be used to help curb the potential for unreasonable rental inflation when such programmes are being administered.
- **Complementarity with government cash distributions:** Although not covered extensively in the literature or in the Desktop Reviews, it is apparent that some governments have pre-existing or disaster-specific funds and legal mechanisms for the distribution of cash after a disaster, which also include shelter. Italy for example has provisions for post disaster "soft loans" for recovery and disaster-specific ordinances for the distribution of cash specifically for reconstruction.[189] It is thus important for non-government actors implementing shelter CTP to understand what is already being allocated and to ensure there is sufficient coordination with local authorities to avoid unnecessary duplication of funds and effort.

The full scope of legal issues relevant to shelter CTP, and CTP in general, is a topic requiring further analysis, however there are a number of resources which provide important insight into the best approaches for CTP which will be useful when developing specific policy frameworks.[190]

iii. Forecast-based financing

Recent global analysis indicates that disaster response efforts remain mostly reactive, especially when it comes to funding. This is in spite of commitments by UN member states to strengthen their early warning systems and preparedness for response.[191] Thus there is an increasing focus on innovative approaches such as forecast-based financing (**FbF**) that make significant promises to save time, money and lives.[192]

The FbF approach emphasizes that many humanitarian actions could be implemented in the window between a forecast and a disaster. The idea is to establish mechanisms or systems which trigger and fund preparedness actions before a disaster strikes. The 'innovation' is that humanitarian funding would be released based on forecast information, for pre-agreed activities which reduce risks and enhance preparedness and response for climate and weather-related events.[193] In some cases, the activities may include financial disbursements to at-risk households to take preparedness measures and/or for use in the immediate aftermath of a disaster.[194]

Proponents of the FbF approach argue that it contributes to meet global commitments made under the *Sendai Framework*, (for example, by requiring the active contribution and coordination of different actors, such as hydro-meteorological services working with National Societies), under the Sustainable Development Goals (for example, by protecting development gains in the window of opportunity between a forecast and a potential disaster), and the Paris Agreement on Climate Change (by incorporating FbF as part of national adaptation planning).[195]

Commitments to innovative funding approaches like FbF also stem from the World Humanitarian Summit in 2016, as outlined in reports such as *Istanbul and beyond: perspectives and pledges of the International Red Cross and Red Crescent Movement on the occasion of the World Humanitarian Summit*.[196] A recent UN General Assembly resolution also highlights member states' commitment to improve their national responses to early warning information to ensure that early warning leads to early action, including through FbF; and to develop or enhance forecast-based preparedness and response systems, including making resources available to support actions in anticipation of natural disasters.[197]

The International Red Cross and Red Crescent Movement has been developing the FbF concept since 2007, including several pilot programmes across the world which demonstrate the effectiveness of these types of interventions, for example in Bangladesh where FbF prevented beneficiaries from having to take out high-interest loans to purchase food or evacuate their animals, and in Mongolia where interventions prior to a Dzud (cold wave) were significant in preventing the loss of livestock.[198] The IFRC has also launched a forecast-based financing window to its Disaster Relief Emergency Fund in 2018.[199] These initiatives describe FbF as 'a mechanism that enables access to funding for early action and preparedness for response based on in-depth forecast and risk analysis'.[200] The policy overview states that this fosters a collaborative approach to humanitarian financing, with responsibilities shared amongst humanitarian stakeholders and national government entities for disaster risk reduction, climate risk management and financing.

Despite the expanding field of discourse about the issue, a review of the 20 Sample Countries suggest that such initiatives are yet to find their way into national policies and legislation. While many countries have mechanisms for releasing funds for preparedness initiatives, only a few meet the innovative aspect of triggering "early action" through the release of funds based on forecasting. Legislation in Kenya for example, allows the release of funding from the Contingency Fund on the basis of a decision by the Cabinet Secretary to take action in the event of "short term, imminent disaster".[201] Viet Nam's disaster legislation specifically requires the relevant disaster management authorities to take "appropriate measures" in the event of warnings and forecasts, which includes early action preparedness and response.[202] In Australia however, actions linked to hydrometeorological forecasting are focussed on resilience rather than early response.[203]

The lack of uptake of FbF has been attributed in part to debate over the best strategy for intervention, as well as an "inherent discomfort" from donors to invest in a situation that is only likely rather than certain.[204] The mandate to take action based on early warning systems is not always well-defined at the national level, and it is often unclear as to who would be responsible for making this type of decision and what decision is appropriate based on the early warning, particularly given the possibility for funding to be spent to "act in vain".[205]

It is here that legislation could potentially play a critical role, as a means of mandating institutional responsibilities for communicating forecasting information, as well as the authorization to act, to establish clear and transparent criteria for disbursements and streamlined processes to ensure that funds are released quickly.

iv. Adaptive social protection

The World Bank is also promoting the concept of "Adaptive Social Protection" which focusses on adapting existing and new social protection schemes such as social security allowances, unemployment and disability benefits, to be more responsive to vulnerability

within society and contribute to overall resilience. By improving inter-governmental co-ordination and data management, Adaptive Social Protection schemes can also be used as an emergency response tool, to send out early warning messages and trigger immediate payments to affected vulnerable people in the event of sudden shocks such as disasters. There are also opportunities to use the scheme to support households as part of wider DRM and climate change programs. Although this topic is not explored fully for the purposes of this report, such schemes have been developed to some extent in the Philippines, Ethiopia and the World Bank has also developed a range of policy recommendations for implementing such a scheme in Nepal, which are further elaborated in the recommendations section of this chapter.[206]

E. Recommendations

Funding is a critical requirement to support DPR activities, as well as those which fall within the whole disaster risk management spectrum. With global commitments such as the *Sendai Framework* on DRR highlighting the importance of having adequate funding mechanisms in place, and in light of the findings outlined above, it is clear that this topic cannot be overlooked when developing preparedness and response procedures, including the related legislation. Innovations such as disaster risk financing, FbF, and CTP are not only an approach for humanitarian actors, but something which can be integrated into national plans and mechanisms.

In moving forward, these funding approaches for preparedness and response can be institutionalized into national frameworks through disaster-related legislation, policies and procedures. The above review indicates that disaster risk funds and financing is an area that is developing rapidly, with a number of innovations emerging that potentially impact domestic DRM legislation. Further comparative research is required on the legislative bases for the range of different emerging DRM funding mechanisms and national disaster risk financing approaches, which should also consider national budget laws and Ministry of Finance mechanisms, as well as integrated approaches that encompass climate change, to provide the full picture of DRM financing.

Below are some specific recommendations arising from the current analysis.

i. National budget allocations and special funds

While it will always be necessary for countries to develop funding mechanisms which are adapted to the specificities of each particular context, there are some general principles for policy and legislation in this area, which may help to ensure that such mechanisms are effective. These principles are applicable from national to local to community levels.[207]

Law and policies should ensure that funding mechanisms for disaster preparedness and response are:

- **Adequate:** The resources available for preparedness and response, in particular annual budget allocations, should be sufficient to cover the minimum required costs for the institutional arrangements and mandates given to different agencies at all levels and, to the extent possible, meet the reasonably expected needs of disaster situations in any given year. This should be based on thorough budgeting and risk assessment processes and take into account the funding that might reasonably be available from other non-government sources.

- **Efficient:** This requires making the best use of existing resources to achieve the best result. This can be achieved by investment in risk reduction and preparedness measures which prevent or minimize the impact of disasters, rather than a contingency only available for response. Efficiency also applies to the minimization of unnecessary structural and administrative barriers, to allow funding to be accessed in a timely manner when needed. This can be achieved through the development of clear procedures and timelines for when and how different funding is triggered, allocated and transferred as well as relevant accountability and transparency and transparency measures.
- **Mandated:** It is important that whatever funding mechanisms are adopted, they are supported by legislation which mandates the various responsible authorities, ministries and agencies to prioritize and implement those provisions, to avoid situations where legislative intentions are not supported in practice, do not provide adequate details or are subjected to the whims of political priorities.

Funding mechanisms should also distinguish between disaster risk reduction and preparedness and response for the purpose of ensuring that adequate provisions are made more the more cost-effective measures of disaster risk reduction, and should ensure that sufficient funds are made available at local government and community levels.

Regulations for special funds for disaster preparedness and response, risk reduction, "climate finance readiness" or other specific disaster-related funds, should include requirements for:

- conditions for accessing the funds from national to local level;
- appropriately mandated management committee(s);
- identified funding sources;
- requirements for proper record-keeping and administration;
- provisions relating to bank accounts and investments; and
- audit requirements.

Another key aspect to consider is the capacity for such funds receive contributions from external and international sources and to facilitate the separate and robust tracking mechanisms for that funding to incentivise contributions and boost donor confidence.

ii. Disaster risk financing

The diversity of mechanisms and the emerging nature of this field make it difficult to propose detailed legislative recommendations in this area, however the following offer a broad approach:

- governments should consider developing a disaster risk financing strategy which addresses all three layers of potential risk:
  - for the lower cost/risk layer, national budget allocations, reserves, special funds and insurance;
  - for the medium cost/risk layer, contingent credit, loans and grants from external sources; and
  - for the high cost/risk layer, international risk transfer instruments (including insurance);

- in considering the most appropriate financing options, some basic considerations should be taken into account such as:
  - the frequency and scale of disasters (human and economic costs);
  - the current financial, institutional and human resource capacities already available in-country and likely assistance from external sources;
  - the overall cost effectiveness of financing risk reduction to prevent disasters, versus response;
  - the "risk appetite" of different stakeholders (insurers, business, agriculture, rural and urban communities, different levels of government and others) to help determine where investments should be made and which modality to use;
  - whether the long-term gains from loans or insurance coverage actually do outweigh the ongoing costs of interest repayments and insurance premiums; and
- governments seeking to benefit from regional or international insurance or risk pooling schemes will likely need to undertake an extensive legal review with potential reforms across a wide range of areas in order to meet eligibility requirements of insurers. For this purpose it is recommended make use of the World Bank and ADBs *Guidance Note on Conducting a Disaster Risk Finance Diagnostic*, which covers legislation, policies and practice relating to financial management and budgeting, risk reduction, preparedness and response, financing mechanisms, institutional arrangements and the role of local government.

iii. Innovative financial preparedness and response tools

Cash Transfer Programming (CTP) and cash for shelter

While there is a long history on the use of cash as a humanitarian response tool, it is an area which is comparatively overlooked by supporting legislation and conversely, is often impeded by restrictions and regulations. This is also the case for shelter CTP, where legal ambiguities can hamper its effectiveness or create overly-burdensome procedures designed for non-emergency settings.

Specific areas for consideration in legal and policy frameworks include:

- facilitation of international transfers of foreign funding for CTP to support domestic responses, which meet minimum requirements of transparency and accountability but allow funds to be transferred in a timely manner and in sufficient volume to meet emergency needs;
- requiring appropriate market analyses as a core component of CTP, including a pre-disaster measure with a view to preparing local markets for the types of goods that may be required after a disaster event;
- coordination mechanisms which identify appropriate government counterparts and institutional arrangements applicable to CTP;
- technical guidance which prescribe the relevant minimum standards of quality expected through the use of cash, particularly for shelter CTP;
- ensuring that labour laws and workplace safety regulations are adapted or specially developed to suit the needs of cash of work following a disaster, providing adequate protection for workers while remaining flexible to suit the exceptional circumstances; and

- identifying and strengthening linkages with existing government cash disbursement mechanisms which may be applied as part of disaster response to support better planning and coordination (see for example, the recommendations for Adaptive Social Protection below).

Recommendations on other legislative issues relevant to CTP are included in other chapters of this report including: access to identification documentation; data protection; and privacy and land tenure.

Forecast-based Financing

In spite of increased attention given to FbF at the international level and as part of humanitarian programming, it is still an area for which few countries have made specific legal and policy provisions. It is recommended that governments consider the development of provisions within existing DRM and/or other relevant legislation to:

- define the types of early action measures that could be undertaken through FbF;
- mandate the roles and responsibilities of different government and institutional bodies;
- establish clear procedures for the communication of forecasting information;
- designate appropriate authorities to act at all levels;
- establish clear and transparent criteria for forecast-based disbursements, and
- define a streamlined process for the quick release of funds.

Adaptive Social Protection

Adapting or making best use of existing social protection programmes such as social security and other household-level financial disbursements could be an efficient and effective way of identifying vulnerability and transferring funds to affected households. The World Bank identifies a number of recommendations for the development of an "Adaptive Social Protection" scheme in the Nepal context which are useful to consider for legal and policy development in other countries:

- develop a policy framework to establish an "adaptive information system registry", which uniquely identifies households and their vulnerabilities and eligibility for different government programs, and which can be used to communicate early warning information. (Such a system should ensure privacy and protection of data);
- design programs and adapt existing program guidelines to integrate community resilience, climate change adaptation and to complement humanitarian response, including early warning;
- establish contingency financing for disaster response at all levels and enable the use of the social protection registry and payment systems to deliver financial assistance to householders;
- ensure DRRM regulations enable the implementation of special programs for vulnerable populations including post-disaster livelihood assistance; and
- establish a special unit or cell within the national disaster management authority to facilitate linkages with social protection schemes.

3. Contingency planning, education and drills

A. Introduction

Contingency planning can be defined as a critical activity for organizations and communities that allows them to prepare to effectively respond to a disaster event and its potential impacts.[208] UNDRR defines it as a management process that analyses disaster risks and establishes arrangements in advance to enable timely, effective and appropriate responses.[209]

Contingency planning can also be said to relate to the concrete actions that are necessary to take when a major emergency is predicted or begins to unfold, despite best efforts to reduce risk and mitigate the effects of hazards before they occur.[210] Developing a contingency plan is a preparedness process that involves the analysis of risk vis a vis the potential impacts of crises should they occur.[211] Following this analysis there is an establishment of procedures for timely, appropriate and effective responses to help mitigate or avoid altogether, the impacts of these disasters.[212] A contingency or emergency plan therefore can be described as a tool that anticipates actions and resolves problems that usually arise during emergency intervention via developed scenario.[213] Simply put, the contingency planning process can be broken down into three questions: what is going to happen; what are we going to do about it; what can we do ahead of time to get prepared.[214]

This chapter will discuss the basic principles of contingency planning based on the findings of the literature and Desktop Reviews. Section B will give a brief overview of the global perspective as regards contingency planning as well as discuss the findings from the sample countries in the Desktop Reviews as to how the process of contingency planning is carried out. Section C will outline the dissemination of the contingency plan and disaster preparedness practices through education programmes, training, drills and simulations, targeted at all members of society including school children. Section D provides recommendations about how to develop law and/or policy on contingency planning.

B. Contingency planning

i. Global perspective

In the global sphere, some international and regional agreements provide a duty on member states, their representatives, or organizations, in either the public or private sphere, to develop plans to help mitigate the impact of disasters. For instance, the *International Convention on Oil Pollution Preparedness, Response and Cooperation* provides that parties to the convention are required to establish measures for dealing with pollution incidents, either nationally or in co-operation with other countries.[215] Additionally, not only are ships required to carry a shipboard oil pollution emergency plan, operators of offshore units under the jurisdiction of member states are also required to have oil pollution emergency plans or similar arrangements which must be co-ordinated with national systems for responding promptly and effectively to oil pollution incidents.[216] The *Convention on Nuclear Safety* similarly requires member states to ensure plants have on-site and off-site emergency plans, that are routinely tested, to cover activities to be carried out in the event of an emergency plan.[217]

Another example is the *European and Mediterranean Major Hazards Agreement* which also promotes the development of emergency plans among states in an effort to reduce the impact of disasters of populations and thus enhance their resilience. Through its secretariat, the agreement offers a platform where governments can be assisted in improving their risk assessments, identifying best adoptable practices in addressing emerging threats as well as promoting coordination between national and international organizations to improve

reaction during emergencies. It also encourages community participation in the preparedness process and promotes community level and school-based education programmes aimed at training the different audiences on their rights, roles and responsibilities before and during a disaster.[218]

These international and regional agreements however often do not provide for the specific criteria that should be included in the emergency plan, as this is often left to the discretion of the member state based on their own national capacities. The International Organization for Standardization through ISO 2230:2018 provides some guidelines, the *Emergency Management Guidelines for Incident Management*, for the development of emergency plans. Most notably it provides for multi-stakeholder participation, focussing on community involvement in the development of these plans.[219] This ensures that the plans developed are not only suited to meet the needs of the affected communities but are also culturally sensitive.

ii. Contingency plans

As noted in the literature, contingency planning is one component of a much broader emergency preparedness process and is included within established processes such as disaster recovery planning and policy creation.[220] The literature is abundant in this area and the IFRC has developed state-of-the-art recommendations on the matter. The *Contingency Planning Guide*[221] builds on the collective experience of the Red Cross and Red Crescent Movement and can be used by governments and organizations in the development of contingency plans. Some of the key recommendation of this guide are listed below.

The guide provides that the contingency plans developed should reflect the context in which they are developed, that is, reflect the national, municipal and organizational resources and capacities available to respond the disaster.

The guide also encourages the development of the plan be as inclusive and collaborative as possible. This is because all the bodies (public or private) involved in the disaster response and recovery processes during the disaster will inevitably link and influence each other's actions. This appears to be a widely recognized principle as seen in the countries sampled in the Desktop Reviews carried out, as discussed below.

Further, to make a plan effective and efficient, it is necessary to plan for a coordinated response which maximizes existing capacities and minimizes gaps, duplications, delays and other constraints.[222] Indeed, the guide indicates they should also be linked to the plans, systems or processes of other government, partner or Red Cross Red Crescent Movement bodies at all levels – national, regional and global.

Contingency plans are usually based on specific events or known risks at local, national, regional or even global levels, such as earthquakes or disease outbreaks. Furthermore, IFRC notes as good practice that contingency plans be developed based on risk assessments as well as be dynamic documents to allow for their update depending on current risks. A risk register can be considered as best practice as it helps authorities and organizations think about risk in a practical way and thus makes it clearer which risks require planning.

The Desk Reviews are also in line with what the literature indicates, and suggest that contingency planning be undertaken when there is a high probability that a disaster may occur, or when there is evidence of recurring natural disasters such as floods and hurricanes.[223] While contingency plans do not in themselves aim to reduce risks, they should nevertheless be based on risk analysis that recognizes the most likely disaster scenarios as well as being sufficiently adaptable to deal with unexpected events.

Finally, the guide indicates that contingency plans should establish operational procedures for response, based on anticipated resource requirements and capacity. This includes identifying what human and financial resources will be required and how they should be managed, ensuring availability of emergency supplies, setting up communication procedures and being aware of a range of technical and logistical responses.[224] This advance decision making ensures timely and effective provision of assistance and humanitarian aid to those most in need when a disaster occurs. Time invested in contingency and response planning pays dividends in reduced damage and loss of life and more effective delivery of response and recovery services.[225]

As indicated above, the core function of contingency planning is to guarantee the best response possible by relevant authorities.[226] However, despite a substantial level of planning, some disasters are too great and can often have devastating effects on the community. Over and above the loss of property and livelihood activities, there is also the loss of life. The literature suggests the plans should also reflect some activities that will assist in the avoidance of devastating effects to the extent possible, as well as the recovery process of a disaster's unavoidable effects. This includes activities that ensure business continuity and restore livelihoods, as well as evacuation of people and property, including livestock, as discussed in Chapter 4 of this report, in order to minimize the damage caused to the community. In some instances, families are separated during the occurrence of the disaster or during the evacuation process. In these cases, the disaster management authorities should provide for ways for families to be reunited or trace the whereabouts of missing family members. In this respect, Chapter 9 of this report provides a detailed overview of the considerations taken into account as regards vulnerable groups.

iii. National legislation

Legislation has a crucial role to play in preparedness particularly with respect to contingency planning. In most cases, as discussed in Chapter 1, the basic law assigns roles and responsibilities for the principal tasks to be accomplished in national emergency situations. Legislation not only ensures that contingency plans are developed by the relevant authorities, but it also ascertains provision of necessary resources to guarantee the activities stipulated in the contingency plan.

The Desktop Reviews reaffirm the important role of contingency planning accorded by governments in disaster preparedness efforts. Most countries legal frameworks include some reference to contingency planning although with varying degrees of specificity regarding mandates, budget allocation and implementation.

The Desktop Reviews also reflect a need for inclusivity in the development of contingency plans. The process is reflected to have input from all relevant sectors at national and local level (inclusive of the community) as well as both public and private sector depending on the context and the nature of the disaster being planned for. From the sampled countries, inclusivity varies from country to country and in some cases is dependent on the risk being planned for. In some countries, it is the sole responsibility of the government to draft contingency plans and this can be either at the national level only, the local level only or inclusive of regional authorities. In Brazil, for instance, the law provides for the allocation of federal resources to the regional and local levels for the execution of preventative actions in disaster risk areas, together with disaster response and recovery actions.[227] The municipality is charged with the responsibility of preparing the contingency plan and core elements of the plan are provided.[228] The cascading of federal resources to the local municipal level demonstrates that the national government has a role to play in the contingency planning process.

In Italy, planning is undertaken at all state levels (national, regional, municipal) with municipalities being responsible for some disasters.[229] In Madagascar, the plan is developed by a central body linked in the Ministry of Interior at the national level, and relevant members of congress at the territorial level.[230] In Mexico all public and private institutions should have a plan to mitigate risks which should define preventative and response actions to employ during the emergency.[231] In Australia, contingency planning is provided for at state level and not national level.[232]

In some cases, some private organizations might have a unique burden of responsibility to develop these plans on their own due to the nature of their business. For example, in Kazakhstan, chemical and industrial plants are expected to develop risk management manuals and action plans with the support from professional relief providers.[233] Additionally, in Finland, owners of certain properties such as large residential buildings, offices and hotels as well as service providers in critical industries like electricity, water and data traffic are required to make emergency plans.[234]

The Desktop Reviews demonstrate the need for contingency plans to be informed by some risk mapping and/or risk assessments. Notably, as discussed in Chapter 4 of this report as well as in IFRC & UNDP's multi-country report on *Effective law and regulation for disaster risk reduction*, risk mapping is often legislated as a mandatory tool to inform the development of Early Warning Systems. In this regard however, in Colombia, Article 33 of Law 1523 of 2012 provides that the National Risk Management Plan shall provide an analysis of risk factors and monitoring of these factors.[235] This plan is used as a guiding tool in the development of the risk management plans at the territorial level.[236] In the Philippines as well, Section 12 of the Disaster Act provides that the Local Disaster Risk Reduction and Management Offices (**LDRRMO's**) are required to facilitate and support risk assessments and contingency planning activities at the local level.[237] As another example, the European Commission is bringing the Spanish government before the Court of Justice of the European Union (**EU**) for failure to comply with the EU Floods Directive (Directive 2007/60/EC), which requires Member States to assess the risk from flooding, to map the flood extent and to take adequate and coordinated measures to reduce this flood risk.[238]

In the UK, according to Section 2(1) of the Civil Contingencies Act, risk assessments are expected to be carried out at the local level and a risk register published thereafter.[239] In the cases where private persons or organizations are expected to make emergency plan as in the case of Finland, as provided for under the Rescue Act, these plans are expected to be informed by risk evaluations carried out beforehand.[240] Some countries, such as Madagascar and Australia develop multi hazard contingency plans as opposed to the singular hazard plans or contingency plans focused on a specific risk seen in other countries.[241] Nonetheless these types of plans do still require risk assessments to guide their development.[242] In Australia, the process of developing the State emergency response plan and recovery plan includes a risk assessment of the hazards to be covered by the plan.[243]

Another aspect of contingency planning considered by the Desktop Studies was with respect to respect to family links, specifically plans on how families are to be reunited are not expressly mentioned in legislation or provided for in most countries. A number of countries were found not have provisions for this expressly included in their legislation.[244] This is not to say that these activities would not be present in the event of a disaster, especially where relief efforts are supported by the National Society of that country.[245] As good examples, Viet Nam and the Philippines take consideration for this process with the

former providing for a family reunification within its national disaster preparedness and response plans and the latter providing for a Family Tracing Reunification System.

C. Education and drills

i. Education and training programmes

A crucial component of preparedness in any country is awareness at all levels of society, including of school-going children.[246] This could involve awareness on the disaster risks prevalent in a region or in the country, safety and emergency protocols and plans, as well as organizations at the local and national level tasked with providing relief support in the event of a disaster. This awareness can be created through education programmes at elementary, secondary and tertiary levels or through short training programmes targeted at all age groups and professionals, including simulations of emergency protocols in action.[247] As stated in the 32nd International Conference of the Red Cross and Red Crescent resolution on *Strengthening legal frameworks for disaster response, risk reduction and first aid*, having mandatory first aid education across the life-span of individuals, through mandatory training for school children and teachers and driver's licence applicants increases the chances that a skilled individual will be available to help during a disaster.

Education and trainings on any developed contingency plan go a long way to enhancing the effectiveness of the plan as the community and the relevant authorities are made aware of their roles, rights and responsibilities.[248] Further, these training programmes, particularly when they are inclusive of simulation exercises allow for the contingency plan to be seen in action and evaluate its workability in a specific context.[249] The education and training programmes, particularly those targeted at the community allow for the ease in assigning responsibilities to members of the community and building a volunteer network to support the implementation of the plan in the event of a disaster.[250]

ii. Drills and simulation

Emergency plans need to be written in the light of the prevailing legislation, as well as the provisions it makes for tackling major incidents and disasters.[251] The plan needs to be tested and exercised by the people and organizations that will use it. Classroom or actual field simulation exercises, based on specific scenarios, are an effective means to determine how realistic the plan is and to assess the capacity of the different actors.[252] Drills also serve to continually remind those likely to be affected of their expected actions in the event of a disaster. Legislation on contingency planning should therefore provide for trainings and drills to assure the effectiveness of the preparedness efforts put in in place.

From the Desktop Reviews it appears that, like the contingency planning process, the primary responsibility for offering trainings to disaster rescue and relief personnel lies with the national government. In Italy the importance of simulation exercises is reflected in the legislation. The law provides for "Civil Protection Exercises" which involve the various components and operating structures of the National Civil Protection Service.[253] The exercises design and test the validity of organizational and intervention models and are organized both at the national and regional levels. There are also "Rescue Rehearsals" which are operational exercises aimed at verifying the operational ability to respond to disasters.[254] In Australia, training procedures are to be provided by the Emergency Management Commissioner and are expected to include training, development and accreditation of incident management personal, and also specify functions of the Inspector

General for Emergency Management which include evaluating state wide training and exercising arrangements to maintain and strengthen emergency management capability.[255] Government agencies are also expected to participate in emergency training.[256] They also have a training framework that outlines core training courses and inductions relevant to the key disaster management stakeholders to support the effective performance of their role.[257] It is also recognized that exercises are an opportunity to test the effectiveness of the management plan.[258] In the Republic of Korea as well, the government is responsible for offering trainings and the disaster relief staff are expected to undergo these trainings periodically.[259]

Nonetheless, local institutions, universities and private organizations in some instances may provide these activities. For instance, in Finland, there is an Emergency Services College where civil defence managers and personnel are expected, as provided under the Emergency Powers Act, to participate in specific trainings organized by the college.[260] In Jordan, the Red Crescent Law includes responsibilities for the National Society to train volunteers in providing medical aid.[261] The Jordanian Civil Defence Law also encourages the private sector to train citizens on how to manage disasters as well as provide them with the equipment to do so.[262]

It is also observed that even in countries that do not have contingency plans, due consideration has been made to training relief personnel and the community in disaster preparedness practices. For example, in Palestine, as provided by the Civil Defence Law, trainings are offered to disaster rescue and relief personnel and certain universities offer post-graduate courses on disaster rescue and relief. Though training is restricted to rescue and relief personnel, the Higher Council on Civil Defence can set up teams of civilians from the Palestine National Authority and other bodies for civilian trainings and activities.[263]

iii. School-based education programmes

From the Sample Countries surveyed, though trainings and simulations are often provided for, there appears to be room for improvement with regard to education programmes targeting school-going children. A few have legislated on the issue. The Philippines, Palestine and Kazakhstan provide for school education programmes focused on disaster preparedness, though the standards are not clearly stipulated.[264] Colombia and Viet Nam also provide for school-based programmes and have gone a step further by indicating the minimum content that such a programme should focus on.[265] In Colombia for instance, Article 3 of the Resolution 7550 of 1994 provides that educational establishments should be asked to create and develop a "project" on prevention and attention of emergencies and disasters, in accordance with the guidelines issued by the Ministry of National Education. The project will include, at a minimum, the creation of a school committee for the prevention and response to emergencies and disasters as well as school brigades; school risk analysis; action plans; and school drills related to possible threats.[266]

Children are highly impacted by disasters and as such it is necessary to make them aware of the potential risks they face in their localities. As examples, following the 2010 Haiti earthquake and the 2005 Pakistan earthquake it was estimated that over 38,000 and 17,000 students respectively, died.[267] Further, as discussed in Chapter 9, disasters place children at an increased exposure to child protection risks such as abduction, trafficking, sexual and gender-based violence. Preparedness efforts in schools aim at reducing the vulnerability to, and impact of disasters on children as well as their teachers.[268] Students and teachers can also play a key role in sharing preparedness information with the general community, thereby making an important contribution to better preparedness overall.[269]

Adequate school preparedness is also important for ensuring the minimal disruption to education after disaster, which, as discussed in Chapter 8, makes an important contribution to protecting the right to education during emergencies. Resuming education as quickly as possible after disaster also supports longer-term recovery by providing physical and psychosocial support to children and minimizes the risk of trauma and exploitation. Unfortunately, reconstruction of schools is not always seen as a priority and can be overlooked by authorities during relief and recovery efforts.[270]

D. Recommendations

i. Contingency planning

Legislation on contingency planning is an important step in disaster preparedness as it almost certainly guarantees a sustainable safety net for a country in the event of a disaster. It is therefore recommended that legislation provide for the minimum standards for developing a contingency plan.

As deduced from the Desktop Reviews, the legislative framework should provide for the authority, organizations and/or private persons responsible for the development of contingency plans regardless of whether addressing multiple or single hazards. The legislation should also provide for the minimum provisions that ought to be reflected in the contingency plan. This could include designating relevant authorities to be involved in the rescue and recovery efforts, the allocation of resources and funding available (national, federal or municipal budgets) for the activities envisioned under the contingency plan, as well as other logistical considerations with respect to emergency supplies and setting up communication systems.

Understanding that restoration of social links soon after a disaster is a critical concern these standards should include provision for family tracing and reunification processes to allow families to find and reunite with their missing relatives who may have been displaced during evacuation or the occurrence of the disaster itself.

Furthermore, inclusive multi-stakeholder participation in planning, including private and public sectors and community involvement, ensures the rights, roles and responsibilities of all and that coordination mechanisms are accurately reflected in the plan. The more inclusive the plan at the development stage, the more well-known it will be by all stakeholders and thus more frequently referred to. Legislation should therefore ensure that the process of planning is participatory.

The content developed should be guided by the use of risk mapping and/or risk assessments. The use of carefully constructed scenarios should be encouraged in order to anticipate the needs that will be generated by foreseeable hazards.[271]

Finally, the *Contingency Planning Guide* developed by the International Federation of Red Cross and Red Crescent Society, and the *Emergency Management Guidelines for Incident Management* of the International Organization for Standardization, are useful tools and can be used by governments and organizations in the development of contingency plans.

ii. Education and drills

With respect to education and training programmes, drills and simulations, it is recommended to have legislation defining the entities bearing the primary responsibility for offering these at all levels of society, being either the government, local institutions, universities, private organizations and/or the National RC Society. Furthermore, these programmes

should aim at education and training the different audiences on their rights, roles and responsibilities before and during a disaster as well as first aid training.

The legislation should also be providing for and setting out the minimum standards and content in line with international best practice for training programmes and drills for professionals, including disaster and rescue and relief personnel, and local community as well as education programmes for school going children. These training and education programmes should seek to provide the target audience with information on what to expect during the disaster, and their rights, roles and responsibilities before and during a disaster. The training programmes should also be designed to reflect the fact that it is not a one-time event by providing refresher courses for persons trained.

All individuals should have access to disaster preparedness training as this guarantees greater awareness of the contingency plans set out and roles and responsibilities arising therefrom. Additionally, policy or other documents should encourage individuals, particularly young people, to get involved at their community level in the preparedness and response efforts as volunteers, and more recommendations are provided in this regard in Chapter 6.

Furthermore, legislation should also provide for simulation exercises and drills involving professional rescue and relief staff and the community respectively. Drills enforce the information shared with the community on the contingency plans through a practical exercise. Simulation exercises not only practically demonstrate to the rescue and relief personnel their roles during the disaster, they also offer a chance to evaluate the practicality of the contingency plan.

iii. School-based education programmes

For school-going children, the legislation should provide for the preparedness and response to emergencies and disasters in school, including the creation of a relevant school committee as well as school brigades, school risk analysis, action plan and school drills concerning possible threats.

4. Early warning, early action

A. Introduction

Since the mid-2000s, there has been growing international recognition of the importance of effective disaster response of early warning systems and forecast-based early action. This Chapter addresses each of these topics in turn. Section B discusses three key components of early warning systems: developing and implementing disaster risk knowledge; monitoring and forecasting hazards; and generating and issuing early warnings. Section C discusses 'early action', which refers to taking action prior to a hazard materializing on the basis of warnings, rather than responding only once the hazard materializes. Section D discusses evacuation, which is an important and well-established form of both early action and early response. Section E provides decision-makers with recommendations about how to develop law and policy to establish accurate early warning systems that trigger effective early action and rapid response.

B. Early warning systems

i. Background

UNDRR defines the term 'early warning system' as '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'.[272] Early warning systems have four key interrelated components:

- developing disaster risk knowledge through:
  - collecting data on hazards, exposure, vulnerability and capacity; and
  - analysing this information in disaster risk assessments;
- detecting, monitoring, analysing and forecasting hazards;
- disseminating authoritative, timely, accurate and actionable warnings; and
- ensuring preparedness at all levels to respond to the warnings received.[273]

Each of the four components of early warning systems is vital: a failure in relation to any element can lead to failure of the system as a whole. The focus of this Chapter is the role of law and policy in relation to the first three components of early warning systems listed above. The fourth aspect of early warning systems — preparedness to respond to warnings — is a very broad issue that is addressed by several portions of this Report, including section C of this Chapter ('Early Action'), section B of Chapter 3 ('Contingency Planning') and section C of Chapter 3 ('Education and Drills'). As the focus of this Report is on domestic preparedness and response, this Chapter focuses on domestic early warning systems, which includes national, sub-national and community-level systems. This Chapter does not focus on regional and international early warning systems.

The issue of early warning systems became the focus of significant international attention in the mid-2000s, following the 2004 Indian Ocean Earthquake and Tsunami, which then UN Secretary-General Kofi Annan described as a 'wake-up call' for governments about the importance of early warning systems.[274] At the time of this catastrophic disaster, there was a tsunami warning system for the Pacific Ocean, but not for the Indian Ocean.[275] Admittedly, even with a near instantaneous tsunami alert, many persons located on the Sumatran coast of Indonesia would not have been able to evacuate in time, as the tsunami reached the Sumatran coast within 30 minutes of the earthquake.[276] A tsunami warning

system could, however, have potentially saved many of the 51,000 lives that were lost in Sri Lanka and India, as the tsunami took two hours to reach those countries.[277]

One of the five 'priorities for action' in the *Hyogo Framework for Action 2005–2015* was to 'identify, assess and monitor disaster risks and enhance early warning'.[278] The *Hyogo Framework* identified several 'key activities' for early warning. One key activity was to develop early warning systems that are 'people centered', and whose warnings: are timely and understandable to those at risk; take into account the demographic, gender, cultural and livelihood characteristics of the target audiences; and include guidance on how to act upon warnings.[279] Another key activity identified in the *Hyogo Framework* was to strengthen coordination and cooperation among all relevant sectors and actors in the early warning chain in order to achieve fully effective early warning systems.[280]

Between 2005 to 2015, there was a paradigm shift away from providing hazard information to providing impact information, and away from single hazard to multi-hazard early warning systems.[281] At its most basic level, providing impact information rather than hazard information means providing information about 'what the weather might do', rather than simply 'what the weather might be'.[282] This requires information and analysis about the at-risk population's exposure and vulnerability to hazards, not just about the geographic location and magnitude of hazards. Warnings that contain information about predicted impacts are more meaningful and actionable; they allow the at-risk population to understand how they may be affected and to use this information to identify the most appropriate preparedness and response measures.[283]

A multi-hazard early warning system is one that addresses several hazards and/or impacts, whether of similar or different types.[284] The paradigm shift towards multi-hazard early warning systems partly reflects a growing recognition that hazards and impacts may occur simultaneously, cascading or cumulatively over time and may, therefore, have interrelated effects.[285] In this context, multi-hazard early warning systems can allow actors that are responsible for different types of hazards and impacts to share information, coordinate activities and use standardized processes that improve the consistency and effectiveness of warnings.[286] For example, a multi-hazard early warning system may use a single, shared platform to issue warnings using standardized terminology and graphics.

The *Sendai Framework* reflects the international community's continued commitment to improving early warning systems and consistently refers to '*multi-hazard* early warning systems'.[287] One of the seven global targets of the *Sendai Framework* is to 'substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030'.[288] In May 2017, the inaugural Multi-Hazard Early Warning Conference was held in Cancun, Mexico, with a focus on how countries can achieve this *Sendai Framework* target.[289] One of the outcomes of the Conference was the adoption of a *Multi-hazard EWS Checklist*, which is structured on the basis of the four key elements of early warning systems identified above.[290] The *Checklist* is a practical, non-technical tool that sets out a list of actions to assist in developing, evaluating or refining an early warning system.[291] It adds to existing guidance in this area, most notably the ten good practices for effective domestic multi-hazard early warning systems identified by the World Meteorological Organization in 2012 through a multi-country research project (the **WMO Good Practices**).[292]

The *WMO Good Practices* and the *Multi-Hazard EWS Checklist* emphasize that law and policy have an important role to play in promoting effective early warning systems. Two of the WMO Good Practices expressly refer to the role of legislation and policy. The first WMO

Good Practice is 'strong political recognition of the benefits of early warning systems, reflected in harmonized national and local disaster risk management policies, planning, legislation and budgeting'.[293] The third WMO Good Practice is 'role clarification' meaning that 'stakeholders are identified, their roles and responsibilities and coordination mechanisms are clearly defined and … documented within national and local plans, legislation, directives and memoranda of understanding'.[294] The *Multi-hazard EWS Checklist* also emphasizes the role of law in clarifying the roles and responsibilities of all stakeholders and establishing coordination mechanisms.[295] It provides some additional, specific recommendations for the role of law and policy in relation to disaster risk knowledge and warnings.[296] These specific recommendations are discussed in sections i and iii below.

ii. Disaster risk knowledge

In relation to disaster risk knowledge, the *Multi-hazard EWS Checklist* recommends that law or policy should mandate the preparation of hazard, vulnerability and capacity assessments for all areas.[297] It further recommends that there should be national standards for the systematic collection, sharing and assessment of disaster risk knowledge and data relating to hazards, exposures, vulnerabilities and capacities.[298] Finally, it recommends that one national agency should be designated as responsible for coordinating hazard identification and risk information, and that there should be a single central repository of all disaster risk knowledge.[299]

The information provided in the Desktop Reviews is not sufficiently detailed to permit an assessment of the laws and policies governing disaster risk knowledge in the Sample Countries. The Desktop Reviews do, however, identify some examples of good practice in this area. In Colombia, for example, a national governmental agency, the UNGRD, is mandated to coordinate risk mapping and consolidate the resulting information into a single repository.[300] The UNGRD has recently published a national 'Risk Atlas' which is a comprehensive set of hazard maps and risk assessments for all geographic regions, which incorporates detailed analyses of exposure, vulnerability and capacity.[301] In the UK, the Cabinet Office is responsible for preparing a multi-hazard National Risk Register of Civil Emergencies based on a national risk assessment, and this process is replicated at the local level by local authorities.[302] The National Risk Register and Community Risk Register are subsequently used to inform contingency planning.

In January 2015, the World Meteorological Organization published a major report analysing the developments in early warning systems during the period since the adoption of the *Hyogo Framework* (henceforth, the **WMO 2015 Synthesis Report**).[303] The *WMO 2015 Synthesis Report* paints a mixed picture, identifying both areas of significant progress, yet also the fact that many challenges remain, especially in developing and least developed countries. In relation to disaster risk knowledge, the *WMO 2015 Synthesis Report* identifies that a persistent issue is that risk assessments remain predominantly focussed on hazards and do not adequately address social, economic and environmental vulnerability.[304] This indicates that, consistent with the *Multi-Hazard EWS Checklist*, there is an important role for law to play in mandating vulnerability assessments for all areas.

iii. Detecting, monitoring, analysing and forecasting hazards

In relation to monitoring and forecasting hazards, the *Multi-hazard EWS Checklist* primarily provides operational guidance, rather than guidance on law and policy.[305] It identifies that an effective monitoring and forecasting system requires: well-trained personnel; the use of high quality technical equipment that generates data in real time (or near real time) and

is appropriate for local conditions; timely processing and analysis of data, including modelling and forecasting using accepted scientific methodologies; and routine maintenance and upgrading of all software and hardware.[306] The *WMO 2015 Synthesis Report* identifies that some of the key persisting issues in this area are: inadequate technical capacity due to a lack of resources and expertise (especially in developing and least developed countries);[307] and incomplete coverage due to certain hazards and/or geographic regions falling outside the scope of existing monitoring networks.[308] These findings suggest that there may be an important role for law to play in ensuring that adequate funding is allocated to monitoring and forecasting, and mandating relevant governmental actors to monitor *all* hazards in *all* geographical areas.

iv. Warnings

Content of warnings

In relation to the content of warnings, the *Multi-hazard EWS Checklist* and the *WMO Good Practices* recommend that warning messages should be: clear and consistent; include impact information; be issued by a recognized and authoritative source; and provide clear guidance about the actions the recipients should take (e.g. 'evacuate', 'take cover').[309] The *Multi-hazard EWS Checklist* specifically recommends that the law should establish standardized processes for generating and issuing warnings.[310] Standardized processes for generating and issuing warnings may be particularly important for ensuring clarity and consistency where several different actors are responsible for generating and/or issuing warnings. They may even be used to introduce standardized content for warning (i.e. standardized wording, colour-coding and graphics).[311]

The Desktop Reviews indicate that there are two main approaches to issuing warnings amongst the Sample Countries. A small number of the Sample Countries have adopted a centralized approach to warnings, whereby warnings relating to different types of hazard are *issued* by the same governmental agency, even if they are *generated* by different agencies.[312] This is the case, for example, in the State of Victoria, Australia, where warnings generated by a wide range of agencies are issued by Emergency Management Victoria through, amongst other channels, an interactive online map and smartphone application.[313] In most Sample Countries, however, there are multiple agencies that generate *and* issue warnings, with each agency having responsibility for specific hazards.[314] Thus, for example, in the Philippines: the Philippine Atmospheric, Geophysical, and Astronomical Services Administration (**PAGASA**) is responsible for issuing warnings for floods, tropical cyclones and storm surges; the Mines and Geo-sciences Bureau (**MGB**) for landslides due to rainfall; the Philippine Institute of Volcanology and Seismology (**PHIVOLCS**) for tsunami and volcanic disasters; and the Department of Health for pandemics and/or epidemics.[315] The *Multi-hazard EWS Checklist* implies that this multi-agency approach is not necessarily problematic provided that the law clearly outlines the roles and responsibilities of each agency and establishes a standardized processes for generating and issuing warnings.

The majority of the Desktop Reviews do not provide detailed information about the content of disaster warnings because this issue was not included in the research questions provided to reviewers. Some of the Desktop Reviews do, however, identify some examples of good practice in this area. For example, in South Africa, there is a requirement that warnings must include information and guidance that will enable those at risk to take measures to avoid or reduce the risk.[316] In Madagascar, the National Office for Disaster Risk Management and the Meteorological Department have implemented a colour-coded warning system that provides recipients with clear directions about the measures they should take to prepare

for the anticipated disaster.[317] The *WMO 2015 Synthesis Report* identifies that there is a persisting problem with warning messages that are incomplete or unclear and, as a result, are difficult to interpret or use.[318] One specific problem is the failure to use risk knowledge to develop warnings that include information about likely impacts, although there is some improvement in this area.[319] There may, therefore, be a role for law and policy to require relevant governmental actors to include impact information in warnings.

Dissemination and communication of warnings

Effectively disseminating and communicating warnings entails reaching the entire population in a timely manner, including seasonal and remote populations.[320] In relation to this issue, the *Multi-hazard EWS Checklist* primarily provides operational guidance, rather than guidance on law and policy. It identifies that effectively disseminating and communicating warnings requires: using many different types of communication channels; developing partnerships with public and private sector entities that may be able to disseminate warnings (e.g. radio, television, social media, mobile phone providers); maintaining and upgrading hardware that is used to disseminate warnings; developing back-up plans in case of hardware failure; developing feedback mechanisms to verify that warnings have been received; and identifying which population groups may be hardest to reach and developing plans to reach them.[321]

The Desktop Reviews paint a mixed picture of the Sample Countries' laws and policies regarding the dissemination and communication of warnings. On one hand, the Desktop Reviews do provide some examples of good practice in this area: several of the Sample Countries have laws and/or policies that envisage the use of multiple communication channels to disseminate warnings,[322] and that mandate private sector media and telecommunications companies to assist with dissemination.[323] For example, in both the Philippines and Korea, the government has a power to require private telecommunications companies to disseminate emergency warnings.[324] In Korea, the law specifies that the government has priority use of telecommunications equipment for this purpose, while in the Philippines the law stipulates that this service must be provided free of charge.[325] On the other hand, however, only one of the Sample Countries, South Africa, has law or policy that envisages feedback mechanisms to ensure that warnings have been received, and that specifically requires warnings to be disseminated to the most at-risk and remote populations.[326]

Equally, the *WMO 2015 Synthesis Report* indicates mixed progress in this area. According to the *WMO 2015 Synthesis Report*, in some countries, the use of new technology and social media has allowed for rapid dissemination of warning messages and reduced infrastructure requirements and costs.[327] Yet, at the same time, many least developed countries still have inadequate telecommunications and technology facilities to disseminate warnings to all at-risk persons.[328] To the extent that telecommunications facilities are insufficient to reach the entire population, they may be supplemented with community early warning systems. Bangladesh's Cyclone Preparedness Programme (**CPP**) is an example of a highly successful community early warning system, which has substantially reduced death tolls due to cyclones.[329] Under the CPP, warnings are initially disseminated from the Bangladesh Red Crescent Societies' National Headquarters to local branches using high frequency and very high frequency radio networks.[330] Subsequently, warnings are disseminated by a vast grassroots network of volunteers, who travel through their communities on foot, bicycle or motorbike, displaying flags signalling the level of danger and making announcements through megaphones.[331] On the eve of Cyclone Mora, a category one cyclone that struck Bangladesh on 29 May 2017, more than 55,000 volunteers mobilized to distribute early

warning messages and assist people to evacuate.[332] Section E below provides decision-makers with recommendations about how to develop law and/or policy relating to the content and dissemination of warnings, taking into account the guidance provided by the *Multi-hazard EWS Checklist* and the *WMO Good Practices*.

C. Forecast-based early action

During the past decade there has been a paradigm shift towards the concept of 'early warning early action', which refers to taking action *prior* to a hazard materializing *on the basis of* warnings, rather than responding only once the hazard materializes.[333] The practical manifestation of 'early warning early action' is FbA mechanisms that release funds and initiate early actions when a forecast event surpasses a pre-determined magnitude and probability (e.g. a 70% chance of a category 3 cyclone).[334] Early actions include actions designed to mitigate the impacts of a hazard (e.g. reinforcing buildings), and actions designed to facilitate a quicker or more effective disaster response (e.g. pre-positioning stocks).[335] Forecast-based early action is particularly well suited to slow-onset hazards such as drought, based on the premise that early action can actually prevent it becoming a disaster.[336] Thus the concept has been applied in the African context with regard to drought and food security, where early action relating to agriculture and grazing may be triggered by certain predetermined thresholds or triggers such as satellite surveillance data, or in the case of drought-related famine, a certain percentage increase in clinical presentations of acute malnutrition.[337]

The rationale for the paradigm shift towards early action is that pre-emptive, rather than responsive, action is generally more effective at mitigating the impacts of hazards and natural phenomena, reducing or even preventing disaster to exposed communities, and it is also more cost-efficient than responding to disasters.[338] Although evidence on the cost savings of early action is limited, the key studies that exist have very positive findings.[339] Taking early action does, of course, carry a risk of 'acting in vain' due to the possibility of a hazard not materializing or being less severe than anticipated.[340] Yet, there is general agreement that 'false early response is more than offset by the cost of a late response'.[341]

The literature indicates that there are at least four key components of FbA mechanisms:

- **Trigger:** The first component of a FbA mechanism is the trigger for early action. The trigger is usually a forecast or prediction of an event that either: (i) exceeds a predetermined magnitude; or (ii) exceeds a predetermined magnitude *and* probability.[342]
- **Timescale:** FbA mechanisms can be designed for short, medium or long-term timeframes. The timeframe for early action is determined by the proximity of the trigger to the forecast event. For example, the trigger for short-term early action may be a forecast of a cyclone occurring within 12 hours.[343] The trigger for medium-term early action may be a forecast of above-average cyclone activity for the coming season.[344] Short, medium and long-term timeframes can be used in parallel,[345] although it should be noted that long-term early action initiatives may overlap with development and disaster risk reduction initiatives.[346]
- **Actions:** The 'early actions' that are appropriate largely depend on the timeframe for action. For example, evacuation may be an appropriate action in a short-term timeframe, while an appropriate action for a medium-term time frame may be to revisit contingency plans and replenish stocks of disaster relief supplies,[347] or support destocking of farms or water rationing in the face of a forecast drought season. Other factors that may determine what 'early actions' are appropriate include the nature of the forecast

event and the at-risk population's capacity and vulnerability. Sometimes early action begins with the release of government or international assistance grants, or insurance funds based on certain parameters (forms of 'parametric insurance' or 'forecast-based financing').[348] This allows pre-emptive action by affected people, such as destocking and substitute livelihood activities in the face of drought, or it can simply allow them to survive a drought season without suffering dire poverty and malnourishment.[349]

- **Automated vs deliberative approach:** Some FbA mechanisms provide for early actions to be pre-determined and implemented *automatically* when the relevant trigger occurs (henceforth, the *automated approach*).[350] Other mechanisms provide for actions to be determined once the relevant trigger occurs (henceforth, the *deliberative approach*).[351] There are advantages and disadvantages to both approaches. On one hand, the automated approach minimizes real-time decision-making, thereby permitting rapid action in relation to sudden-onset hazards.[352] On the other hand, the deliberative approach preserves the flexibility to respond to the situation as it unfolds, and to make decisions as more detailed and accurate information becomes available, which may be more appropriate to medium term risks such as a forecast seasonal drought.

With the exception of evacuation, which is discussed in Section D below, FbA fell outside the scope of the Desktop Reviews. While the literature on FbA is growing, it does not yet address the role of legal and policy frameworks in relation to FbA. This may be due to the fact that, to date, FbA has largely been implemented through pilot or small-scale programs, and that governments and humanitarian actors are only now beginning to 'scale up' FbA.[353] Many of the types of actions that constitute FbA (e.g. evacuation, pre-positioning relief supplies) are ordinarily addressed in contingency plans or Standard Operating Procedures (**SOPs**), although this is less so for medium term risks such as drought. This does not, however, mean that there is no role for law and policy to play in facilitating FbA. On the contrary, governments may develop policies that formally adopt 'early warning early action' as a guiding principle of their disaster management systems and identify FbA mechanisms as a key tool for implementing this principle. Importantly, specific legislative powers may be required to authorize the release of funds based on forecast triggers, rather than in response to events after they occur. Legislation may require relevant governmental actors to develop FbA mechanisms, including by revising existing contingency plans and/or SOPs and authorization to access disaster funds for forecast-based early action. In general, it is preferable for FbA mechanisms to be integrated into existing planning and budget processes in order to avoid creating parallel processes.[354]

D. Evacuation

i. Evacuation of people

The term "evacuation" commonly refers to the temporary movement of people to a safer place before, during or after a hazardous event in order to protect them. It is distinguished from other types of people movement in disaster settings, such as displacement or planned relocations (which are addressed in Chapter 7 of this report), due to the short timeframe and emergency nature of the movement, and evacuations may be mandatory, advised or spontaneous.[355]

Recent literature and decisions of international human rights bodies support the existence of a duty of States to evacuate people as part of broader duties to protect life and security.[356] Bound up with this duty are obligations to support the monitoring of hazard situations,

providing information to people at risk, monitoring and making plans for emergency evacuations. Further conditions for evacuations to be applied "to the greatest practicable extent" are included the IASC Operational Guidelines on the Protection of Persons in Situations of Natural Disasters (**IASC Guidelines**), such as the provision of safe roads or other means of transportation to a safe area, conditions of safety, nutrition, health, hygiene and proper accommodation, non-separation of family members, non-discrimination and special assistance for vulnerable people such as those with disabilities, the injured and the elderly without family support.[357]

However the duty for evacuation is not without conditions and limitations, largely related to the need to balance this duty with other corresponding principles and rights, such as necessity, last resort and freedom of movement. This is particularly relevant in the context of mandatory evacuation, when people are required to evacuate and/or refuse to follow a mandatory evacuation order.[358]

The Camp Coordination and Camp Management Cluster's *Comprehensive Guide for Planning Mass Evacuations in Natural Disasters* (**MEND Guide**)[359] provides detailed recommendations on how to implement evacuations in accordance with these principles, rights and duties, which provides a useful reference for the further development of legislation and policies in this area.

The Desktop Reviews indicate that the vast majority of the Sample Countries' laws provide for emergency evacuations. A key finding from the Desktop Reviews is that, in the vast majority of Sample Countries, a government is only empowered to order evacuations when a 'state of disaster' (**SoD**) or 'state of emergency' (**SoE**) has been declared.[360] Mandatory evacuation may be characterised as a derogation from the right to freedom of movement. International human rights law generally provides that such derogation is only permissible during a public emergency.[361] The *International Covenant on Civil and Political Rights* (the **ICCPR**) imposes a further condition: it provides that derogation is only permissible during a public emergency that has been 'officially proclaimed'.[362] The fact that the Sample Countries' laws generally restrict mandatory evacuation to a declared SoE/SoD is, therefore, a good practice that is consistent with international human rights law. The issue of derogation from human rights during a declared SoE/SoD is discussed in more detail in Section D of Chapter 5. Interestingly, in the State of Victoria, Australia, the government's power to conduct mandatory evacuation from a declared disaster area is restricted: it cannot be used to compel evacuation of a person that has a financial interest in the relevant land or building.[363] The Desktop Reviews did not identify any similar restrictions on the power to order mandatory evacuations in the other Sample Countries. Indeed, this requirement does not apply in the State of Queensland, Australia, which demonstrates that the nature of evacuation powers may differ significantly within, not just between, different countries.

The Desktop Reviews indicate that, although the vast majority of the Sample Countries' laws provide for emergency evacuations, the detailed arrangements for evacuations generally appear in planning documents, such as evacuation plans or general disaster contingency plans. Several Desktop Reviews indicate that it was not possible to locate this type of detailed planning document,[364] which may indicate either that detailed evacuation planning has not been conducted, or simply that it has not been made publicly available. Some of the Sample Countries do, however, have highly detailed evacuation plans.[365] In Italy, where disaster management is devolved to the Regions, there are many examples of highly detailed regional and municipal evacuation plans.[366] The literature, including the *Multi-hazard EWS Checklist*, emphasizes the importance of comprehensive planning for evacuations.[367]

Matters that should be planned in advance include (but are not limited to) evacuation routes, modes of transport for evacuees (e.g. public or private modes of transport; air, ground or sea travel), the location of evacuation shelters or designated safe areas, and the roles and responsibilities of all relevant governmental and non-governmental actors.[368] In order to ensure the at-risk population's safety, these matters should be determined using hazard maps and risk assessments.[369] Arguably, the law has a role to play in mandating relevant governmental actors to prepare evacuation plans and in specifying the matters that should be included in such plans.

Certain groups may be more likely to require special assistance to evacuate in an emergency due to impaired or limited mobility. These groups include (but are not limited to): persons with disability or illness, young children and older persons; and impoverished or vulnerable groups that have low levels of access to private modes of transport. Another group that requires special consideration is prisoners who, self-evidently, have restricted mobility. Failing to plan to assist these groups to evacuate exposes them to heightened danger. A prominent example is the impact that Hurricane Katrina had on the prison population and the poorest communities in New Orleans. For a large proportion of the residents of New Orleans' impoverished neighbourhoods, a lack of access to private transportation made it very difficult to evacuate.[370] Further, although a mandatory evacuation order was issued for New Orleans, 8,000 prisoners in Orleans Parish Prison remained in jail and 'endured days of rising, toxic waters, a lack of food and drinking water, and a complete breakdown of order'.[371]

The Desktop Reviews indicate that a small number of the Sample Countries have adopted specific measures to assist persons with disabilities or illness, young children, older persons and/or prisoners to evacuate. The types of measures adopted vary considerably, including whether they are established through legislation or planning documents. In Italy, for example, regional evacuation plans often provide for the registration of older persons and people who require evacuation assistance, and a shuttle bus service to evacuate such persons.[372] In the Philippines, the law requires children to be given priority during evacuations, and community civil society organizations are tasked with ensuring the safety and well-being of children during evacuations.[373] In the States of Victoria and Queensland in Australia, hospitals, aged care facilities, educational facilities and prisons are required to develop their own evacuation plans.[374] The fact that only a small number of the Sample Countries have adopted specific measures to assist such persons to evacuate indicates that there is significant room for improvement in this area.

ii. Evacuation of livestock and domestic animals

The evacuation of livestock and domestic animals (i.e. pets) is an issue that, arguably, does not receive enough attention in disaster preparedness and response. Yet, it is an extremely important issue, not only for the welfare of animals themselves, but also for that of their owners. A common issue is that at-risk persons may refuse to evacuate or try to re-enter dangerous areas if they are not allowed to take their domestic animals with them. For example, it is estimated that more than half of the people who did not evacuate during Hurricane Katrina in 2005 chose to stay because they were unable to take their pets with them.[375] This places people and first responders at greater risk. A further issue arises when evacuees arrive at evacuation centres that are unable to accommodate their pets.[376] This can result in evacuees choosing not to enter or stay in relief centres, which can result in them failing to receive adequate assistance.

The evacuation of livestock can pose enormous logistical challenges due to the sheer size and quantity of animals that may be involved. As an example, a New Zealand study has

modelled the amount of time and resources that would be required to evacuate dairy cows in the event of a moderate to large eruption of the Taranaki volcano.[377] It estimates that the evacuation of the 200,000 dairy cows in the vicinity of the volcano would cost more than NZ$2 million and take between 7 and 21 days (depending on the number of truck and trailer units used).[378] Ultimately, the study recommends against attempting a complete evacuation due to 'extreme difficulty, if not impossibility'.[379] The study does, however, acknowledge that the eruption of the Taranaki volcano would create an especially challenging situation and that other types of disaster, such as floods, may pose less severe logistical challenges.[380]

The Desktop Reviews indicate that the evacuation of domestic animals and livestock are issues that are addressed in planning documents rather than in legislation. Only three of the 20 Samples Countries have planning documents that address this issue.[381] As an example, in Italy, various regional and municipal disaster plans identify areas where livestock may be accommodated in the event of an evacuation, and one municipal plan specifically provides for people and their domestic animals to be assisted.[382] As a further example, in the State of Queensland, Australia, the Evacuation Guidelines encourage local disaster management groups to address domestic animals in their evacuation plans.[383] As one of many proposed measures, the Evacuation Guidelines suggest developing a strategy for residents in low risk areas to provide foster care for domestic animals from high risk areas.[384] The fact that only three of the 20 Sample Countries have planning documents that address the evacuation of livestock and domestic animals indicates that there is large scope for improvement in this area.

World Animal Protection have developed protocols and guidelines for including animal scenarios in desk simulations and field drills, as well as a training course "PrepVet" for addressing animals in disasters, designed for veterinarians and civil defence organizations.[385] Their work has resulted in the development of a Disaster Management Plan by the Government of India's Department of Animal Husbandry, Dairying and Fisheries, which covers a comprehensive range of measures for risk prevention, preparedness, response and post-disaster protection of animals, building on a number of India's key legislative instruments including the Disaster Management Act 2005, the National Disaster Management Policy 2009, the National Livestock Policy 2013 and the National Disaster Management Agency Guidelines on Biological Disaster Management 2008.[386]

The United States (**US**) provides an example of good practice in relation to laws and policies governing the evacuation of domestic animals and livestock during disasters. The well-publicized failure to evacuate pets and pet-owners during Hurricane Katrina catalysed legislative reform in the US.[387] In 2006, Congress passed the *Pets Evacuation and Transportation Standards Act* (the **PETS Act**), which requires state and local emergency plans to 'account for the needs of individuals with household pets and service animals before, during, and following a major disaster or emergency'.[388] The PETS Act permits the Federal Emergency Management Agency (**FEMA**) to reimburse state and local governments for rescuing, caring for, and sheltering animals in an emergency. It also permits FEMA to provide funding to states and localities for the creation, operation, and maintenance of pet-friendly emergency shelters.[389] In relation to livestock, the US State of Texas provides an example of good practice. The Texas Animal Health Commission (**TAHC**) is a state agency whose functions include assisting farmers and ranchers to evacuate livestock during emergencies.[390] In order to discharge this function, the TAHC coordinates an Animal Response Team comprising representatives from federal and state agencies, industry and other stakeholders.[391] One of the key practical measures that TAHC implements is to administer 'holding facilities'

for livestock that have been evacuated.[392] These examples from the US demonstrate that it is possible for government to use law to address the evacuation of animals during disasters by: (i) mandating consideration of this issue in disaster or evacuation planning processes; and (ii) assigning responsibilities for animal evacuation to relevant governmental actors.

E. Recommendations

The recommendations in this section rely heavily on the WMO's *Multi-hazard EWS Checklist*. When developing law and/or policy regarding early warning systems, decision-makers are encouraged to refer directly to this resource for more detailed guidance.

i. Early warning systems

In order to create an effective multi-hazard early warning system, law and/or policy should clearly stipulate the roles and responsibilities of all actors involved in: developing disaster risk knowledge; detecting, monitoring, analysing and forecasting hazards; and generating and issuing early warnings. Law and/or policy should also establish standards for the systematic collection, sharing and assessment of risk information and data relating to hazards, exposures, vulnerabilities and capacities. Further, it should establish coordination mechanisms for all relevant actors.

In relation to disaster risk knowledge, law and/or policy should mandate hazard mapping and risk assessments for all hazards in all geographical areas. It should require risk assessments to address the exposure, vulnerability and capacity of people, infrastructure and economic sectors that may be affected by hazards. Law and/or policy should also mandate the creation of a standardized central repository of all disaster risk knowledge.

In relation to monitoring and forecasting, law and/or policy should mandate monitoring and forecasting for all hazards in all geographic areas, as well as a requirements for information-sharing between different technical agencies and levels of government. In addition, the law should allocate sufficient funding to monitoring and forecasting agencies to enable them to: obtain high quality technical equipment; maintain and upgrade software and hardware; and train and retain highly-qualified staff.

In relation to warnings, law and/or policy should establish standard processes for generating and issuing warnings. Importantly, law and/or policy should require warnings to contain: impact information (i.e. information about what the 'weather might do', not just about what the 'weather might be'); and clear practical guidance (e.g. 'evacuate', 'take cover'). Law and/or policy should also require the agencies that are responsible for issuing warnings to:

- use a wide variety of communication channels to disseminate warnings;
- develop and implement feedback mechanisms to verify that warnings have been received; and
- develop and implement plans to reach the most at-risk and remote populations.

In addition to the foregoing, the law should mandate private telecommunications companies to disseminate warnings upon request and at no charge.

ii. Forecast-based early action

At present, there is a lack of literature regarding the role of law and policy frameworks in relation to early action, including FbA.

Notwithstanding the foregoing, the positive results of pilot and small-scale programs warrants giving serious consideration to whether, and how, to use law and/or policy to promote FbA. Decision-makers should consider developing policies that formally adopt 'early warning early action' as a guiding principle of their disaster management systems and identify FbA mechanisms as a key tool for implementing this principle, as well as ensuring budget allocations for FbA and authority to use funds in response to forecast-based triggers.

Decision-makers should also consider requiring relevant governmental actors to develop FbA mechanisms. In general, decision-makers should strive to do this in a manner that integrates FbA into existing planning processes — for example, by updating existing contingency plans and SOPs — rather than creating parallel processes.

iii. Evacuation of people

Law and/or policy should mandate governmental DPR actors to develop comprehensive evacuation plans that specify: evacuation routes; modes of transport for evacuees (e.g. public or private modes of transport; air, ground or sea travel); the location of evacuation shelters or designated safe areas; and the roles and responsibilities of all relevant governmental and non-governmental actors. An evacuation plan may be a stand-alone document or form part of a general disaster contingency plan. In order to promote evacuees' safety, the law should require the persons responsible for developing evacuation plans to refer to hazard maps and risk assessments, especially in relation to the selection of evacuation routes and evacuation shelters.

Law and/or policy should clearly state the principles and conditions under which evacuations, in particular mandatory evacuations, may take place, with due regard to humanitarian principles, human rights and international standards.

Law and/or policy should require evacuation plans to contain measures to ensure that people with impaired, limited or restricted mobility are assisted to evacuate. This includes (but is not limited to) some members of the following groups: young children; older persons; persons with disabilities; prisoners; and persons with limited access to private transport. The law should also require hospitals, schools, prisons and nursing homes to develop their own evacuation plans.

Decision-makers should also refer to the *MEND Guide* as a useful resource for the development of legislation and policy in this area.[393]

iv. Evacuation of livestock and domestic animals

Decision-makers should consider amending the law to require governmental DPR actors to include domestic animals and livestock in evacuation plans. More specifically, they should consider legally requiring governmental DPR actors to make plans for: accommodating domestic animals at evacuation centres or nearby; temporarily making land or other facilities available for evacuated livestock; and assisting people to evacuate their animals when they are unable to do so independently.

The law should mandate businesses that have large numbers of livestock to prepare livestock evacuation plans. In addition, decision-makers should develop and implement policies designed to encourage the general public to make their own evacuation plans for domestic animals and livestock. This may include raising public awareness and providing education and planning tools.

5. States of emergency and states of disaster

A. Introduction

This Chapter addresses declarations of a 'state of emergency' (**SoE**) or a 'state of disaster' (**SoD**), which are a common legal mechanism for initiating disaster response. Section B introduces the distinction between SoEs and SoDs and outlines the main differences between these legal phenomena. It also explains the shared, underlying function of SoEs/SoDs, which is to cause a switch to an emergency legal modality in which special governance arrangements apply and special government powers are available. Section C discusses the key dimensions of SoE/SoD powers, which includes the trigger for the power, the identity of the person or entity authorized to make a declaration, and the consequences of a declaration. Section C outlines how these dimensions of SoE/SoD powers differ significantly among the Sample Countries. Section D discusses the limitation and derogation of rights during an SoE/SoD, while Section E outlines the key types of safeguards that can be used to preserve the rule of law and to promote transparency and accountability during an SoE/SoD. Section F provides decision-makers with recommendations about how to develop or amend laws relating to SoEs/SoDs in order to promote a proportionate and tailored response to different degrees and types of disaster.

B. States of emergency vs states of disaster

According to earlier IFRC research, there is a distinction between 'states of emergency' (**SoE**) and 'states of disaster' (**SoD**).[394] The power to declare an SoE is usually established by a country's constitution and vested in persons or entities at the highest level of government. SoEs are generally designed for extreme and unforeseeable situations that fundamentally challenge the prevailing legal order. The power to declare an SoE is, accordingly, often premised on the existence of a serious threat to security, public order or the constitutional order. SoEs are more likely to be triggered by disasters such as civil war or widespread civil unrest, rather than by meteorological disasters, epidemics or industrial accidents, but are often worded broadly enough to apply to any kind of disaster. The effect of declaring an SoE is generally to centralize decision-making and enliven special governmental powers that do not otherwise exist. The declaration of an SoE often also permits government to limit, or even derogate from, constitutional rights and/or human rights.[395]

In contrast to SoEs, SoDs are generally established by legislation, rather than in a country's constitution. A key point of distinction between SoEs and SoDs is that the responsibility to declare an SoD is often vested in sectoral governmental actors, such as the national disaster management office, security forces or the police. The effect of declaring an SoD is usually to activate disaster management plans, including mobilizing personnel and resources. Similar to an SoE, this may include enlivening special governance arrangements and governmental powers that do not otherwise exist, such as powers to evacuate or to quarantine people. Yet, in contrast to SoEs, the actions of governmental actors under an SoD are usually more tightly constrained and may be limited to powers or actions set out in disaster management legislation or plans.[396]

In the majority of disasters, it will be more appropriate to declare an SoD, rather than an SoE (presuming that both forms of declaration are available). This is because the majority of disasters are not sufficiently severe to endanger the prevailing legal order, or to warrant the centralization of decision-making, and interference with constitutional and human rights.[397] Unfortunately, the vast majority of the literature focuses on SoEs, rather than SoDs, and on 'social' or 'political' situations such as civil war or unrest, rather than other types of disaster.[398]

The distinction between SoEs and SoDs is widely used in the literature and is apparent from the Desktop Reviews, although there are differences in the terminology used by different countries, and by different academics and commentators.[399] From the 20 Sample Countries, 14 have laws that provide for both SoEs and SoDs,[400] while the remaining six appear to only have SoEs.[401] The Desktop Reviews show that the SoEs and SoDs in the Sample Countries are highly diverse, such that the descriptions of SoEs and SoDs in this section must be understood as generalizations, from which there are many variations and exceptions. The main variations between different SoEs/SoDs are discussed in sections C, D and E below.

The Desktop Reviews illustrate that the distinction between SoEs and SoDs is not always 'clear cut' and that some SoEs and SoDs defy easy categorization.[402] Indeed, it is possible to argue that, rather than comprising two separate legal phenomena, SoEs and SoDs share the same broad function. Declaring an SoE/SoD causes a 'switch from normal to emergency legal modalities' in which special governance arrangements apply and special government powers are available.[403] The underlying rationale for this change is that, unless government has access to special arrangements and powers, the disaster will exceed its response capacity.[404] Viewed from this perspective, the difference between SoEs and SoDs is a difference of *degree*, rather than of *type*. That is, SoEs and SoDs are alike in the sense that both trigger a change in governance arrangements and governmental powers, yet they vary in relation to the magnitude of those changes.[405] In addition to causing a 'switch' to an emergency legal modality, a declaration of an SoE/SoD may perform a vital public information function, by communicating the seriousness of a threat to the public and DPR actors and thereby encouraging them to implement appropriate preparedness and response measures.[406]

In some circumstances, a declaration of an SoE/SoD may not have the function of triggering special governance arrangements or governmental powers. This type of declaration is fundamentally different from the SoDs and SoEs discussed in this Chapter because it does not cause a 'switch' to an emergency legal modality and is, instead, better characterised as an alert or notification procedure. This type of declaration may be used in circumstances where a disaster can be managed using existing governance arrangements and governmental powers, but where it is nonetheless important to notify the public and other DPR actors of the situation in order to prompt them to take appropriate action. This type of declaration is not the subject of this Chapter.

Two major international reviews have been conducted on SoEs and SoDs: a 2010-11 Organization of American States project reviewing twelve Caribbean states in depth and surveying a wide range of other jurisdictions (the **OAS Review**);[407] and a 2013 Indian Government Taskforce project reviewing the Indian Disaster Management Act and studying nine other jurisdictions in depth (the **Indian Government Review**).[408] The Indian Government Review recommended against a 'one size fits all' approach, whereby the only legal mechanism for responding to a disaster is an SoE mechanism designed for extreme situations.[409] To the contrary, both the Indian Government and OAS Reviews agree that States should develop proportional and tailored mechanisms in legislation for differing degrees and types of risk, rather than relying on high-level powers and safeguards.[410] The Reviews recommend differentiating between SoEs and SoDs, and developing several different SoDs to address different hazards and disaster management needs.

In practice, an effective system of SoEs/SoDs may resemble a pyramid, with multiple tiers and channels of SoD corresponding to different degrees and types of risk. Each tier of the pyramid corresponds to more severe or large-scale disasters than the tier below, and provides government with correspondingly broader emergency response powers. An SoE

sits at the apex of the system and is designed to be used in only the most extreme and unforeseeable circumstances. The trigger for progressing from one tier of the pyramid to the tier above is the degree to which government capacity has been exceeded by the relevant disaster. For example, in the UK and Australian state of Victoria, most emergency management powers are part of the 'normal' legal system; where the capacity of those powers is exceeded, one of various SoDs may be declared; and if *that* capacity is exceeded, the government may exceptionally declare an SoE.[411] This tiered approach to SoDs/SoEs promotes proportionality by ensuring that changes to governmental powers and governance arrangements correspond to the nature and magnitude of the disaster.

C. The key dimensions of SoEs and SoDs

The Desktop Reviews and the literature illustrate that there are four key dimensions of SoDs/SoEs: (i) the timing of a declaration of an SoE/SoD; (ii) the trigger for making a declaration; (iii) the identity of the person or entity that is empowered to make a declaration; and (iv) the legal effect or consequences of a declaration. This section discusses each of these four dimensions in detail.

i. Timing of the declaration

The Desktop Reviews illustrate that, in the majority of cases, legal powers to declare an SoE/SoD (**declaratory powers**) are designed to be used responsively — that is, *after* a risk has materialized into a disaster or emergency. It is, however, possible for a legal power to declare an SoE/SoD to be designed to be used pre-emptively — that is, *prior* to a particular risk materializing into a disaster or emergency. Indeed, the OAS Review recommends that, in order to facilitate pre-emptive action, SoE/SoD powers should use a broad definition of 'disaster' which includes a 'threat of disaster'.[412] An example of a country with a pre-emptive declaratory power is the US, where the *Stafford Act* permits State Governors and other regional authorities to request the President to pre-emptively declare an emergency or major disaster on the basis of a preliminary damage assessment, which takes into account the anticipated amount of damage and the State's or regional authorities' disaster management capacity.[413]

Although pre-emptive declarations provide a valuable 'head start' on a disaster response, there are inevitable challenges in conceptualising and measuring when a risk is sufficiently likely, proximate (both temporally and geographically) and severe to justify a pre-emptive declaration. Some threats, such as extreme weather events, may be predicted with a reasonably high degree of certainty, thereby providing a clear, objective basis on which to make a pre-emptive declaration. Other threats, such as terrorist attacks, cannot be predicted with the same certainty or objectivity. Indeed, Bruce Ackerman has argued that the difficulty of ascertaining when there is a 'clear and present danger' of a terrorist attack creates a real risk of misuse of SoE powers in this context.[414] The legal trigger for a pre-emptive declaratory power may, therefore, need to be tailored to different types of risk, in order to reflect the different types of information and considerations that should be used to evaluate each type of risk.[415]

ii. Trigger for the declaratory power

The literature emphasizes that it is important for the law to clearly stipulate a trigger, or set of criteria, that enlivens the power to declare an SoE/SoD.[416] This serves to constrain the exercise of the declaratory power and provides a proper basis for subsequent review by the

legislature and/or judiciary. Although a clear trigger is important, there are risks in adopting excessively narrow or complex triggers or criteria. These risks include delay in making a declaration and initiating a response due to a lack of clarity about whether it is permissible for a declaration to be made.[417] For example, the lack of provision for epidemics in the Liberian emergency regime, which focusses predominantly on war and civil unrest, may have contributed to delays in responding to the 2014 Ebola outbreak in that country.[418] It is, therefore, important to strike a balance between, on one hand, creating specific legal triggers in order to constrain governmental emergency powers and, on the other hand, retaining sufficient flexibility to respond to serious and unforeseeable threats.

The Desktop Reviews illustrate that the triggers that enliven the power to declare an SoE/SoD vary significantly among the Sample Countries. One unifying feature is that all of the declaratory mechanisms in the Sample Countries refer in some form to the *necessity* of implementing an SoE/SoD in the circumstances. Aside from this, the provisions vary widely in terms of what, if any, additional criteria are imposed. Some of the common triggers or criteria that are used are as follows:

- **A particular event:** All of the Sample Countries have declaratory powers that are conditioned on the occurrence of a particular event. There is substantial variation in the specificity of these events, ranging from declaratory powers that are enlivened by a 'general disaster',[419] to those that are enlivened by categories of event such as 'natural' disasters,[420] to those enlivened by specific types of event (e.g. flood, fire).[421] Fourteen of the 20 Sample Countries have two or more types SoD/SoE, which apply to different types of event.[422] In general, the occurrence of a particular event is not the only condition for the declaration of an SoE/SoD and, in addition, one or more of the following criteria also applies.

- **An existential threat:** Nine of the 20 Sample Countries have declaratory powers that are premised on the existence of a threat to public safety, national security, public order or the constitutional order.[423] This type of trigger is more commonly found in SoEs, but does appear in some SoDs.[424] To the extent that an SoE/SoD is conditioned on this type of existential threat to national security, public order or the constitutional order, it may be more likely to be designed, and used, for disasters such as civil war or civil unrest. This type of SoE/SoD may also, however, be applicable where a 'natural' disaster results in widespread looting or violence.[425]

- **Insufficient capacity:** Ten of the Sample Countries have declaratory powers that are expressly premised on a disaster exceeding the operational and/or financial capacity of the normal disaster management system.[426] A common formulation is for the national government to be empowered to declare an SoE/SoD on the basis that a sub-national jurisdiction's disaster management capacity is overwhelmed. This is the case in Brazil, Italy and Mexico, although capacity is only one criterion or trigger, meaning that declarations do not automatically occur as soon as sub-national capacity is overwhelmed.[427] Another common formulation is for a national government to be empowered to declare a national SoE/SoD when the nation's disaster management capacity has been overwhelmed and international assistance and/or extraordinary measures are required.[428]

- **Absolute loss or damage:** Four Sample Countries have declaratory powers that are premised on an absolute measure of loss or damage, although the threshold and method of measuring loss or damage varies between countries.[429] In Kyrgyzstan and the Philippines, in order to determine whether the scale of a disaster is sufficient to enliven the declaratory power, authorities are required to assess specific indicators of loss and

damage such as the total number of casualties, damage to significant economic assets (e.g. percentage of fishing boats destroyed) and the geographic scope of the disaster.[430] The use of absolute loss and damage thresholds can improve transparency and encourage public confidence in the validity of declarations.[431] Yet, they may also be difficult to implement in the midst of the chaos of disaster.

- **A request or recommendation:** Seven of the Sample Countries' declaratory powers provide that a declaration of an SoE/SoD may only be made on the request or recommendation of a specified person or entity.[432] For example, in the Australian State of Victoria, Paraguay and South Africa, a declaration of an SoE/SoD can only be made upon the request or recommendation of the disaster management agency.[433] Similarly, in Italy and the Republic of Korea the national governments may only declare an SoE/SoD in respect of a sub-national jurisdiction if that jurisdiction has first requested that a declaration be made.[434]

The Desktop Reviews illustrate that the declaratory powers of the Sample Countries contain many different combinations and permutations of the above criteria.[435] This variation reflects the fact that different declaratory powers are designed to address differing degrees and types of risk. It also reflects the fact that declaratory powers are a product of each jurisdiction's particular political and constitutional system. In light of this diversity, it is not feasible to strictly prescribe the criteria that should enliven declaratory powers. Yet, as discussed at the beginning of this Section, it is important that there are clear criteria in order to support timely decision-making and permit subsequent review.

In some circumstances, it may not be feasible or appropriate for the criteria which condition a declaratory power to be specified in the same instrument as the power itself. This may, for example, apply to constitutional provisions, which are often drafted in broad language and cannot be easily amended. In this situation, the criteria for exercising the power should, nonetheless, be clearly specified in another legal instrument.[436] Kenya offers a good example of this approach. The Kenyan Constitution empowers the President to declare a state of emergency with respect to war, invasion, general insurrection, disorder, natural disaster or other public emergency but only if a declaration is 'necessary to meet the circumstances for which the emergency is declared'.[437] In order to clarify when a declaration may be 'necessary', a procedural guide has been developed which categorizes disasters according to the capacity of disaster management authorities, and specifies that a Constitutional SoE may be declared only where national capacity is exceeded and international assistance is required.[438]

iii. Repository of the declaratory power

The Desktop Reviews indicate that the identity of the person or entity who is empowered to declare an SoE/SoD (i.e. the repository of the power) varies significantly among the Sample Countries, and even within the Sample Countries depending on the type of SoE/SoD in question. SoDs, especially those that give rise to more limited and localized emergency powers, can often by declared by disaster management institutions or the police.[439] On the other hand, SoEs are usually exercised by persons or entities at the highest level of government.

The literature emphasizes that it is important for the law to clearly specify the person or entity who is authorized to make a declaration of an SoE/SoD. A lack of clarity can lead to disagreement about who is responsible for making a declaration, or to delay or failures to initiate emergency response.[440] The OAS Review found that a lack of clarity is a real problem

in practice: in several countries, it was not clear who had authority to declare an SoE/SoD, and this lack of clarity extended even to the most high-level 'constitutional' SoEs.[441] The Desktop Reviews also indicate that this observation applies to some of the Sample Countries.[442] In order to address the foregoing problems, the OAS Checklist recommends that the law should: (i) clearly specify who has authority to make each type of declaration of SoE/SoD; and (ii) establish a hierarchy of officials who can make each type of declaration, in order to anticipate the possibility that the primary repository will be unable to make a declaration.[443]

The OAS Checklist recommends that, in order to promote accountability and reduce arbitrariness in decision-making, the repository of a declaratory power should be required to 'act on advice', such as the advice of relevant governmental agencies or the legislature.[444] The nature of a requirement to act on advice will depend, to a certain extent, on a jurisdiction's political and constitutional system. As Bulmer points out, states with a parliamentary system of government have a tendency to rely on Cabinet approval for declarations, while states with presidential systems generally defer to presidential decisions made following consultations with the legislature and other leaders.[445] Federal systems have a tendency to require the repository to act on the advice, or the request, of sub-national governmental authorities.[446] Importantly, although the OAS Review recommends that the repository of a declaratory power should act on advice, it equally recommends that approval requirements should not be too onerous because this may undermine government's ability to rapidly initiate disaster response.[447]

iv. Consequences of a declaration

As discussed in Section B above, the effect of a declaration of SoE/SoD is to cause a switch to an emergency legal modality characterised by new governance arrangements and/or new governmental powers that are not otherwise available. In relation to governance arrangements, some of the common changes are centralization of decision-making authority, suspension of certain judicial writs or procedures, and grants of additional and/or delegated regulatory powers. Eliott Bulmer has, however, suggested that, to the extent possible, delegated emergency regulatory powers should be avoided in favour of expedited legislation created in the normal way.[448] More broadly, some commentators have warned against the tendency to concentrate power in the executive and, in federal systems, the central executive, during times of emergency.[449]

In relation to emergency powers, it is relatively common for declaratory powers, especially those relating to SoEs, to provide government with the power to take whatever action is 'necessary' to respond to the circumstances. In all but the most extreme emergencies, it is, however, more appropriate to place stricter limitations on governmental emergency powers. Bruce Ackerman suggests that this may be done in a 'positive' and/or 'negative' way: in the positive approach, the law stipulates a number of 'special measures' that may be taken by the government during an SoE/SoD; and in the negative approach the law stipulates the measures that government may not implement during an SoE/SoD.[450] These are generally measures that could potentially compromise the jurisdiction's political and/or constitutional order, such as constitutional amendments, referenda, elections or institutional reforms.[451]

The Desktop Reviews indicate that the 'positive' approach is more prevalent among the Sample Countries, and that some of the more common types of emergency powers include powers to compulsorily evacuate or quarantine people, and to requisition, damage or destroy property. The Desktop Reviews also indicate that some countries' laws reflect a

hybrid of the positive and negative approach. In Kazakhstan, for example, the law sets out a comprehensive list of emergency powers, including powers to impose a curfew, evacuate citizens from areas exposed to danger, and prohibit public gatherings.[452] Equally, it provides a list of things that the government is prohibited from doing during an SoE, including making constitutional amendments, holding referenda and conducting elections.[453]

In addition to triggering special governance arrangements and governmental powers, a declaration of SoE/SoD may have a number of other legal consequences or effects, including the following.

- **Automatic procedures:** In some jurisdictions or situations, the declaration of an SoD or SoE automatically triggers certain pre-determined regulatory measures. In the Philippines, for example, the declaration of a state of calamity automatically triggers price controls on essential goods and (re)programming of funds for repair and upgrading of public infrastructure.[454]
- **International assistance and loans:** In some jurisdictions or situations, the declaration of an SoD or SoE at a national level is a prerequisite to requesting international disaster relief assistance.[455] For example, in Paraguay a joint declaration may be made by the disaster management agency and the Ministry of Finance when national disaster management capacity is overwhelmed and the country wishes to seek international loans and assistance.[456]
- **Fiscal and other resource facilities:** A common function of SoE/SoD declarations is to make additional resources available to DPR actors. Several of the Sample Countries have special emergency funds which are made available upon a declaration of an SoE/SoD.[457] Declarations may also allow States to take special fiscal or administrative actions to reallocate resources, including finances and personnel, among government bodies.[458]
- **Military plans and martial law:** In some jurisdictions or situations, a declaration of an SoE/SoD may be a trigger for the military to perform relief work or to exercise police powers. It may even be a trigger for a switch to martial law, whereby the military assumes control of normal civilian functions of government. Among the Sample Countries, Mexico and the Philippines make specific provision for the deployment of the military in response to a declared disaster.

The Desktop Reviews indicate that, in some of the Sample Countries, the law requires a declaration of an SoE/SoD to stipulate certain specified details such as: the legal and factual basis, territorial scope and duration of the declaration; the emergency powers that will be available to government during the SoE/SoD; and/or the extent to which government may limit, or derogate from, existing laws, rights, or democratic procedures during the SoE/SoD.[459] Italy presents an example of good practice in this regard. In Italy, the Council of Ministers may, at the request of the affected regions, declare an SoE by resolution. The resolution must indicate the duration and territorial extent of the SoE, and the scope and limits of the power granted to the Chief of Civil Protection to issue special regulations (*ordinanza*). The resolution must stipulate the extent to which *ordinanza* may derogate from existing law and, when issuing *ordinanza* with that effect, the Chief of Civil Protection must explicitly indicate the derogated provisions and the reasons for derogation.[460] This kind of requirement promotes transparency and accountability; it permits better oversight over declarations and measures taken during SoEs or SoDs, thereby placing pressure on decision-makers to carefully consider and justify their actions.

D. Human rights: limitation and derogation

The literature and the Desktop Reviews indicate that it is common for the law to authorize government to limit or derogate from fundamental rights during an SoE/SoD.[461] A limitation of a right refers to the restriction of the enjoyment of the right in pursuit of a legitimate purpose and within the margins provided by the instrument that establishes the right.[462] A limitation of a right is permissible during 'normal' times, not only during an emergency. In contrast, a derogation from a right is only permissible in emergency conditions and is, for that reason, sometimes called an 'extraordinary limitation'.[463] Derogation is usually governed by a separate provision within human rights instruments, which provides that the full and effective exercise of rights in an instrument may be restricted when, and only so far as, necessary in an emergency.[464]

The distinction between limitation and derogation is a matter of degree — that is, limitations and derogations occupy different portions of a single spectrum that ranges from a low to a high degree of restriction of rights.[465] The Human Rights Committee posits that limitations, rather than derogations, of rights are likely to be sufficient for most disaster responses.[466] For example, many commentators have observed that restrictions on freedom of movement that are designed to limit the number of people travelling into disaster-affected areas are likely to constitute a legitimate limitation of the right to freedom of movement under article 12(3) of the ICCPR, rather than a derogation of that right, provided that the limitation complies with the principle of necessity.[467]

Different rights instruments use different language to specify when derogation or limitation is permissible. Some of the most common formulations are that derogation or limitation is permissible to preserve 'public order', 'national security' or 'public health and morals', or simply 'where necessary'.[468] Certain rights cannot be limited or derogated to any extent. These 'absolute' rights include (but are not limited to) the: right to life; the rights not to be subjected to torture or slavery; and the right to recognition before the law.[469] The UN Human Rights Committee has also indicated that the following are inviolable humanitarian principles: the humane treatment of persons deprived of liberty; the prohibitions on hostage taking and unacknowledged incarceration; the protection of minority rights and non-discrimination; the prohibition of propaganda advocating war or national, racial or religious hatred; and sufficient safeguards and procedural guarantees in the judicial system to preserve the rule of law.[470]

'Necessity' is a near-universal requirement for limiting or derogating from human rights, both under international human rights law and domestic laws. A requirement of necessity stipulates that limitations and derogations from rights are only permissible *to the extent necessary* to achieve the relevant purpose or objective. International law, the literature and state practice have imbued this otherwise nebulous concept with meaning and structure. There is general agreement that 'necessary' does not simply mean 'convenient', but rather refers to the absence of alternative measures to achieve the relevant purpose or objective. According to the *Siracusa Principles on the Limitation and Derogation Provisions in the International Covenant on Civil and Political Rights* (the **Siracusa Principles**), necessity also means that the contemplated action must be proportionate to a legitimate aim and as least restrictive as possible.[471] Another important point is that a requirement of 'necessity' does not provide the decision-maker with an unbounded discretion to act based on their subjective views.[472] Instead, according to the *Siracusa Principles*, an assessment of necessity should be made on the basis of objective considerations, and any limitations may not be applied in an arbitrary or discriminatory manner.[473] The concept of 'necessity' underpins several other

aspects of SoEs/SoDs. It is commonly used as a criterion for determining when an SoE/SoD may be declared, extended or terminated, and for deciding on the nature of governmental emergency powers. To the extent that 'necessity' is used as a criterion for these other aspects of SoEs/SoDs, the foregoing comments are equally applicable.

Nine of the Sample Countries have laws that expressly authorize the limitation of or derogation from human rights during an SoE and/or an SoD.[474] An additional five Sample Countries provide the repository of emergency authority with wide powers to take all 'necessary' measures, which, depending on the circumstances, may entail implementing measures that restrict human rights.[475] In the remaining Sample Countries, the law grants government emergency powers that may restrict human rights, such as powers to control movement during an SoE/SoD.[476] The Desktop Reviews do not analyse whether the Sample Countries' laws are consistent with international human rights principles regarding limitation and derogation of rights. In any event, even if a provision authorizing limitation or derogation of rights is consistent with international human rights law, this does not guarantee that it will be *applied* in a manner consistent with international human rights law. To the contrary, provisions authorizing limitation or derogation, by their very nature, create relatively broad discretions that are susceptible to misuse and abuse. Further research is required to better to understand the extent to which both law and practice in this area are consistent with international human rights law.

E. Safeguards

The literature emphasizes that it is vitally important for there to be 'safeguards' in place during an SoE/ SoD in order to maintain the rule of law, to preserve democratic institutions and processes, to protect human rights, and to promote governmental transparency and accountability. This section discusses the main types of safeguards that may be implemented during an SoE/SoD.

i. Supervision and review

There is general agreement in the literature that it is crucial for the branch of government that is responsible for declaring and administering an SoE/SoD (usually the executive) to have its decisions supervised and reviewed by the remaining branches of government (usually the legislature and the judiciary).[477] 'Supervision' in this context refers to a wide range of mechanisms, from reporting requirements to direct control.[478] The Geneva Centre for Democratic Control of Armed Forces has identified the following seven matters that the judiciary and/or the legislature should consider when supervising or reviewing decisions or actions relating to an SoE/SoD:

- **Temporality:** The appropriate time-frame for the exercise of emergency measures.
- **Exceptional threat:** The exceptional nature of the risk.
- **Declaration:** The proper procedure including ratification and notifications.
- **Communication:** Effective communication to the public and to relevant other branches of government, and to international bodies.
- **Proportionality**: The appropriate scope of measures taken during an SoE/SoD.
- **Legality**: Compliance with domestic and international law.
- **Intangibility:** The importance of non-derogation from absolute rights.[479]

Legislative supervision

In some jurisdictions, legislative ratification is required in order for a declaration of an SoE/SoD to come into effect, although the OAS Review warns that this may cause undue delay.[480] More commonly, ratification may be required *after* a declaration has been made through provisions stipulating that the SoE/SoD, and measures taken under it, will lapse if legislative approval is not provide within a specified period of time. Time-periods vary widely, from 24 hours in Fiji to 120 days in Bangladesh.[481] Some countries grant longer periods where parliament is not in session, or provide that approval is to be made at the next session of parliament.[482] In some jurisdictions, regular parliamentary resolutions are sufficient, while in others special majorities including supermajorities and/or bicameral consent is required.[483] In some jurisdictions special parliamentary committees are established with steering and supervisory roles.[484]

It is also common for the legislature to be given power to extend or amend an SoE/SoD when called upon to consider the declaration.[485] This decision should be made according to the same principles guiding the initial declaration, and should consider whether ordinary legal powers would be sufficient for the disaster response. Where this is the case, it will not be 'necessary' to extend the SoE/SoD and it should be terminated.[486] Bruce Ackerman has proposed a 'supermajoritarian escalator' mechanism whereby initial approval may be provided by simple majority, but subsequent renewals are required to meet increasingly demanding supermajorities (e.g. 65 per cent, then 75 per cent).[487]

Judicial supervision

SoE/SoD mechanisms are legal measures and, as such, must be reviewable by the judiciary, although the extraordinary nature of SoEs and SoDs may warrant special stipulations as to the jurisdiction and the effect of review.[488] The International Law Associations' *Paris Minimum Standards of Human Rights Norms in a State of Emergency* insists that courts should have jurisdiction to determine whether:

- emergency declarations and legislation accord with the law in terms of procedures and conditions, and proportionality and necessity;
- legal instruments permitting limitations of and derogations from rights are lawful and properly enacted;
- any non-derogable rights have been violated; and
- laws outside of emergency measures continue to be in effect, with a presumption that they are in effect unless explicitly repealed.[489]

In practice, there are two main ways in which the above jurisdiction may be conferred on the judiciary. First, the law may require the executive branch of government to apply to the judiciary for approval of certain specified decisions or actions. For example, in Ecuador, a declaration of an SoE must be submitted to the Constitutional Court, which is required to issue an opinion on the constitutionality of the declaration and emergency measures prescribed therein.[490] Second, the law may permit persons or entities who claim to have been affected by a decision or action relating to a SoE to apply to a court for a determination of the legality of that decision or action.[491] In order for judicial supervision to be capable of protecting human rights, the judiciary should be empowered to redress wrongdoing by imposing penalties on governmental actors and/or making orders for compensation.[492] The OAS Review found, however, that, while penalties for non-compliance with emergency

measures by private individuals are widespread, penalties for institutional non-compliance, including unconstitutional or otherwise unlawful emergency measures, are 'often absent'.[493]

ii. Other safeguards

In addition to legislative and judicial supervision, the following measures may also serve as valuable safeguards during an SoE/SoD:

- imposing a time limit on the SoE/SoD so that it will automatically lapse after a certain period of time unless extended (or unless ratified if ratification is required);[494]
- providing notice of the SoE/SoD to the 'widest possible audience', rather than merely publishing the declaration in the public register of laws and decisions;[495]
- providing notice to relevant international organizations, including the UN Human Rights Committee and regional treaty bodies;[496] and
- training governmental DPR actors about permissible limitation and derogation of human rights during emergencies.[497]

F. Recommendations

i. SoEs and SoDs

Decision-makers should develop a range of SoDs that are proportional and tailored to differing degrees and types of risk, especially risks that are highly prevalent in their jurisdiction. An effective system may resemble a pyramid, with multiple tiers of SoD leading up to an SoE, which is designed to be used in situation of violence or conflict and only the most exceptional, large-scale and unforeseeable disasters. Each tier of the pyramid should correspond to more severe or large-scale disasters than the tier below, and provide government with correspondingly broader emergency response powers. The lowest level of the pyramid may comprise highly specialized SoDs, which provide local governments and/or sectoral agencies with powers to respond to relatively common and/or small-scale disasters without impeding human rights. This tiered approach to SoDs/SoEs promotes proportionality by ensuring that changes to governmental powers and governance arrangements correspond to the nature and magnitude of the disaster. Further, it minimizes the application of broad governmental powers that may jeopardize the rule of law, democratic institutions and human rights.

ii. Dimensions of SoEs and SoDs

It is vital that laws governing SoEs/SoDs clearly set out: (i) the legal trigger(s) for making a declaration; (ii) the person or entity that is responsible for making a declaration (i.e. the repository of the declaratory power); (iii) the consequences of the declaration; and (iv) when a declaration may be made (i.e. pre-emptively or only once a disaster has occurred).

- **Legal trigger(s):** The legal trigger(s) for declaring each type of SoE/SoD should be tailored to the degrees and types of disaster that the SoE/SoD is designed to address. It may be appropriate for the legal trigger for an SoE to be broadly worded, in order to provide government with sufficient flexibility to respond to exceptional and unforeseeable events. SoDs — especially lower order SoDs — should have much more precise triggers, in order to constrain the power to declare an SoD, and to provide a basis for subsequent review.

- **Repository:** The law should clearly specify who has authority to make each type of declaration of SoE/SoD. It should also establish a hierarchy of officials who can make each type of declaration, in order to anticipate the possibility that the primary repository will be unable to make a declaration. Decision-makers should consider introducing a requirement for the repository to 'act on advice' or 'upon request' of another entity (e.g. disaster management institutions or sub-national governments). This type of requirement precludes the concentration of power in the hands of a single person or entity. It may also preserve the autonomy of sub-national jurisdictions and give appropriate weight to the expertise of relevant sectoral agencies.

- **Consequences:** The law should clearly specify the governance arrangements and governmental powers that arise once an SoE/SoD has been declared. It is generally preferable for there to be a pre-determined, precise and exhaustive list of such governmental powers. However, for SoEs and higher order SoDs, it may be appropriate for the government to retain greater flexibility to determine the scope of its emergency powers at the time of the emergency, subject to the safeguards discussed below. Even for SoEs and higher order SoDs, the law should preclude government from taking actions that may undermine the integrity of the jurisdiction's political and constitutional order (e.g. constitutional amendments, referenda, elections).

- **Timing:** In order to facilitate pre-emptive action, the law should permit declarations of an SoE/SoD to be made when a risk has not yet materialized but is proximate (both temporally and geographically), high likely to occur and anticipated to have a severe impact. This may be achieved by using a broad definition of 'disaster' that includes a 'threat of disaster', or by establishing a separate pre-emptive declaratory power.

The law should require a declaration of an SoE to stipulate the legal basis, territorial scope and duration of the declaration, and also the emergency powers that will be available to government during the SoE/SoD. Further, the law should require government to give notice of a declaration of an SoE/SoD to the widest possible audience, rather than merely publishing it in the public register of laws and decisions.

iii. Safeguards and human rights

It is vitally important for there to be safeguards in place during an SoE/SoD in order to promote governmental transparency and accountability, to maintain the rule of law, to preserve democratic institutions, and to protect human rights.

The laws governing SoEs/SoDs should only permit government to limit, or derogate from, rights to the extent permissible under international human rights law. Further, the judiciary should have jurisdiction to determine whether: legal instruments permitting limitations and derogations of rights are lawful and properly enacted; and whether any non-derogable rights have been violated.

The law should provide for judicial and/or legislative supervision of SoEs and high level SoDs with respect to: the initial declaration of an SoE/SoD (including any powers specified therein); decisions or actions taken during an SoE/SoD; and any decision to extend or terminate an SoE/SoD. Judicial or legislative supervision may take the form of:

- a requirement to obtain legislative or judicial approval of a declaration of an SoE/SoD and decisions or actions taken during an SoE/SoD;

- legislative power to amend or terminate an SoE/SoD, including a power to amend details such as the geographical scope, time period and emergency powers; and/or
- judicial power to declare an SoE/SoD, and decisions or actions taken during an SoE/SoD, unlawful and to make appropriate orders to redress such illegality (e.g. declaration of invalidity, penalties, compensation).

In addition to legislative and/or judicial supervision, decision-makers should consider introducing a time limit that provides for an SoE/SoD to terminate automatically once a specified period has elapsed, unless the SoE/SoD has been extended with judicial and/or legislative approval.

iv. Requirement of necessity

'Necessity' is commonly used as a criterion to determine: when a declaration of an SoE/SoD may be made; what emergency powers are available; whether an SoE/SoD may be extended or terminated; and whether human rights may be limited or derogated. To the extent possible, the law should not use 'necessity' as the *sole* criterion for these types of decisions because this creates a relatively unconstrained decision-making power which is susceptible to misuse or abuse. Instead, the law should supplement the criterion of 'necessity' with additional criteria. Further, the law should expressly provide that 'necessity' requires there to an absence of alternative measures to achieve the relevant aim, and for the contemplated measure to be proportionate to the relevant aim.

6. Legal facilities

A. Introduction

This chapter addresses whether humanitarian actors, both foreign and domestic, have the necessary legal facilities to undertake preparedness and response activities. It considers whether all actors are provided the appropriate recognition, protections and privileges required to contribute effectively to disaster preparedness and response. Section B considers volunteers and whether the health, safety, insurance, liability and other critical legal issues facing volunteers are provided for in legislation. Section C addresses licensing and whether the law allows for professional relief personnel such as medical staff to provide assistance in an emergency, across sub-national and national borders. Section D discusses the issue of tax exemptions and whether these are provided in the case of relief activities and whether they apply to both preparedness and response activities. Section E outlines the type of liability protections that may be provided to rescue and relief personnel including volunteers and whether organizations are provided liability protections in law. Section F considers the new and increasingly important issue of Unmanned Aerial Vehicles (**UAVs** – viz. drones) and their regulation including registration, flight operations, use of airspace and insurance. Section H addresses the requirements of data management and data privacy. Section G provides recommendations to policy makers on ways of ensuring the relevant legal facilities are in place to facilitate humanitarian activities both in response to disasters and in preparedness.

B. Volunteers

Volunteers are a critical part of many disaster responses, and yet they may face many uncertainties when providing services in disaster situations. Legal issues include heightened health and safety concerns, and questions related to insurance, liability, and employment. However the legal context surrounding the use and role of volunteers in disasters ranges from a basic lack of clarity in regard to the definition and scope of volunteering, to legal barriers that may prohibit or restrict volunteering activities, and the need to provide for the proper training and management (including remuneration and subsistence) of volunteers.

The Desktop Review shows that two-thirds of countries at least recognize that volunteers are a specific category of actor in disaster response. In many cases this recognition is part of an encouragement of social participation in disaster responses, and volunteers are sometimes considered alongside the private sector as a social sector that can be mobilized in response to disasters. As is noted in the literature review, this is consonant with the wider treatment of volunteers and volunteerism as a social force. For example the 2015 *State of the World's Volunteerism* report discusses volunteering in the context of 'transforming governance,' concluding that an enabling legal and regulatory environment for volunteerism is needed to maximize the contribution of volunteers to the 'common good'.[498] In this context of general prescriptions for encouraging volunteer participation, the Inter-Parliamentary Union together with United Nations Volunteers programme and the IFRC developed a guidance note on *Volunteerism and Legislation*[499] outlining laws that can have an impact on volunteers, including labour law, tax law, social welfare laws, immigration law, and the regulatory framework for non-profit or charitable organizations.

The Desktop Review shows that aside from the general recognition that volunteers can contribute to disaster response, there are far fewer countries that have taken legislative steps to address the specific issues that arise in relation to volunteers. The IFRC's publication *Legislative Issues in Disaster Management and Epidemic Response* notes a set of issues in relation to health and safety obligations of organizations using volunteers including insurance

coverage for accidents and the payment of compensation[500], employment (such as additional protections against dismissal)[501], and liability. Subsequent guidance from the IFRC examines legislative responses to these issues.[502] There are only five countries in the Desktop Review that give specific consideration to the roles and responsibilities of volunteers in the disaster context, in some cases through comprehensive treatment of these roles and in other cases limited to more specific issues such as those around remuneration/compensation for volunteers.[503] In only one case is the issue of risks that may attend to volunteers responding to disasters specifically addressed.[504]

One area that the Desktop Review shows a good number of countries addressing directly in their legal frameworks in disaster response is in the training of volunteers. These include specification of the level of government responsible for the training of volunteers in disaster response[505], and specification of the expectations and requirements for volunteer training.[506] The Desktop Review points to the legislative status of Red Cross and Red Crescent National Societies as the context in which the role of volunteers is often addressed, either explicitly or implicitly.

The literature review draws attention to an emerging issue which further adds to the complexity of volunteer roles in disaster response and that is the increasing role of informal volunteers, that is those not affiliated with humanitarian or other organizations.[507] There is some argument that informal volunteers of this type will become more prominent given the scale of disaster risks due to population growth, urban development and climate change.

C. Licensing

Professional licensing requirements can pose a significant barrier to professionals' ability to provide assistance in an emergency, particularly for medical professionals, both in international contexts where professionals are brought from one country to another, and in sub-national contexts where professional regulation is often not normally recognized across state or local boundaries.

Most of the discussion of professional licensing which has taken place in the domestic disaster context has related to medical professionals in such matters as rights to provide medical care and issue prescriptions, as well as issues of liability and medical insurance. However, similar issues could also apply to other types of professionals involved in disaster response such as engineers, building surveyors and teachers.

The Desktop Review suggests that the recognition of medical professionals is not considered to be a significant impediment in relation to disaster responses in the great majority of countries. However, it could reasonably be assumed to be more relevant to federal states, where medical licensing requirements differ between states, such as the US, as discussed below. While the issue is not addressed in relation to four countries in the desktop review, in fifteen of the twenty countries in the review, the recognition of medical professionals is either a national matter or there is automatic recognition across sub-national boundaries. In one case the specific issue of the entry of medical professionals and their recognition in the context of disaster response is addressed in the legal framework.[508] As well, at least three countries make specific reference in their disaster response legislation to the matter of recognition of medical professionals involved in disaster response.[509]

Much of the literature on professional licensing relates to the myriad issues which have arisen and been discussed in the US in relation to cross State regulation of medical professionals, including matters which arose in responses to Hurricanes Katrina and Rita.[510]

Ways in which a declaration of emergency can be used as a trigger to waive regulatory barriers to the recognition of health care licenses has been examined in some detail by the US Institute of Medicine.[511]

D. Tax exemptions

Taxation can be a significant drain on the capacities of national actors to provide much-needed disaster relief, particularly when taxes such as Value Added Tax (**VAT**) and customs duties are directly imposed on relief purchases and imports of goods and equipment to support relief efforts.[512] Tax exemptions can also be used to benefit households, businesses and other entities which have been affected by disaster as part of relief and recovery.

The literature review indicates that there has been little attention given to the role of law in relation to the issue of tax exemptions, the most significant being IFRC's publication on *Legislative Issues in Disaster Management and Epidemic Response*,[513] and the body of work relating to IDRL, although this is focussed largely on international response. Despite its relative absence from literature, the Desktop Reviews suggest is an area where governments have been active in legislation in a number of areas.

In relation to the exemption of goods, equipment and property used for disaster response, of the eighteen countries in the Desktop Review where data is available, only three countries make no provision for tax exemptions.[514] However, both the literature review and Desktop Studies indicate there are inconsistencies in how the issue is treated from country to country. In some countries for example, exemptions for disaster related activities and goods are covered only as part of the exemptions applicable to non-profit non-governmental organizations, rather than as a general rule[515] and many provisions apply only to disaster response, rather than preparedness.

Findings indicate it is common for National Societies and non-governmental organizations (**NGOs**) to benefit from some form of tax exemptions as not-for-profit organizations however there are often inconsistencies in the types of exemptions granted or a lack of clarity in applicable national laws or regulations.[516] A number of countries also have specific taxation provisions applicable to National Societies, over and above the provisions made for NGOs more generally, such that their activities, whether in relation to disaster response or disaster preparedness, are exempt from tax.[517]

A majority of countries in the Desktop Review have made a number of other taxation exemption provisions in relation to disasters, enacted in a number of forms. There have been some attempts to create tax regimes that allow for the reduction of personal taxable income to accommodate for losses caused by natural disasters or calamities[518] or to enable local government entities to grant taxation exemptions in response to specific disaster events such as flooding.[519] There is also a significant group of countries that have sought to ensure that the provision of disaster relief is expressly exempted from import duties and other forms of taxation.[520] Again however, such measures are diverse and country-specific and require further study to determine their applicability more generally.

E. Liability

One of the major issues affecting disaster response and preparedness personnel, whether as professionals or as volunteers, is that of liability. Fear of liability can act as a deterrent for the willingness of individuals and organizations to engage in life-saving humanitarian

activities, or alternatively may serve as an incentive for officials to act where there may liability in the failure to perform certain duties. The Literature Review notes a number of areas where liability exposure may arise:

- criminal and civil liability for various acts or omissions in relation to disaster prevention and response;[521]
- liability for bystanders providing rescue and first aid where Good Samaritan laws or similar are not in place;[522]
- medical negligence (both criminal and civil);
- liability for traffic or machinery-related accidents in the course of disaster-related activities causing loss of life, personal injuries, or damage to property;
- liability to compensate private persons or government agencies for the use of their land, vehicles, premises, and any damage thereto, if these are used in an emergency response operation;
- liability for environmental damage;
- potential liability for injury, loss of life or damage to the personal property of relief personnel working under their direction (staff and volunteers);
- vicarious liability for damage or injury caused by such relief personnel (whether deliberate, negligent, or accidental); and
- direct liability for deaths, injuries or property losses caused by a hazard if the government failed in a duty of care, such as taking preventive measures for a reasonably foreseeable hazard, issuing timely and effective warnings, responding in a timely and appropriate manner, and avoiding unnecessary further damage by the means of response.

Additionally, the heightened sensitivities created by disaster situations can influence public perceptions of risk relating to disaster warnings and the adequacy of response, leading to controversy, scapegoating and blaming, which further exacerbate liability concerns.

The literature suggests that liability protections tend to be applied inconsistently or not at all, and most existing information is from developed countries. While some provisions on immunity from prosecution are included in domestic DRM laws, other liability issues are addressed across much wider range of legislation. Some countries are also bound by common law principles on issues such as duty of care, negligence and public interest which may impact on the ability to limit liability through legislation in some cases. In this context, the Desktop Review sought specific information on whether national law provides liability protections to disaster rescue and relief personnel, including volunteers, and whether similar protections are provided to organizations whether government, NGOs or National Societies.

There is a marked split between countries on the question of whether liability protections are available to personnel in the context of disasters. Half of the eighteen countries for which data was available on the issue provide no liability protections for disaster personnel.[523] In the other nine countries, protection is provided, often through complex legal provisions which specifically for disaster responders. The literature review also identifies the complexities of "Good Samaritan Laws", such as those of the US which provide a degree of protection for medical first responders. In some cases the liability protections applied to disaster relief

personnel apply specifically to civil defence or emergency personnel including volunteers,[524] while in other cases the liability protections for disaster response personnel derive from general protections afforded to agents of the state, provided that actions carried out are consistent with assigned duties and not are negligent.[525] In some cases, specific insurance provisions apply to disaster response personnel either to provide support in case of injury[526] or to provide for compensation in cases of damage caused by relief personnel.[527] In one case liability protections apply only to international personnel by virtue of recognized privileges and immunities.[528]

In general, organizations are afforded liability protections only to the extent that individual disaster response personnel are protected. The Desktop Review revealed very little consideration of protections against liability of organizations per se although in at least one case there is a requirement for organizations to insure themselves against harm caused in disaster response contexts.[529]

One of the key challenges in this area is balancing the need to offer reasonable protection for personnel, organizations and government agencies carrying out bona fide preparedness and response activities, with the need to maintain public safety standards and ensure there is appropriate recourse for those who suffer loss and damage as a result of gross negligence during preparedness and response efforts.

F. Licensing of unmanned aerial vehicles

The use of unmanned aerial vehicles (**UAVs**) in disaster preparedness and response arena has been increasing, and they are often seen as a rapid and cost-effective way of undertaking rapid damage assessments, identifying locations of displaced populations and sometimes considered for the transport of goods. Their use creates a raft of legal and regulatory issues including their registration, flight operation certificates, use of airspace and other safety and regulatory matters. The literature review draws attention to a number of specific regulatory issues associated with the way in which UAVs are used, including legal issues related to cargo delivery from drones,[530] maintenance of visual line of sight in drone operations (the operator must be able to physically see the drone at all times), and the ethics of drone use in humanitarian contexts.[531]

Guiding support of both international actors and countries in this area is the *Humanitarian UAV Code of Conduct* first published in 2014[532] which establishes a number of general principles relevant to the use of UAVs in disaster settings, covering issues of safety and compliance, the application of humanitarian principles, data protection and privacy and the modalities of consultation and coordination. The network of practitioners responsible for the code – UAViators – has also produced reports such as *Humanitarian UAV/Drone Missions: Towards Best Practices* which identifies some of the legalities associated with UAV use, such as obtaining necessary customs permits, liability insurance and operating permissions in compliance with local laws. The document also notes the likelihood of encountering situations where there are no UAV regulations or where they are unclear, suggesting this is an area still in need of legislative development in many countries.[533]

The Desktop Reviews bear out the conclusions of the Literature Review that the rapid increase in the use of drones in humanitarian settings has outflanked most domestic legal frameworks, with no country identified as having addressed through legislation or regulation the use of UAVs in disaster contexts. It is noted however that a number of countries have established specific provisions on the use and operation of UAVs per se, either in their civil

aviation codes or through specific regulation.[534] In this regard, the *Humanitarian UAV Code of Conduct* urges the humanitarian use of UAVs to comply with all relevant national and international frameworks.

G. Data protection and privacy

When the wide-ranging and powerful General Data Protection Regulations of the European Union came into effect in May 2018 they focused considerable global attention on data gathering, protection and privacy.[535] How data is gathered, shared and protected during preparedness and response activities, by both domestic and international actors, is a key issue for the disaster management sector.

The Desktop Study identified that most countries have regulations around data protection and privacy requiring the consent of the individual before disclosure may occur, most often in the form of specific legislation concerning the protection of personal information.[536] In some cases, such provisions are included as part of constitutional or penal code provisions.[537] In nearly all cases, there are no special provisions covering the use of personal data as part of disaster preparedness or response activities, although a number of instruments included provisions enabling the sharing of personal data without consent in situations where this is necessary to protect public or individual health and safety (which could potentially include some situations in a disaster context).

Notable provisions were found in Australia which allow government entities to disclose personal data for a "permitted purpose" in situations where a disaster has been officially declared, to enable access to services, which includes organizations such as the Australian Red Cross. In Korea, the Korean Red Cross is specifically authorized to access government-held data to facilitate its operations, except in "extenuating circumstances".

More detailed guidance on the use of data in humanitarian settings have been developed by humanitarian organizations themselves. Oxfam and the International Committee of the Red Cross (**ICRC**) have developed guidance on the use of data in humanitarian situations,[538] other examples include the *Data Stater Kit*[539], and the more general ethical context of information handling in disaster contexts is addressed in the 'Signal Code' developed by the Harvard Humanitarian Initiative.[540]

Data privacy and management issues ramify across a number of aspects of disaster preparedness and response operations, for example in some of the critical issues faced the delivery of health services and cash transfer activities.[541] Another issue relates to information gathered in the course of Restoring Family Links (**RFL**), the process of reuniting families separated during disasters and other emergencies. This vital work has been a mainstay of the International Red Cross and Red Crescent Movement since its beginning, but cannot function without processing personal data and ensuring its protection from other parties for unrelated uses, resulting in a call for states to "acknowledge that the flow of personal data among the components of the Movement should remain as unrestricted as possible, while complying with strict data protection requirements".[542]

H. Recommendations

i. Volunteers

Issues relating to volunteers can be addressed across many different areas of law, including taxation law, labour law, immigration law, social welfare and charitable organizations law, as well as disaster laws and dedicated volunteer legislation. Countries have taken quite divergent approaches to legislation and while there can be no prescriptive formula, law and policy makers should conduct an assessment of their legislation to identify ways in which legislation can remove legal barriers and create an enabling environment for volunteers.

While there is acknowledgement that gaps in research still exist in this area, specific issues that may considered as part of the development of laws, policies and volunteering strategies include:

- definitions of volunteers and any different categories (for example government emergency services volunteers, community organization volunteers);
- the extent to which a declaration of disaster/emergency impacts on the status of volunteers and any special protections or exemptions that might be afforded;
- differences between national and international volunteers;
- organizations which are permitted to engage volunteers and the conditions for doing so;
- any age or professional restrictions for volunteers in different sectors;
- contractual rules and general conditions for the engagement of volunteers, including obligations from organization to volunteer and *vice versa*;
- payments, allowances and any provisions regarding maximum volunteering hours (considering that disaster situations often require extended assistance);
- certification/accreditation of volunteers;
- criminal liability of volunteers (for example misuse of relief goods or funds, exploitation of people in need);
- immunity for volunteers and their actions, including first aid, in the course of performing their duties;
- insurance or compensation covering health, injury or death while performing duties;
- other insurance applicable to volunteers including civil/public liability and professional indemnity;
- ability of employees to seek leave of absence and protection from dismissal from regular work for volunteering activities;
- leave and tax benefits which may be accorded to encourage volunteering;
- training requirements and standards for volunteers in different roles; and
- background checks and their scope.

A number of countries have developed laws specific to volunteering as a way of capturing all relevant legal issues for volunteering in any context, and the development of "framework

legislation" may be considered for this purpose. In doing so, it is important that these instruments to address the issues above as they pertain specifically to disaster settings.

ii. Licensing

While the issue of professional licensing, particularly for medical personnel, is often addressed by government or private associations at national level, issues may more frequently arise when sub-national state and provincial laws have different licensing requirements, needing special authorization or waivers in the event of disaster to facilitate an inter-state response.

Requirements for the licensing of personnel within different sectors across state or provincial boundaries (including internationally, as relevant) should be systematically reviewed as part of national disaster preparedness measures. Where special licensing is required, measures should be put in place to enable automatic recognition or permission to provide services during disaster and other emergency situations. Alternatively, fast-tracked procedures for authorization or permissions should be established for immediate application in the event of a disaster.

iii. Tax exemptions

While it is encouraging that many countries have provided some form of tax exemptions to reduce the cost burden of disaster preparedness and response on relief organizations and, in some cases, to those affected by disaster, there is lack of consistency as to when, how and to whom such exemptions apply and the source of relevant legislation.

Further research and analysis is required to comprehensively address this issue from a legislative perspective, but in general applicable laws and policies should seek to:

- provide exemptions from VAT and other taxes associated with the conduct of both disaster preparedness and response activities, particularly with regard to goods, equipment, property and services;
- provide tax exemptions for not-for-profit organizations legitimately participating in disaster preparedness and response activities, to reduce the overall costs burden of such activities;
- ensure that tax exemptions for disaster preparedness and response are sufficiently clear and that any conflict of laws issues are resolved; and
- consider ways that tax exemptions may be used to incentivise disaster preparedness and mitigate disaster losses for individuals and organizations.

iv. Liability

Much of the literature in this area explores the different areas of potential liability, rather than offering specific guidance or recommendations as to the types of legal and policy provisions that might be appropriate. Nor does it enable conclusions as to how to strike the right balance between protection from liability and enabling people who are legitimately aggrieved to seek recourse.

Nevertheless, it is clear that legislation and policy in this area should seek to remove unnecessary barriers to preparedness and response activities by providing reasonable protection for individuals and organizations undertaking bona fide work in good faith.

While it may not be possible or indeed desirable to provide complete immunity from liability, there are legislative measures that may be helpful, such as protection from liability for general negligence, placing a cap on damages or compensation for certain types of loss resulting from the exceptional circumstances of an emergency. However, legislation should continue to provide individuals and communities reasonable recourse from loss and damage sustained as a result of gross negligence or neglect in duty of care in regard to such activities.

v. Licensing of unmanned aerial vehicles

Many countries have developed regulations around the use and operation of UAVs as part of civil aviation codes of other legislation, to which the humanitarian community should comply, but rarely if ever do these specifically refer to situations of disaster preparedness and response.

Although designed primarily to guide the humanitarian sector in the use of UAVs, the *Humanitarian UAV Code of Conduct and Guidelines* includes principles which may be relevant for domestic law and policy makers in developing more specific guidance for disaster situations, including:

- respecting the principles of humanity, neutrality, impartiality and independence;
- do no harm by assessing and mitigating any unintended consequences on communities;
- engagement with communities and the provision of continuous information about the purpose and use of UAVs;
- transparency regarding flight activities and sharing issues and concerns with authorities and communities;
- coordination and collaboration within and beyond the humanitarian sector regarding the use of UAVs to increase effectiveness and share lessons learned; and
- responsible collection, management and storage of data.

Where countries do not have domestic UAV regulations in place, the International Civil Aviation Organization has issued a circular on Unmanned Aircraft Systems (**UAS**) which offers guidance for States on an appropriate regulatory framework for their use, safety and management. States may opt to use this as a framework until such time as their own regulations are developed.[543]

vi. Data protection and privacy

Research suggests that while many countries have developed legislation regarding the general protection of personal data, there is still a gap in the development of provisions specific to disaster situations. Humanitarian operations would benefit from legislation providing further clarity about the extent to which exceptions such as the protection of health or safety apply to disaster situations and whether there are specific organizations, including National Societies, which may use and store such data as part of their essential operations. Legislation should also include protections against states demanding data for enforcement uses, which may undermine the trust of affected persons in the National Society.

7. Disaster-related human mobility

A. Introduction

Disasters have always caused human mobility. This kind of human mobility is, however, increasing due to the exacerbation of meteorological hazards caused by climate change.[544] During the past decade, the international community has increasingly focused its attention on the protection and assistance of persons on the move due to disasters. In 2010, the UNFCCC *Cancun Outcome Agreement* on climate change adaptation called for '[m]easures to enhance understanding, coordination and cooperation with regards to climate change induced displacement, migration and planned relocation'.[545] Responding to this call to action, the international community has since made significant progress in identifying key principles and best practices for conducting planned relocations, and for protecting and assisting disaster-displaced persons.

This progress is particularly evident from the adoption of two key human rights-oriented texts produced in late 2015: first, the *Guidance on Protecting People From Disasters and Environmental Change Through Planned Relocation*;[546] and second, the *Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change* (the **Nansen Protection Agenda**).[547] More recently, in July 2018, the vast majority of member states of the United Nations agreed on the text of the *Global Compact for Safe, Orderly and Regular Migration*.[548] This text, which was adopted in December 2018, commits states to 'develop coherent approaches to address the challenges of migration movements in the context of sudden-onset and slow-onset natural disasters'.[549]

While there are many circumstances surrounding human mobility in disaster settings, including emergency evacuations as discussed in Chapter 4, this Chapter focuses on two aspects of disaster-related human mobility: planned relocation and disaster displacement. Section B discusses planned relocation, while Section C discusses the phenomenon of disaster displacement. Section D provides decision-makers with recommendations about how to develop law and/or policy for conducting successful and dignified planned relocations, and for protecting and assisting disaster displaced persons.

B. Planned relocation

This section focuses on planned relocations which means 'a planned process in which persons or groups of persons move or are assisted to move away from their homes or places of temporary residence, are settled in a new location, and provided with the conditions for rebuilding their lives'.[550] Planned relocation is carried out under the authority of the State and takes place within national borders.[551] The literature indicates that there are two main types of disaster-related relocation.[552]

- **Preventive relocation:** This type of relocation is an attempt to avoid a threat before it materializes and is generally based on a determination, by government authorities or by the affected people themselves, that the disaster risk in a particular area is unacceptably high.[553]
- **Responsive relocation:** This type of relocation occurs in response to a particular disaster. For example, a community may be evacuated during a disaster and, once the immediate threat has subsided, government authorities may require and/or assist them to resettle in a new location rather than returning to their homes.[554]

Both types of relocation may be caused by either slow-onset or sudden-onset hazards. The distinction between these two types of planned relocation is not clear cut: since preventive

relocation is often used in areas that have suffered previous disasters, it can, alternatively, be viewed as a subset of responsive relocation.[555] Planned relocation is, however, distinct from evacuation, which is discussed in Chapter 4.

The literature indicates that the experience of communities with relocations has been predominantly negative.[556] Common causes of unsuccessful relocation projects include a lack of community participation in design and implementation, the selection of inappropriate sites that are not proximate to the population's livelihoods and social networks, and under-budgeting of relocation costs.[557] In order to succeed, relocation should be much more than 'a new house in a safe place'; it should provide the relocated community with the means to rebuild their lives through access to livelihoods, public services and social networks.[558] There are many examples of relocations being unsuccessful where this holistic approach is not adopted.[559]

The *Sendai Framework* recognizes relocation as a method of managing disaster risk and calls on states to develop policies governing relocation of human settlements in disaster risk-prone zones.[560] The Desktop Reviews indicate, however, that it is relatively uncommon for countries to have laws and policies that specifically address relocations.[561] From the 20 Sample Countries, only five have any form of law or policy that specifically addresses the issue of planned relocation.[562] A notable example is Brazil, where municipalities may relocate people that live in areas susceptible to high impact landslides, flash flooding or other hazards.[563] Importantly, Brazilian law provides that relocation can only occur after the site has been inspected and a technical report has been prepared that demonstrates the risks to the occupants.[564] This requirement is an example of good practice because it means the decision to relocate must be evidence-based and provides a safeguard against municipalities using their relocation powers for ulterior purposes (e.g. to acquire desirable land).

Another example of good practice is Brazil's laws and policies governing the relocation of persons residing in informal settlements in high-risk areas.[565] Brazilian law provides for the legalisation of informal settlements and stipulates that occupants can only be removed from informal settlements in high-risk areas as a last resort.[566] This principle of last resort means that there must be no other available option to eliminate or mitigate risk, such as engineering works to contain slopes and reduce the risk of landslides.[567] Importantly, the law and related policies provide that, if relocation is required, authorities should endeavour to keep communities close to where they used to live, in order to avoid disrupting their family and social ties, their access to basic services and their livelihoods.[568] There are two aspects of this law that reflect good practice: first, the use of a principle of 'last resort'; and second, a holistic approach to relocation that addresses community needs other than safe housing.

There are also examples of good practice in countries outside the sample group. For example, in September 2018 Vanuatu adopted a comprehensive *National Policy on Climate Change and Disaster-Induced Displacement*.[569] The Policy, developed with technical support from the International Organization for Migration, contains a set of guiding principles and identifies key actions in 12 strategic areas (e.g. education, infrastructure, agriculture, food security, livelihoods).[570] The Policy recognizes that planned relocation is an option of last resort and aims to take into account lessons learned from previous relocation experiences globally and in the Pacific, so that movement takes place with dignity and with appropriate safeguards and human rights protections in place.[571]

The fact that only five of the 20 Sample Countries have laws that specifically address planned relocations suggests limited legislative interest in this area, despite the increasing likelihood of planned relocations due to the impacts of climate change, development and

urbanisation. Section E below provides decision-makers with recommendations about how to develop law and policy governing planned relocations.

C. Disaster displacement

Disaster displacement refers to 'situations where people are forced to or obliged to leave their homes or places of habitual residence as a result of a disaster or in order to avoid the impact of an immediate and foreseeable natural hazard'.[572] Approximately 26 million people are newly displaced every year as a result of sudden-onset disasters.[573] Most people displaced by disasters are internally displaced, however some people displaced by disasters cross national borders in order to reach safety.[574] Cross-border disaster displacement is particularly prevalent in Africa, Central America and South America.[575] Displacement, whether internal or cross-border, negatively impacts family and community life, economic livelihoods, education and health.[576] It aggravates pre-existing vulnerabilities and creates heightened safety risks, including trafficking and sexual and gender-based violence.[577] The negative impacts of displacement vary depending on the particular circumstances. Protracted or indefinite displacement has a propensity to create severe impacts, particularly if displaced persons are not granted clear rights to basic services or to remain on the land, or in the country, to which they have fled.[578]

At both national and international level, there are legal gaps in the protection of cross-border disaster-displaced persons. Persons who have crossed borders in response to a disaster are generally not refugees within the meaning of the *Convention Relating to the Status of Refugees*[579] or under the broader definitions adopted at the regional level in the Americas and Africa. It is arguable that international human rights law prohibits cross-border disaster-displaced persons from being returned to their country of origin if the circumstances in that country are so extreme that their return would constitute inhuman and degrading treatment.[580] There is, however, a lack of specific jurisprudence on this issue.[581] Further, in any event, international law does not grant such persons a positive right to be admitted to and stay in another country.[582] At the domestic level, only a small number of states have national laws or bilateral or regional agreements that address the admission and stay of foreigners displaced by disasters.[583]

The Desktop Reviews do not discuss protection and assistance of displaced persons. This group is, nonetheless, addressed in this Report due to their particular need for protection and assistance. Section D below provides decision-makers with recommendations about how to develop law and/or policy to manage displacement risk and to protect disaster-displaced persons, including both cross-border and internally displaced persons.

D. Recommendations

i. Planned relocation

As discussed in section B above, the experience of communities with relocations has, thus far, been predominantly negative. In order to address the unique and complex challenges posed by planned relocations, decision-makers should develop a comprehensive legal and policy framework for undertaking planned relocations in a manner consistent with international law, particularly international human rights law.[584]

There is a large body of existing guidance documents and frameworks that address, or are relevant to, planned relocations.[585] The most comprehensive resource is the *Guidance*

on Protecting People from Disasters and Environmental Change through Planned Relocation (**Guidance on Planned Relocation**) and its accompanying *Toolbox*, developed by The Brookings Institution, the Office of the United Nations High Commissioner for Refugees, the Georgetown University Institute for the Study of International Migration, and the International Organization for Migration.[586]

The *Guidance on Planned Relocation* was developed between 2011 and 2015 through a consultative process involving representatives of States, international organizations and experts from a wide range of disciplines.[587] It was also informed by an analysis of 30 existing guidance documents and frameworks.[588] Although it is not possible to provide a complete summary of the *Guidance on Planned Relocation* in this Report, some of the key principles are identified below.

- **Principle of last resort:** Planned relocation should be used as a measure of last resort, after other risk reduction and/or adaptation options have been considered and reasonably exhausted.[589]
- **Accountability:** Planned relocations must be undertaken in accordance with national legislation and international law, and potentially relocated persons should have the right to challenge a planned relocation before a court of law.[590]
- **Minimum standards:** Planned relocations should enable relocated persons to improve, or at least restore, their living standards.[591] As a minimum, relocation sites should provide safe shelter, suitable livelihoods, transportation, basic infrastructure and basic services (e.g. healthcare and education).[592]
- **Other affected persons:** Planned relocation should enable host populations to maintain their pre-existing living standards, or to attain the same living standard as relocated persons (whichever is higher).[593] Further, planned relocation should mitigate adverse impacts on persons who live in close proximity to the areas from which relocated persons originate.[594]
- **Participatory approach:** Relocated persons and other affected persons should be informed, consulted, and enabled to participate in decisions on whether, when, where, and how a planned relocation occurs.[595]

The Toolbox provides decision-makers with concrete suggestions about how to implement the *Guidance on Planned Relocation*.[596] Importantly, it provides a 'Checklist' for legal frameworks, which is a series of questions highlighting the key issues and actions that should be regulated by law.[597] This Checklist is an extremely useful tool for developing, reviewing or amending domestic law and policy for planned relocations. Decision-makers should, therefore, refer directly to both the *Guidance on Planned Relocation* and its accompanying *Toolbox* when developing law and policy governing planned relocations.

ii. Disaster displacement

In the last decade, disaster and climate-induced displacement has gained increasing recognition in international human rights, climate change, migration, disaster and development law and policy.[598] One of the most significant developments has been the Nansen Initiative, which, from 2012 to 2015, collated effective State practice into a single resource entitled the *Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change* (**Nansen Protection Agenda**).[599]

Issue Area	Key Actions
Managing disaster displacement risk	• Identifying people at risk of displacement and supporting them to develop disaster preparedness and response plans. • Investing in measures such as improving housing, livelihood diversification and food security in order to increase the resilience and adaptive capacity of at-risk communities. • Prioritizing infrastructure improvements (i.e. sea-walls, dams, dykes, earthquake resistant buildings) in at-risk areas. • Developing law and policy to support effective and sustainable planned relocations as a last resort, where other options have been exhausted.[602]
Protecting cross-border disaster displaced persons	• Developing legal criteria to identify cross-border disaster displaced persons. • Providing for cross-border disaster displaced persons to: – be admitted to and stay in the country's territory (at least temporarily); – enjoy full respect of their human rights during their stay; and – be entitled to assistance to meet their basic needs during their stay. • Precluding foreigners who are already present when disaster occurs from being returned to a disaster-affected country if conditions there would be prohibitive. • Developing criteria to determine when the return of cross-border disaster displaced persons may take place (note: any such criteria should be consistent with international human rights law). • Allowing cross-border disaster-displaced persons to apply for renewed or permanent residency when the conditions causing their displacement are prolonged or permanent.[603]
Protecting internally disaster-displaced persons	• Ensuring that laws and policies relating to internal displacement include internally disaster-displaced persons. • Addressing the protection of internally disaster-displaced persons in contingency plans and clarifying the corresponding roles and responsibilities of relevant actors. • Strengthening the institutional capacity and resources of national and local authorities to enhance protection and support for IDPs in disaster contexts.[604]

It is important for domestic decision-makers to implement legal and policy measures to protect disaster-displaced persons, and also to manage disaster displacement risk. The table above identifies key actions that may be mandated or facilitated by law and/or policy. When developing law and policy addressing disaster displacement, decision-makers should refer directly to the *Nansen Protection Agenda* and the *UN Guiding Principles on Internal Displacement*.[600]

For some of the key actions identified above, it may sometimes be appropriate for decision-makers to develop new law and policy, rather than amending or adapting existing instruments.[601] This may be the case in relation to cross-border disaster-displacement, which is often not regulated under domestic law. However, decision-makers should take care to avoid unnecessary fragmentation in the legal, policy and institutional frameworks relating to disaster management.

In addition to the key actions identified in the table above, further research on the protection of displaced persons, and persons at risk of displacement, should be undertaken in order to expand the existing body of guidance and to inform the development of law and policy.

8. Emergency shelter and housing, land and property rights in disasters

A. Introduction

In recent years, there has been a growing recognition of the HLP rights issues that are raised by disasters, including regulatory barriers to emergency shelter assistance, particularly for vulnerable groups. Humanitarian actors have become increasingly focussed on ensuring equitable access to emergency shelter assistance and on protecting the HLP rights of disaster-affected persons.[605] The importance of HLP rights in disasters has also received attention within international human rights fora, with the Human Rights Council adopting a resolution in March 2012 calling for States to ensure that all disaster-affected persons have equitable access to housing, irrespective of their pre-disaster tenure status.[606]

This Chapter focuses on three common HLP-related problems that arise during disasters: first, inequitable access to emergency shelter assistance due to DPR actors using eligibility criteria that exclude vulnerable groups; second, a lack of available land and buildings for emergency and transitional shelter assistance due to the absence of laws permitting government to temporarily requisition land and buildings during disasters; and third, educational disruption due to the use of schools for emergency shelter. Section D of this Chapter provides decision-makers with recommendations about how develop law and policy in order to address these three issues. Given that the scope of this Report is limited to disaster preparedness and response, it does not address longer-term shelter support.

B. Inequitable access to emergency shelter assistance

i. Security of tenure

When selecting beneficiaries for emergency shelter assistance, both humanitarian and government actors sometimes insist on sighting formal documentation of secure tenure before providing assistance.[607] Potential beneficiaries may even be required to provide evidence of freehold title, with lesser property rights (e.g. leases) being inadequate.[608] The focus on secure tenure reflects valid concerns about infringing on third party property rights and is an attempt to minimize the risk of beneficiaries being subsequently disturbed by eviction or legal dispute.[609] An insistence on proof of secure tenure is, however, inequitable because it discriminates between beneficiaries based on their pre-disaster tenure status, rather than their level of need.[610] An insistence on proof of secure tenure is also often impractical in a disaster context where many people may have had their formal documents damaged or destroyed and the processes for replacing them may be lengthy or temporarily unavailable.[611]

In many countries where shelter assistance is required, the HLP system exhibits certain characteristics that make it especially inequitable and impractical to use secure tenure as a criterion for emergency shelter assistance. These characteristics are described below.

- **Legal pluralism:** Statutory laws, customary laws and faith-based HLP systems co-exist and, in some cases, the relationship between these systems, or between different rules or laws within each system, is unclear.[612]
- **Weak statutory HLP systems:** Statutory or other formal processes for registering land, demarcating land boundaries and/or resolving land disputes are complex, lengthy, expensive and/or ineffective. They are, therefore, underutilized and inaccessible to a significant proportion of the population, especially vulnerable and disadvantaged groups.[613]

- **Limited registration of land:** A large proportion of land is unregistered. Instead, a significant proportion of the population derive tenure from customary laws or faith-based systems and lack formal tenure documentation.[614]

- **Inequitable access to land:** There is a high degree of inequality in access to land with vulnerable groups, such as women and racial or ethnic minorities, having low rates of ownership or use rights.[615] Further, a significant proportion of the urban population live in informal settlements and have limited or no tenure security.[616]

Where the above characteristics are present, a secure tenure requirement has the propensity to exclude large segments of the population from accessing emergency shelter assistance, particularly vulnerable and disadvantaged groups that are likely to be most in need of assistance. Further, in any event, title documents may not be an accurate way to verify secure tenure. On one hand, an absence of title documents may not equate to a lack of secure tenure because customary systems may predominate and provide a high degree of security of tenure.[617] On the other hand, title documents may not necessarily equate to secure tenure because registration processes may be flawed and underutilized.

In countries that exhibit the characteristics described above, humanitarian actors have used community verification and community-based land mapping processes to verify ownership or use rights, instead of relying on formal tenure documentation.[618] Community-based land mapping is a process whereby residents jointly design and implement a process for identifying the ownership and use of land in their area.[619] Humanitarian actors have also used these community-based processes as the basis for subsequently documenting tenure arrangements through, for example, statements of ownership verified and signed by neighbours and community leaders, and land boundary agreements signed by all community members.[620] These community-based processes, and the resulting documentation, have provided humanitarian actors with sufficient comfort to provide emergency shelter assistance.

In recognition of the problems associated with the requirement of 'secure' tenure, the international humanitarian community has begun to move towards a requirement of 'secure *enough*' tenure.[621] This concept recognizes that many tenure arrangements other than freehold title may be sufficiently secure to indicate that the risks associated with providing emergency shelter assistance are relatively low. Further, it reflects a pragmatic approach that strikes a balance between meeting the urgent needs of disaster-affected persons and minimizing the risk of future evictions or land disputes. The 'secure enough' tenure approach is recommended by the *Sphere Minimum Standards*, which explains that this approach entails undertaking a due diligence process to obtain as much certainty as is feasible in the circumstances.[622]

From the 20 Sample Countries, only one — Kazakhstan — has laws that require proof of secure tenure as an eligibility requirement for shelter assistance.[623] In Kazakhstan, in order to receive a government grant or loan for earthquake-related repairs or reconstruction, an affected person must provide proof of their right to use the land.[624] This criterion may exclude vulnerable and disadvantaged groups that are most in need of shelter assistance. The remaining 19 Desktop Reviews indicate that they were unable to locate any requirement of secure tenure in domestic laws relating to shelter assistance. Indeed, to the contrary, several Desktop Reviews identified that assistance is provided on the basis of needs assessments, or that a 'secure tenure' requirement would be inconsistent with general legal protections enshrining non-discrimination and equality.[625]

The literature also provides examples of domestic governments adopting good practices for promoting equitable access to emergency shelter assistance. In Chile, for example, after the February 2010 earthquake, the government introduced laws to simplify and accelerate the land tenure regularisation process for small properties.[626] The goal of the new laws was to provide a fast track procedure for people urgently requiring shelter assistance.[627] In Ecuador, after the April 2016 earthquake, a multi-agency Housing Land and Property Group, under the leadership of the Ecuador Red Cross, advocated for changes to public policies to improve access to shelter assistance.[628] The Ministry of Development and Housing responded to this advocacy by adopting a Ministerial Agreement entitling persons lacking formal title to access earthquake reconstruction programs.[629]

Notwithstanding these positive cases, the literature equally provides many examples of domestic governments using 'secure tenure' as an eligibility criterion for emergency shelter assistance.[630] Section E below provides decision-makers with specific recommendations about how to develop law and/or policy to create an inclusive and non-discriminatory approach to emergency shelter assistance.

ii. Personal identification documents

In some disaster contexts, DPR actors have required potential beneficiaries to provide proof of identity in order to access emergency shelter assistance.[631] This requirement is also used for many other types of disaster-related assistance.[632] Even though proof of personal identity is generally a much less onerous requirement than proof of secure tenure, it can still be problematic in disaster contexts where identity documents may be lost, damaged or destroyed. A potential solution to this problem is to establish an expedited procedure for replacing identity documents, or a procedure for issuing provisional identification documents to disaster-affected persons. This is equally relevant to land title documents, which are also susceptible to being lost, damaged or destroyed during disasters.

None of the 20 Desktop Reviews identify the existence of special or expedited procedures for replacing personal identity or land title documents during a disaster.[633] Instead, several Desktop Reviews indicate that normal procedures for replacing documents continue to apply.[634] Several Desktop Reviews also identify that replacing land title document requires the applicant to present their personal identity documents.[635] This requirement, while feasible in normal times, may be problematic in a disaster context where a person may have lost *both* personal identification and land title documents. Although the Desktop Reviews do not identify special or expedited procedures for replacing records, they do identify some good practices in this area.

Several of the Desktop Reviews identify that their countries possess electronic records meaning that, if physical records are lost or destroyed, the record holder's information is preserved and the relevant document can be re-issued.[636] Electronic records systems may, therefore, save time and obviate the need for disaster-affected persons to re-establish or reconstruct information contained in lost or destroyed records (e.g. land boundaries, place of birth). Another good practice identified in the Desktop Reviews is providing replacement records to disaster-affected persons free of charge.[637] Section E below provides decision-makers with specific recommendations about how to develop law and/or policy to address the loss or destruction of land title and personal identification documents during disasters.

C. Land and buildings for emergency and transitional shelter

In the aftermath of a disaster, it is often very difficult for DPR actors to find land for the construction of temporary shelter.[638] In urban settings, land is often in scarce supply and, as a result, DPR actors are forced to select sites outside of crowded city centres, where land is less in demand and easier to obtain.[639] This can lead to low uptake from disaster-affected persons, who are generally reluctant to move far from their communities and livelihoods, even on a temporary basis.[640] Another challenge for DPR actors can be finding land in a low-risk area that will not expose the affected population to further hazards.

In this context, it may be helpful for government authorities to possess a power to temporarily requisition land for emergency shelter. Conversely, the absence of such powers may constitute a regulatory barrier to emergency shelter. For example, in the aftermath of the January 2010 earthquake in Haiti, there was a pressing need for the government to requisition land and, subsequently, to build or authorize camps for the displaced and homeless.[641] There were, however, very few successful requisitions due, in part, to delay and confusion caused by a lack of clear rules governing requisitions.[642] The government's inability to quickly requisition land meant that shelter agencies struggled to find adequate land to meet urgent needs.[643]

Not all of the Desktop Reviews addressed the requisitioning of land, but some did provide relevant information. Further, the Australian Red Cross, with the support of its pro bono partner Allens Linklaters, has recently conducted a mapping of HLP rights in 12 Asia Pacific jurisdictions (the **HLP Mapping**) that includes information about requisitioning land.[644] Together, the Desktop Reviews and the HLP Mapping indicate that there are (at least) two main types of requisition power that may be available to governments during a disaster.

- **Ordinary requisition laws:** Many countries' laws permit government to requisition land for public use during normal times and these provisions may, theoretically, also be invoked during disasters.[645] In many countries, the requisitioning of land is governed by constitutional law due to the high degree of importance ascribed to the protection of private property rights.[646]
- **Disaster-related requisition laws:** Some countries have laws that *specifically* permit government to temporarily requisition land following a disaster.[647] These powers may apply to disaster situations generally, or they may be 'emergency powers' that are only available for the period in which a declaration of disaster or emergency is in force.

Ordinary requisition laws can be impracticable in a disaster context because they are generally designed for permanent requisitions and, consequently, establish lengthy procedures that allow the affected person several opportunities to challenge the requisition and/or the amount of compensation awarded.[648] These safeguards, which are designed to prevent the arbitrary and unjust deprivation of property rights, mean that ordinary requisition laws are generally not capable of facilitating rapid and temporary requisition of land to meet the urgent needs of a disaster-affected population.[649] Disaster-related requisition powers are, in contrast, more practicable because they generally establish faster and less onerous procedures.

The Desktop Reviews and HLP Mapping indicate that disaster-related requisition powers are relatively uncommon. Four Desktop Reviews identify temporary requisition powers that apply during disasters.[650] For example, in Finland, during a state of emergency, municipalities are empowered to order private persons, companies and institutions to

provide premises for the temporary accommodation of displaced people.[651] Similarly, in Jordan, during an emergency or disaster, the Prime Minister may authorize the Interior Minister to seize any real estate or buildings required for public shelters.[652] The fact that only four of the 20 Desktop Reviews identify the existence of temporary requisition powers suggests that there is scope for domestic law to be amended to include such powers. It is, however, very important that any such powers are accompanied by safeguards to preclude the arbitrary and unjust deprivation of private property rights. Section E below provides decision-makers with recommendations about how to design temporary requisition powers that strike a balance between, on one hand, meeting the urgent needs of disaster-affected populations and, on the other hand, protecting private property rights.

D. Use of schools for emergency shelter

International human rights law establishes that the right to education is one of the fundamental human rights of the child; this right prevails even during emergency situations of armed conflict and natural disaster.[653] Mitigating educational disruption during a disaster not only protects the right to education, it also provides physical and psychosocial protection that can be 'life-saving and life-sustaining'.[654] Ongoing access to quality education in a disaster:

- mitigates the psychosocial impact of disasters by giving children a sense of 'routine, stability, structure and hope for the future';[655]
- protects against child protection risks (i.e. abduction, trafficking, illegal adoption, child marriage, exploitation and SGBV);[656]
- allows children who need particular assistance (e.g. medical care or child protection) to be identified, supported and monitored;[657] and
- allows lifesaving knowledge to be disseminated to children (e.g. information about disease prevention, sanitation and accessing support services).[658]

The use of schools as shelters during and following disasters may disrupt education, either by forcing schools to close or creating conditions that significantly reduce quality of education. The Inter-Agency Network for Education in Emergencies (**INEE**) therefore recommends that educational facilities should only be used as shelters during disasters when there is no other alternative.[659]

From the 20 Sample Countries, only Brazil and the Philippines have laws or policies mandating that schools should only be used as evacuation centres or temporary shelters as a last resort.[660] Brazil's *Joint Protocol on Protection* requires authorities to avoid using schools as shelters in order to ensure continuity of school activities for children and adolescents.[661] Similarly, Philippines law provides that schools may only be used as evacuation centres where there is no other available place or structure.[662] Philippines law is an example of good practice because it contains several additional measures to preserve educational facilities during disasters. Philippines law provides that, when a school is used as an evacuation centre, gymnasiums, auditoriums and other open spaces should be used first, and classrooms should only be used as a last resort.[663] Further, the use of the school premises must be as brief as possible.[664] If local authorities predict that the school will be required for more than 15 days, they must provide written documentation to the Department of Education demonstrating that they have considered all alternative sites and are taking measures to minimize disruption to educational activities.[665] The fact that only two of

the 20 Sample Countries have laws or policies designed to minimize the use of schools as temporary evacuation centres suggests that there is significant scope to strengthen law and/or policy in this area.

E. Recommendations

i. Access to shelter assistance

Security of tenure

To the greatest extent possible, law and/or policy should provide for emergency (i.e., temporary) shelter assistance to be provided to disaster-affected persons on the basis of need, rather than pre-disaster tenure status. Where an assessment of tenure security is deemed necessary, law and/or policy should provide that 'secure enough' or 'reasonably secure' tenure is sufficient. Law and/or policy should explicitly provide for community verification and community-based land mapping to be used to demonstrate or verify tenure. Further, it should identify that the following indicia may be used to assess tenure security:

- tenure documentation that does not comply with legal formalities;
- investment in the property;
- payment of rent, utilities and/or taxes; and
- use of the property to support livelihoods, including as collateral for debt.[666]

In order to mitigate the risk of tenure-related issues arising during disasters, governments should develop programs to regularise undocumented or informal land tenure. Where such programs already exist, but are complex and lengthy, simple and expedited processes should be introduced.

Safekeeping and replacement of important documents

The law should establish procedures to expedite the replacement of personal identification and land title documents that are lost or destroyed during disasters. Replacement documents should be provided to disaster-affected persons free of charge or subsidized as necessary. Further, the law should establish procedures for recognizing (at least on a temporary basis) land ownership and use rights that are: identified using community verification and community-based land mapping; and documented via agreements or statements signed by all relevant parties.[667]

In order to minimize the risk of personal identification and land title documents being lost during disasters, public preparedness programs should educate the general population about practical measures for maintaining access to records, including:

- storing records in a manner that allows them to be quickly retrieved and transported in the event of an evacuation; and
- making electronic copies of records and storing them in a manner that permits access even where personal devices are lost (e.g. using cloud storage or personal email accounts).

As a longer-term measure, and where permitted by national resources, decision-makers should consider introducing electronic records systems to prevent loss of information during disasters.

ii. Access to land and buildings for emergency and transitional shelter

Government requisitioning of land is often governed by constitutional provisions designed to preclude the arbitrary and unjust deprivation of private property rights. To the extent permitted by constitutional law, decision-makers should consider introducing powers that permit government to temporarily requisition land and buildings following a disaster.

In order to minimize interference with private property rights, the law should stipulate a maximum period for temporary requisitions and provide the temporary occupiers – those displaced – with documentation to protect their right to temporarily reside there for that duration. Further, the law should mandate that private land or buildings may only be requisitioned if there is insufficient public land or buildings available. In addition to the foregoing, the law should specify the following details:

- the criteria for determining when the power may be exercised;
- the types of property that may be requisitioned;
- the process for notifying the property owner of the requisition;
- the minimum notice period;
- the property owner's rights to challenge the requisition;
- the grounds on which a property owner may challenge the requisition;
- the amount of compensation to be paid to the property owner (if any) for the period of use;
- the mechanism for enforcing the requisition (if necessary);
- the process for returning the property to its owner;
- the mechanism for enforcing the return of the property (if necessary); and
- an obligation on the government to return the property to the owner in its original state.

Clearly specifying the above details serves to: (i) impose strict controls on the temporary requisition power, thereby precluding the arbitrary and unjust deprivation of property rights; (ii) create clarity about how the requisition procedure operates, thereby preventing delay and confusion during a disaster; and (iii) provide property owners with certainty about their rights, thereby encouraging them to cooperate.

When determining the circumstances in which temporary requisition powers may be exercised and the maximum period of a requisition, decision-makers should take into account the fact that property may be required not only for emergency shelter, but also for transitional shelter. It may, therefore, be inadequate for temporary requisition powers to be limited to a declared state of emergency or disaster.[668]

In addition to the above details, the law should provide that, when exercising temporary requisition powers, decision-makers are required to have regard to whether the location and nature of the property is appropriate for emergency shelter. Specific factors that should be taken into account are whether the property will expose the affected population to further hazards, and whether it is proximate to the affected population's livelihoods and community.

iii. Use of schools for emergency shelter

In order to minimize educational disruption during disasters, law and/or policy should provide that schools may only be used for emergency shelter where there is no feasible alternative, and contingency plans should identify alternative sites to serve as emergency shelters.[669]

In light of the fact that it may not always be possible to avoid using schools for emergency shelter, law and/or policy should contain practical measures to promote educational continuity in this situation. Specifically, decision-makers should consider adopting the following practical measures:

- mandating that, where possible, gymnasiums, auditoriums and other open spaces are used instead of classrooms in order to permit teaching to continue;
- stipulating a maximum number of school days for which schools may be used as emergency shelters during any given school year;
- establishing financing mechanisms for the replacement or repair of any school property that is damaged by the use of the school as emergency shelter; and
- establishing rules and procedures for the use of the school as emergency shelter that are designed to ensure that the school is maintained in good condition.[670]

For further practical guidance about how to promote educational continuity when schools are used as shelters, decision-makers should have regard to: the International Agency for Education in Emergencies' *Minimum Standards for Education: Preparedness, Response Recovery*;[671] and the Asia Pacific Coalition for School Safety's *Policy Brief and Practice Guidance for Pacific Nations on Limiting and Planning the Use of Schools as Temporary Evacuation Centres in Emergencies*.[672]

9. Protection and inclusion of particular vulnerable groups

A. Introduction

i. Context

In many countries, disaster laws focus on the roles and responsibilities of domestic institutions and make limited reference to disaster-affected populations themselves.[673] The protection of disaster-affected populations should, however, be the principal aim of all DPR activities. Indeed, IFRC considers that receiving humanitarian assistance after a disaster is a fundamental right, derived from the rights to life, to health and to adequate housing (amongst other rights), as enshrined in international human rights law.[674]

The following groups *may* be disproportionately impacted by disasters: women and girls; children (including unaccompanied and separated children); older persons; persons with disabilities; migrants and displaced persons; racial and ethnic minorities; indigenous groups; and sexual and gender minorities. These groups may experience a higher incidence of disaster impacts such as morbidity, mortality and property loss or damage. Equally, they may experience a higher incidence of the many forms of violent, exploitative or otherwise harmful behaviours that increase during and after disasters. Section iii below identifies the underlying reasons why these groups may be disproportionately affected by disasters.

This Report uses the term 'vulnerable groups' to refer collectively to the groups identified in the preceding paragraph notwithstanding the fact that, depending on the circumstances, it may be more accurate to describe some of the groups identified above as having 'specific needs', being 'at risk' or being 'vulnerable'.[675] The list of vulnerable groups provided above is not exhaustive; indeed, any group that experiences pre-existing discrimination and marginalisation may be disproportionately affected by disasters. Other groups that may be disproportionately affected by disasters, depending on the local context, include: religious and/or political minorities; and marginalised classes or castes. This Chapter does not discuss these groups in detail due to the lack of literature that specifically addresses the impact of disasters on these groups. The general recommendations in Section D are, however, highly relevant to these groups.

As is evident from the preceding paragraphs, this Report discusses various *groups* that are identified by characteristics such as age, sex or disability. It is important to acknowledge that this group-based approach has serious limitations. Vulnerable groups are not homogenous: the degree to which members of a 'vulnerable group' are *actually* disproportionately affected by disasters varies between countries, and between individuals within the same group in the same country. As an example, the degree to which women are disproportionately affected by disasters varies between countries depending on levels of gender discrimination. Further, it varies between women in the same country depending on factors such as their level of education or wealth, health, age, migration status, race or ethnicity (amongst many other factors). Indeed, the fact that disaster impacts vary significantly within vulnerable groups is partly a product of intersectionality — that is, the tendency for persons that have two or more vulnerabilities (e.g. older women with disability; unaccompanied and separated girls) to experience heightened discrimination and marginalisation.

The international community is increasingly recognizing the importance of protecting and including vulnerable groups in disaster management. Notably, the *Sendai Framework* calls for a people-centred, inclusive and non-discriminatory approach to disaster risk reduction that pays special attention to people disproportionately affected by disasters.[676] It specifically notes the importance of involving 'women, children and youth, persons with disabilities, poor people, migrants, indigenous peoples … and older persons in the design and

implementation of policies, plans and standards'.[677] There are also many conventions that specifically govern the rights of the vulnerable groups identified above, such as the *Convention on the Rights of the Child* and the *Convention on the Elimination of All Forms of Discrimination against Women*.[678]

ii. Chapter outline

This Chapter focuses on the protection and inclusion of vulnerable groups in disaster preparedness and response. Section B below discusses each vulnerable group in turn. Each sub-section in Section B analyses why the group may be disproportionately impacted by and during disasters, and whether existing law and/or policy in the 20 Sample Countries provides for their protection and inclusion in disaster preparedness and response. In addition to discussing each vulnerable group in detail, this Chapter includes a section on mental health and psychosocial support (**MHPSS**), however it is acknowledged that MHPSS is important for all disaster-affected populations, not only for vulnerable groups.

Section D below provides decision-makers with recommendations about how to develop law and/or policy to protect and include vulnerable groups in disaster preparedness and response. It provides six general recommendations that apply to all vulnerable groups and specific recommendations tailored for individual vulnerable groups. Section D also provides recommendations about how to develop law and/or policy to provide mental health and psychosocial support during disasters.

This Chapter adopts the Inter-Agency Standing Committee's definition of 'protection' as 'all activities aimed at obtaining full respect for the rights of the individual in accordance with the letter and the spirit of the relevant bodies of law (i.e. International Human Rights Law (**IHRL**), International Humanitarian Law, International Refugee law (**IRL**)'.[679] The term 'inclusion' refers to any action designed to ensure that vulnerable groups have direct and meaningful participation in decisions that affect them, including in the design and implementation of DPR activities.

iii. High-level findings

The research in section B of this Chapter illustrates that there are (at least) four underlying factors that cause vulnerable groups to be disproportionately impacted by and during disasters. Not all of the factors below apply to all vulnerable groups, however most vulnerable groups experience two or more of the factors below:

- pre-existing social marginalisation causes DPR actors to directly or indirectly discriminate against vulnerable groups in DPR activities. Indirect discrimination can take the form of barriers to access (e.g. facilities that are not accessible to people with disabilities), or a failure to tailor DPR activities to the specific needs of vulnerable groups (e.g. a failure to provide menstrual hygiene management for women and adolescent girls);
- pre-existing economic marginalisation in the form of vulnerable housing and livelihoods exposes some vulnerable groups to more severe impacts (i.e. mortality, morbidity, financial loss) during disasters. Vulnerable housing refers to housing that is poor quality and/or located in high-risk areas, while vulnerable livelihoods refers to livelihoods that are particularly susceptible to environmental change or damage, or are legally or economically insecure (i.e. casual, irregular or unskilled work);[680]

- physical, intellectual, psychological and/or sensory impairments make it more difficult for some vulnerable groups to escape, or take shelter from, physical hazards during a disaster. This may also apply to carers, who choose or are socially obliged to remain with persons that have such impairments; and
- some vulnerable groups are at heightened risk of violent, exploitative or otherwise harmful behaviours following disasters. These behaviours include sexual and gender based violence (**SGBV**), physical violence, physical or emotional abuse, labour exploitation, trafficking, child abduction and illegal adoption.

Overall, the Desktop Reviews indicate that domestic laws and policies in the 20 Sample Countries do not sufficiently protect vulnerable groups during disasters due to a lack of disaster-specific protection measures. Eleven of the 20 Desktop Reviews explicitly recommend amending the law to protect vulnerable groups,[681] and an additional two Desktop Reviews identify deficiencies or gaps in the legal protection of vulnerable groups.[682] The Desktop Reviews also indicate that, even where domestic laws and policies do include measures to protect vulnerable groups during disasters, they often do so unevenly by addressing the needs of some but not all groups.[683]

B. Particular vulnerable groups in disaster preparedness and response

i. Women and girls

Women and girls suffer disproportionately from gender discrimination and gender blindness in DPR activities.[684] Additionally, women and girls may be at heightened risk of SGBV during disasters. Each of these three factors is discussed below.

Sexual and gender-based violence

IFRC research indicates that the incidence of SGBV often increases during disasters, and that SGBV is present to a significant extent in every disaster-affected population that has been studied.[685] The types of SGBV that occur during disasters include (but are not limited to) domestic violence, rape and sexual assault, child/early marriage, transactional sex and trafficking.[686] SGBV affects women, men, girls and boys; however, women and girls are disproportionately affected due to pre-existing gender inequality. Although research indicates that there is a propensity for SGBV to increase during disasters, there are significant barriers to obtaining accurate information about the incidence of SGBV during disasters. In many countries, SGBV reporting systems are underutilized due to social stigma, or are under-resourced and underdeveloped.[687] Further, reporting systems may break down, or function less effectively, during disasters.[688]

Sixteen of the 20 Desktop Reviews provide information in relation to law and/or policy on SGBV.[689] Only two of the 16 countries — Colombia and the Philippines — have laws and/or policies that specifically address the heightened risk of SGBV during disasters.[690] Nine out of the 16 countries have general legal and institutional frameworks for preventing SGBV that continue to apply during disasters, but do not specifically contemplate or address the increased risk of SGBV during disasters.[691] Many Desktop Reviews comment, however, that there is no information on how effective these normal frameworks are during disasters.[692]

IFRC research sheds light on this issue. It indicates that disasters have a propensity to severely strain existing SGBV protection services, including policing, reporting systems,

healthcare, psychosocial support and legal advice. This is especially true if those systems are already deficient in normal times. For example, the IFRC's recent research into SGBV protection in Ecuador, Nepal and Zimbabwe found that gaps and challenges in SGBV protection during normal times were exacerbated during disasters.[693] SGBV service providers — including, but not limited to, health agencies, the police and legal services — did not have contingency plans to ensure continuity of services during disasters and, as a result, had insufficient resources to address the increased volume of SGBV complaints.[694] Another key finding from the research was that, in the three countries, there were no mechanisms in place for coordination between the SGBV protection institutions and the disaster risk management systems.[695]

Importantly, the design and management of emergency shelter may aggravate or mitigate the risk of SGBV. A key practical measure to mitigate the risk of SGBV is to provide women and girls with access to gender-segregated, well-lit, lockable and security-patrolled toilets and showers that are proximate to sleeping and living areas.[696] Another practical measure is to make sex-segregated sleeping areas available. A small number of the Desktop Reviews indicate that law and/or policy contains such practical measures to mitigate the risk of SGBV in emergency and transitional shelter. For example, Philippines law mandates that emergency shelters must provide sex-segregated emergency latrines,[697] while Brazilian policy requires that sanitary facilities in emergency shelters must be adequately lit and cannot be isolated.[698] The fact that the Desktop Reviews identify very few laws and policies containing such practical measures to mitigate the risk of SGBV suggests that there is large scope for improvement in this area.

Gender discrimination

Direct gender discrimination in disaster preparedness and response occurs when one gender is treated less favourably *on the basis of* their gender, rather than on the bases of other characteristics.[699] Direct gender discrimination may occur through formal processes or requirements that exclude one gender, or grant persons with that gender a lower priority or status. Equally, direct discrimination may occur when DPR actors have discriminatory attitudes, whether conscious or unconscious, that cause them to give one gender favourable treatment.

Indirect gender discrimination occurs when DPR activities are *theoretically* equally available to all genders, but are *practically* less accessible to one gender.[700] A common form of indirect gender discrimination is using eligibility criteria that one gender is less likely to be capable of satisfying. Although men and boys may experience gender discrimination, it is more commonly experienced by women and girls. As discussed in section viii below, it may also be experienced by transgender persons, third gender persons or any person whose gender identity and/or expression does not accord with the binary norms of 'male' and 'female'.

As discussed in Chapter 1, many of the Desktop Reviews highlight that their country's constitutional laws and human rights or anti-discrimination legislation establish a general prohibition on discrimination.[701] None of the Desktop Reviews, however, indicate that their country's DM laws and/or policies contain an express prohibition on gender discrimination in disaster preparedness and response. A case study of the April 2015 earthquake in Nepal, commissioned by the IFRC, illustrates how direct and indirect gender discrimination can preclude women from accessing assistance.[702]

- **Direct discrimination**: Nepalese officials often required families to register for disaster relief through a male head-of-household, thereby rendering many women reliant on

the good will of their male relatives.[703] Additionally, this practice resulted in many single women, divorced women and female-headed households struggling to access relief.[704]

- **Indirect discrimination**: housing reconstruction grants were made available to persons who had formal proof of title.[705] In practice, this requirement discriminated against women, who were unlikely to be listed as a co-owner on land title documents.[706]

The Nepal case study underlines the importance of avoiding both direct and indirect gender discrimination in disaster response to ensure that men, women, girls and boys have equitable access to assistance, both in theory and in practice.

Gender blindness

Gender blindness refers to a failure to recognize and respond to the fact that women, men, girls and boys have different needs and coping strategies, especially during disasters. This may occur when DPR actors assume that the needs and behaviours of men and boys represent those of all disaster-affected persons. Gender blindness may manifest as a failure to take steps to make DPR activities equally accessible to women and girls (i.e. indirect discrimination). It may also manifest as a failure to recognize and meet the specific rights and needs of women and girls, namely sexual and reproductive health services and menstrual hygiene management.

International human rights law recognizes that women have a right to good quality sexual and reproductive health services.[707] Women's sexual and reproductive health rights (**SRHR**) derive from multiple human rights, including the right to life and the right to health.[708] In emergency situations, however, there is often a lack of access to adequate sexual and reproductive health services, which has a disproportionately negative impact on women.[709] Even during an acute crisis, SRHR require access to a minimum level of services, including (but not limited to) clinical care for survivors of rape and emergency obstetric and newborn care.[710] Comprehensive sexual and reproductive health services should be implemented as soon as the situation stabilizes. This includes (but is not limited to) antenatal and postnatal care, comprehensive family planning services, and treatment and prevention of sexually transmitted infections (**STIs**).[711]

Importantly, there are many two-way causal links between SRH and SGBV. On one hand, SGBV creates SRH risks — for example, sexual violence creates a risk of sexually transmitted infection and unwanted pregnancy, while intimate partner violence may serve as a barrier to contraceptive and condom use.[712] Equally, SRH conditions create SGBV risks — for example, testing positive for Human Immunodeficiency Virus (**HIV**) or Sexually Transmitted Infections (**STIs**) may constitute a risk factor for experiencing SGBV, with studies finding an increase in violence following disclosure of HIV status or even following disclosure that HIV testing has been sought.[713]

For women and adolescent girls, menstrual hygiene management is also an important human rights issue that can impede their full enjoyment of the rights to health, education and work.[714] Similar to sexual and reproductive health services, however, menstrual hygiene management is often compromised during humanitarian emergencies. This is due a serious lack of access to the basic materials required to manage menstruation (e.g. sanitary pads/cloths and underwear), in addition to a lack of appropriate sanitation facilities.[715] These barriers are often intensified by cultural beliefs and taboos surrounding menstruation, which can make women less likely to demand improved services or supplies.[716]

Sixteen of the 20 Desktop Reviews provide information regarding whether DM law and policy contemplates gender-specific needs.[717] In 11 of the 16 countries, DM law and policy does not contain any requirement to consider gender-specific needs in disaster preparedness and response.[718] For four of the 16 countries, DM law and policy contains only a very high-level or general obligation to identify and fulfil gender-specific needs.[719] Only one of the 16 countries — Colombia — has concrete and specific measures to identify and fulfil gender-specific needs in disaster preparedness and response.[720] Colombia's *Manual of Standardization of Humanitarian Action* requires gender to be recorded as part of temporary shelter registration, and for gender-specific needs to be taken into account in relation to the provision of food, water, medical services, sanitation and hygiene.[721] The fact that Colombia is the only country whose laws require consideration of gender-specific needs suggests that there is large scope for improvement in this area.

ii. Children

Consistent with the *Convention on the Rights of the Child*, this Report uses the term 'children' to refer to all people below the age of eighteen years.[722] This category excludes some adolescents, a term that encompasses people aged 10 to 19 years; it also excludes young people, a term that is often used to refer to people under the age of 25 years.[723] This section of the Report focuses specifically on children, notwithstanding that there are limitations to adopting this approach, namely that the risks faced by children may persist into late adolescence and young adulthood.

During disasters, children are at increased risk of: abduction, trafficking, sale and illegal adoption; exploitation, including child labour; sexual and gender-based violence, including child prostitution and child marriage; physical violence and neglect.[724] For ease of reference, these risks are referred to collectively as 'child protection risks'. Girls are particularly vulnerable to certain child protection risks, namely sexual and gender-based violence.[725] In addition to child protection risks, disasters may compromise children's access to education and their participation in decision-making about issues that affect them. Importantly, the right to education applies even in emergency situations of armed conflict and natural disaster, notwithstanding the practical challenges that arise in these contexts.[726]

During disasters, children are also at increased risk of being separated from their parents and family members due to factors such as being in different locations when disaster strikes (e.g. school and work), having a family member succumb to injury or death, and the general chaos induced by disasters.[727] Separation is often a highly distressing event that can have a severe negative impact on child development and mental health.[728] Compared to the general child population, unaccompanied and separated children (**UASC**) are significantly more vulnerable to the child protection risks identified above because they lack the care and protection of their primary caregiver(s).[729]

The Desktop Reviews indicate that most of the 20 Sample Countries have general legal and institutional frameworks that address child protection risks and establish mechanisms for caring for UASC during normal times. In addition, Italy has recently become one of the first states to enact comprehensive legislation to protect the rights of UASC children arriving in Italy (i.e. foreign UASC).[730] However, only two countries — Brazil and the Philippines — have laws or policies that specifically address the heightened risks to children, especially UASC, during disasters.[731]

Brazil's *Joint National Protocol for the Comprehensive Protection of Children and Adolescents, Elderly Persons and Persons with Disabilities during Disasters* (the **Joint Protocol on Protection**) contains

several measures that may protect children, including UASC, from child protection risks during disasters.[732] As an example, the *Joint Protocol on Protection* requires authorities to maintain a list of children and adolescents at each emergency shelter or camp, and to provide them with identification bracelets naming the adult responsible for them.[733] The *Joint Protocol on Protection* also prohibits unaccompanied children from being moved unless they require medical treatment.[734]

The Philippines' *Children's Emergency Relief and Protection Act* imposes several obligations on government agencies to protect children during disasters. Once a state of calamity has been declared, the police and the Department of Social Welfare and Development (**DSWD**), are required to immediately heighten comprehensive measures and monitoring to prevent child trafficking, labour, exploitation and abuse.[735] Further, the DSWD is required to develop a minimum set of standards and guidelines for a Family Tracing Reunification System for orphaned, unaccompanied and separated children.[736]

If effectively implemented, the Brazilian and Philippines laws discussed above may mitigate some of the child protection risks prevalent during disasters. However, the fact that only two of the 20 Sample Countries have laws or policies that specifically address the protection of children and UASC during disasters indicates that there is large scope for improvement in this area. Section D below provides decision-makers with specific recommendations about how to develop law and/or policy to protect children, especially UASC, during disasters.

iii. Older persons

Older persons are commonly identified as especially vulnerable to the impacts of disasters.[737] Importantly, however, older persons are not a homogenous group and it is not old age *per se* that makes older persons particularly vulnerability to disasters. Instead, their vulnerability is due to factors *associated* with, but not *inevitable* in, old age, including physical mobility, diminished sensory awareness, pre-existing health conditions, special nutritional needs, social isolation and economic constraints.[738] Older women may be more vulnerable than older men, partly due to heightened risk of SGBV.[739]

Older persons, especially older persons with disabilities, are often invisible to DPR actors and, as a result, are inadvertently excluded from assistance.[740] Exclusion is caused by, amongst many other factors, a failure to collect information about older persons (e.g. through registration and needs assessments), to make assistance accessible to them and to meet their specific needs.[741] Assistance that is appropriate for the general population may be inaccessible or inappropriate for older persons. In relation to food, for example, older persons may find it more difficult to: register for food distributions; travel to a food distribution point; queue in harsh weather conditions for a distribution; carry a distribution back to their home or shelter; and access food that satisfies their nutritional needs (e.g. fortified or blended foods).[742]

Although much literature focuses on the vulnerability of older persons, it is important to recognize older persons' capacity for, and contributions to, disaster preparedness and response.[743] Older persons often possess significant capacity to contribute to disaster preparedness and response owing to: their knowledge of the community and local environment; experience of previous disasters; and social roles and influence.[744] Indeed, during disasters, older persons have increased responsibilities for supporting their families, mobilizing resources and caring for children and other dependants.[745]

The laws and policies of several of the 20 Sample Countries identify older persons as a vulnerable group during disasters.[746] Only four countries, however, have laws or policies that contain concrete measures designed to protect older persons during disasters.[747] In Italy, for example, regional disaster plans provide for persons over the age of 70 to be registered and to receive evacuation assistance.[748] As another example, in Queensland, Australia, aged care facilities are required to have emergency evacuation plans.[749] The fact that only four of the 20 Sample Countries have measures to address the needs of older persons indicates that the widespread recognition of older persons' vulnerability does not necessarily translate into concrete action. There is, therefore, significant scope to strengthen the protection of older persons in disaster preparedness and response law and policy. Section D below provides decision-makers with recommendations about how to develop law and policy to protect and include older persons in disaster preparedness and response.

iv. Persons with disabilities

Approximately 15 per cent of the global population have a disability.[750] Similar to older persons, persons with disabilities are commonly identified as particularly vulnerable to the impacts of disasters. Statistical data on the impacts of disasters on this group is limited; however, it does indicate that the mortality rate of persons with disabilities during disasters may be two to four times the mortality rate of the general population.[751] It is worth noting that approximately 46 per cent of people over the age of 60 have a disability, meaning that there is significant overlap between these populations.[752] It is also worth noting that disability disproportionately affects women, especially in low and middle income countries, and among older persons.[753]

Persons with disabilities have physical, psychosocial, intellectual and/or sensory impairments that may make it more difficult for them to escape, or take shelter from, physical hazards during a disaster, and to access DPR activities before, during and after a disaster. In turn, this vulnerability may impact carers — the majority of whom are women — who may choose or be socially obliged to put themselves in danger in order to assist persons with disabilities during disasters. Compared to the general population, persons with disability have additional and specific needs that may not be met during a disaster. These needs include: assistive devices such as wheelchairs, catheters and prosthetics; information in braille, sign language or audio format; support services such as social workers, nurses, sign language interpreters and disability carers (including for intellectual disabilities); and specific medications.[754] Additionally, persons with disabilities are at heightened risk of physical, psychological and sexual abuse during disasters.[755]

International law recognizes the importance of protecting and including persons with disabilities in DPR activities. The *Convention on the Rights of Persons with Disabilities* obligates States Parties to take all necessary measures to ensure the protection and safety of persons with disabilities during natural disasters.[756] The *Sendai Framework* identifies persons with disabilities and their organizations as critical in the assessment of disaster risk, and the design and implementation of appropriate plans.[757] The *Charter on Inclusion of Persons with Disabilities in Humanitarian Action* reflects the international community's commitment to ensure that persons with disabilities have full and effective participation in, and access to, humanitarian assistance, including emergency preparedness and response.[758]

Notwithstanding the foregoing international legal instruments, people with disabilities are often excluded from humanitarian assistance due to indirect discrimination and marginalisation. A 2015 global online consultation of 484 persons with disabilities, 118 disabled

people's organizations and 167 humanitarian actors found that it was extremely difficult for persons with disabilities to access general and disability-specific services during crises.[759] The main contributing factors were a lack of accessible information about available services, a lack of physical accessibility of services and a lack of trained staff on disability.[760] While this consultation focused on humanitarian actors, the Desktop Reviews indicate that domestic law and policy also fails to adequately protect persons with disabilities.

While it is common for domestic law or policy to identify disabled persons as a vulnerable group during disasters,[761] only four of the 20 Sample Countries have laws and/or policies that contain measures designed to ensure the protection of persons with disabilities during disasters.[762] Thus, similar to older persons, the widespread recognition that persons with disabilities are vulnerable during disasters does not translate into tangible measures for their protection and inclusion. Section D below provides decision-makers with recommendations about how to develop disaster preparedness and response law and policy to protect persons with disabilities.

v. Migrants and marginalised racial and ethnic groups

This subsection discusses the vulnerability of migrants and marginalised racial and ethnic groups (**MREG**). Migrants and MREG may be disproportionately impacted by disasters due to the following factors.

- **Language:** Migrants and MREG may not be proficient in, or may not usually communicate in, the official or dominant language(s) of the country or region where they live. The failure of DPR actors to disseminate educational materials, warnings and response information in the languages spoken by migrants and MREG may place them at greater risk of harm.[763]
- **Economic marginalisation:** Many migrants and MREG suffer from pre-existing economic marginalisation that manifests in vulnerable housing and livelihoods. When a disaster occurs, poor quality housing directly causes increased physical impacts (i.e. mortality, morbidity and injury), while vulnerable livelihoods may cause greater economic loss.[764]
- **Discrimination:** Many migrants and MREG suffer from pre-existing direct and/or indirect discrimination. Irregular migrants may be ineligible to receive government services, or may avoid engaging with government services due to fear of being deported.[765] Further, governments may discriminate against MREG by intentionally or inadvertently excluding them from disaster preparedness and response programs.[766]

The vulnerability of migrants may be increased by: limited knowledge of local hazards, institutions and services; and limited social and family support networks.[767]

Notwithstanding the above, it is important to recognize that migrants may be simultaneously vulnerable *and* resilient to the impacts of disasters. Research on the 2010-2011 Canterbury Earthquakes in New Zealand and the 2011 Tōhoku Earthquake and Tsunami in Japan shows that some migrants were more resilient to the impacts of disasters due to their prior experience of civil war and natural disasters, as well as everyday inequality.[768]

The Desktop Reviews did not examine the protection and inclusion of racial and ethnic minorities. They did look to provisions on migrants, but none of them indicated that their countries have laws and policies designed to ensure the protection of migrants during disasters. In light of the fact that migrants and MREG may be disproportionately impacted

by disasters, decision-makers should consider introducing legal and/or policy measures to ensure their protection and inclusion in disaster preparedness and response. Section K below provides specific recommendations about how to do this.

vi. Indigenous groups

Similar to MREG and migrants, indigenous groups may be disproportionately impacted by disasters due to discrimination and economic marginalisation.[769] Additionally, indigenous groups whose identity and livelihoods depend on the environment are particularly vulnerable to the environmental damage caused by disasters.[770] Disasters may threaten indigenous groups' livelihoods by causing environmental damage that makes it difficult, or impossible, to practice traditional agricultural, farming, fishing and hunting methods.[771] Further, disasters may threaten indigenous cultural and social identity by causing damage to, or separation from, traditional lands.[772]

Although indigenous groups are vulnerable to disasters, they may equally possess traditional knowledge and practices that make them resilient to disasters. Accordingly, the *Sendai Framework* recognizes the importance of using indigenous knowledge and practices to complement scientific knowledge in disaster risk assessment,[773] and notes that indigenous peoples can provide an important contribution to the development and implementation of DRR plans and mechanisms, including for early warning.[774] The experience of Simeulue Island during the 2004 Indian Ocean Earthquake and Tsunami illustrates this point. Following the Indian Ocean Earthquake, residents of Simeulue Island evacuated to the mountains with astonishing speed and success.[775] Tsunami waves 15 metres high hit the northern point of Simeulue Island within 10 minutes of the Earthquake, however only 7 people died out of a total population of approximately 90,000.[776] The successful evacuation on Simeulue Island was due to knowledge of a devastating tsunami in 1907, which was passed down from one generation to the next through songs, poems, lullabies and stories.[777] This oral tradition taught subsequent generations to immediately evacuate to the mountains whenever a strong earthquake is followed by a receding tide.[778]

From the 20 Sample Countries, only one country — Colombia — has law or policy designed to ensure the protection of indigenous groups during disasters.[779] Colombian law recognizes indigenous groups as particularly vulnerable to disasters and provides that it is lawful for them to be given preferential treatment in humanitarian assistance.[780] Similarly, only one country, the Philippines, has law or policy that recognizes the importance of indigenous knowledge in disaster management. The main Philippines disaster law establishes that it is State policy to ensure that disaster risk reduction measures are sensitive to indigenous knowledge systems.[781] The fact that only two of the 20 Sample Countries have law and/or policy relevant to the protection and inclusion of indigenous groups in disaster preparedness and response suggests that there is large scope to strengthen law and policy in this area. Section K below provides specific recommendations about how to develop disaster preparedness and response law and policy to protect and include indigenous groups.

vii. Sexual and gender minorities

Compared to many other vulnerable groups, the literature on the experience of sexual and gender minorities (**SGM**) in disaster contexts is limited, and consists mainly of a small number of case studies on recent disasters.[782] These case studies show that SGM may be disproportionately impacted by disasters due to pre-existing, systemic discrimination and marginalisation.[783] Further, they show that regular DPR activities and humanitarian programs are often blind to the needs and vulnerabilities of SGM. As a result, they may

unintentionally exclude SGM or exacerbate their existing marginalisation.[784] Some recent examples are as follows.

Examples:

- After Typhoon Haiyan in the Philippines in 2013, homosexual men living in transitional resettlement sites experienced various difficulties including: violence from other members of the community; difficulty accessing toilets and other WASH facilities due to fear and discomfort from other members of the community; and discrimination from members of the police force.[785]
- Following the 2004 Indian Ocean Earthquake and Tsunami, many of the Aravani community in India's Tamil Nadu state were not entitled to government ration cards because they are a third gender group, being neither men nor women.[786] As a result, they were unable to access to emergency shelter, food aid, or cash relief.[787] Although there were eleven relief agencies with gender programs in Tamil Nadu, none had specific strategies for inclusion of the Aravanis.[788]
- After Tropical Cyclone Winston in Fiji in 2016, some members of sexual and gender minorities were fearful or uncomfortable about using emergency shelter, due to the possibility of violence or discrimination from cohabitants.[789] Some members of sexual and gender minorities therefore sought housing support from one another, rather than using community shelter.

As for other vulnerable groups, it is important to note that SGM are not a homogenous group with a uniform level of vulnerability. There is variation in the level of vulnerability of SGM both between, and within, countries. For example, in some countries third gender persons may actually experience relatively low levels of marginalisation and discrimination, compared gay and lesbian persons.

The Desktop Reviews did not address the protection and inclusion of SGM. This Report does not, therefore, analyse the extent to which the Sample Countries have laws and/or policies that addresses the protection and inclusion of SGM in disaster preparedness and response. Nonetheless, the protection and inclusion of SGM is an important issue that should be considered by decision-makers involved in reviewing or amending domestic disaster law and/or policy. Section K below, therefore, provides decision-makers with specific recommendations about how to develop law and/or policy to protect and include SGM in disaster preparedness and response. These recommendations are based on existing research and guidance developed by the international humanitarian community.

C. Mental health and psychosocial support in disasters

Disasters cause widespread emotional suffering, both in the form of mental health problems (e.g. generalized anxiety disorder, post-traumatic stress disorder and depression) and non-pathological distress (e.g. grief, fear, anger).[790] The impact of disasters on mental health can be long-lasting. Ten years after a disaster, the incidence of depression and post-traumatic stress disorder in a disaster-affected population can be four to five times higher than in non-affected populations.[791]

Health and non-health actors have a tendency to approach disaster-induced mental illness and non-pathological distress from different angles. Non-health actors, including many

humanitarian actors, tend to focus on 'psychosocial well-being', a concept that emphasizes the impact of relationships, family and community networks, social values and cultural practices on individual psychological well-being.[792] This approach views social problems that are caused or aggravated by disaster as a major contributor to emotional distress and suffering. These social problems include family separation, disruption of community networks and structures, and increased incidence of SGBV.[793] Health actors tend to view disaster-induced emotional distress and suffering through the lens of 'mental health', a concept that emphasizes the prevention and treatment of mental health problems.[794] The health sector does, however, also use the terms 'psychosocial rehabilitation' and 'psychosocial treatment' to describe non-pharmacological treatments for mental illness or distress.[795]

The composite term 'mental health and psychosocial support' (**MHPSS**) serves to unite as many actors as possible.[796] It refers to 'any type of local or outside support that aims to protect or promote psychosocial well-being and/or prevent or treat mental disorder'.[797] MHPSS therefore extends beyond the prevention and treatment of mental illness to include other activities such as family tracing and reunification, and enabling communities to engage in cultural, spiritual or religious practices that facilitate mourning and healing.[798] A key component of MHPSS in disasters is "psychological first aid", which, unlike what its name suggests, is a non-clinical intervention that can be delivered by non-health professionals that have received training.[799] Psychological first aid is 'a basic, humane, and supportive response to those who are suffering and need support' that involves: listening carefully; assessing and ensuring that basic needs are met; encouraging social support; and protecting from further harm.[800]

The Desktop Reviews did not address MHPSS. This Report does not, therefore, analyse the extent to which the Sample Countries have laws and/or policies that address MHPSS in disaster preparedness and response. Nonetheless, MHPSS is an important issue that should be considered by decision-makers involved in reviewing or amending domestic disaster law and/or policy. Section K below provides recommendations for domestic decision makers based on existing guidance developed by the international humanitarian community.

D. Recommendations

For most of the vulnerable groups discussed in section B above, the international humanitarian community has developed comprehensive principles, guidelines, standards and tools about how to protect and include them in humanitarian assistance.[801] These documents are an invaluable resource based on extensive research and field experience. Rather than 'reinventing the wheel', government decision-makers should draw on these resources to guide the development of disaster preparedness and response law and policy.

The recommendations in this section draw extensively on the existing body of guidance developed by the international humanitarian community. Section i provides general recommendations for the protection and inclusion of vulnerable groups in disaster preparedness and response. Unless otherwise stated, these general recommendations are relevant to all vulnerable groups. Sections ii to ix below provide specific recommendations for the protection and inclusion of particular vulnerable groups.

Many of the recommendations in this section are highly detailed and prescriptive. Depending on the country context, it may be most appropriate to implement these recommendations through policy and planning documents, rather than through legislation.

For example, many of the key actions identified in sections ii to ix below may be included in disaster contingency plans or standard operating procedures.

i. General recommendations for the protection of particular vulnerable groups

Prohibition on discrimination

As noted in Chapter 1, in some jurisdictions it is standard practice not to refer to human rights in sectoral legislation due to the existence of generally applicable human rights protections. Provided that it is practicable and appropriate in the specific country context, decision-makers should amend disaster law and policy to prohibit discrimination, both direct and indirect, in all aspects of disaster preparedness and response.[802]

In order to protect all vulnerable groups, a prohibition on discrimination should apply to discrimination on the basis of the following characteristics (in no particular order): gender, gender identity or expression, sexual characteristics, sexual orientation, age, disability, marital or relationship status, nationality, migration status, class or caste, race, colour, ethnicity, religion and political opinion.

As indicated in section B above, discrimination against vulnerable groups is often indirect and inadvertent, rather than direct. In order to address indirect discrimination, decision-makers should consider amending disaster law and/or policy to create a general obligation for DPR actors to identify and fulfil the specific needs of vulnerable groups.[803]

Discrimination in DPR activities may be the product of deeply entrenched cultural attitudes, beliefs, norms and practices. For this reason, legal change alone may be ineffective. The legal changes proposed in this subsection should, therefore, be accompanied by mandatory training for government DPR actors to sensitize them to the specific needs and vulnerabilities of different groups, thereby promoting a cultural shift towards an inclusive approach to disaster preparedness and response.

Meeting the needs of vulnerable groups

In order to ensure that vulnerable groups are protected by, and included in, DPR activities, two things should occur:

- first, regular DPR activities should be equally accessible to vulnerable groups.[804] This means removing information, physical and financial barriers that prevent vulnerable groups from accessing DPR activities at the same rate as the general population. For example, public disaster preparedness campaigns should be disseminated in languages spoken by ethnic minorities and migrants, and via a range of formal and informal media; and
- second, in addition to regular DPR activities, DM actors should adapt DPR activities to meet the specific and additional needs of vulnerable groups. For example, children and older persons may need fortified or easy-to-chew food, and women and adolescent girls require menstrual hygiene management services.

Sections ii to ix below provide detailed guidance about how to make DPR activities accessible to, and adapted for, vulnerable groups.

In order to ensure that the needs of vulnerable groups are met, law and/or policy should mandate that risk assessments, needs assessments, vulnerability assessments and

contingency plans identify vulnerable groups and their specific needs.[805] This applies both to general and sector-specific assessment and planning processes. Further, law and/or policy should provide for assessment and planning processes to involve direct and meaningful engagement with vulnerable groups.

Contingency plans should be designed to meet the identified needs of vulnerable groups by: apportioning roles and responsibility for key actions; identifying and pre-positioning adequate resources; stipulating minimum standards; and establishing procedures for monitoring and evaluating vulnerable groups' access to, and participation in, DPR activities.[806]

Collection of disaggregated data

In order to assist DPR actors to plan for and meet the needs of vulnerable groups, law and/or policy should mandate the collection and analysis of sex-, age- and disability-disaggregated data in risk, vulnerability and needs assessments. Law and/or policy should also mandate the collection and analysis of disaggregated data in relation to: participation in DPR activities; disaster impacts (i.e. morbidity, mortality, economic losses); and the incidence of SGBV.[807]

For data on age, decision-makers should use the same cohorts used in national data collection systems.[808] If there are no established national age cohorts, decision-makers should use the age cohorts stipulated in the *Humanitarian Inclusion Standards for Older People and People with Disabilities*.[809] For data on disability, decision-makers should use the *Washington Group Short Set of Questions on Disability* (the **WGSS**).[810] For data on gender, decision-makers should consider including an 'other' gender category, but only if it is safe and appropriate to do so.[811]

Other potential characteristics for disaggregation include nationality, migration status, race, ethnicity, religion and sexuality. Law and/or policy should not, however, mandate collection or sharing of this data. Whether data on these factors is collected should be determined on a case-by-case basis, depending on the local context. For example, in many situations, collecting information about sexual and gender identity may create risks for individuals and increase their vulnerability because, if the information falls into the wrong hands, it may engender discrimination, or even violence.[812] Further, sexual and gender minorities may choose not to self-identify, meaning that any data collected is inaccurate.[813] The safety and appropriateness of collecting data on the characteristics listed above should be ascertained by consulting with local representative or advocacy organizations, and all actors that collect data should have robust 'do no harm' policy and practice.[814]

If collecting data on the above factors poses a risk to vulnerable groups, DM actors should instead use: pre-existing data sets collected by national statistical departments or other governmental agencies; information provided by local representative organizations; estimations; and/or rules of thumb.[815] For example, DPR actors may rely on the fact that an estimated 15 per cent of people globally have a disability,[816] or the rule of thumb that at least 5 per cent of the population is likely to identify as a sexual or gender minority.[817]

Training for government DPR actors

Law and/or policy should mandate that all government DPR actors, including sectoral agencies, the military and the police, are required to participate in training designed to sensitize them to the specific needs and vulnerabilities of different groups. This kind of training is vital to creating the cultural change necessary to ensure compliance with the legal changes proposed in this section. Specifically, training should focus on educating DPR actors about:

- their legal obligations to vulnerable groups, including non-discrimination;
- the specific needs of, and risks posed to, vulnerable groups;
- the heterogeneity and resilience of vulnerable groups;
- how to collect sex-, age- and disability-disaggregated data;
- how to identify the needs of vulnerable groups using risk, vulnerability and needs assessments;
- key actions for addressing the specific and additional needs of vulnerable groups;
- how to empower vulnerable groups by drawing on their knowledge and experience; and
- how to make regular DPR activities equally accessible to vulnerable groups.[818]

Training should draw on the existing body of guidance developed by the international humanitarian community. Importantly, training should instil an understanding of the importance of empowering members of vulnerable groups and of drawing on their knowledge, experience and other existing resources, rather than viewing vulnerable groups as passive recipients of assistance. Law and/or policy should allocate adequate resources for this training.[819]

Participation of vulnerable groups

Law and/or policy should promote the participation of, and leadership by, vulnerable groups in disaster preparedness and response through the following measures:

- **Representatives:** Mandating that multi-stakeholder disaster preparedness and response institutions, such as coordinating or consultative bodies, include representatives of vulnerable groups. Appropriate representatives include advocacy organizations, relevant sectoral agencies or commissions (e.g. women's commissions), and experienced service providers.[820]
- **Recruitment:** Actively recruiting members of vulnerable groups to be civil servants in all disaster preparedness and response institutions and divisions of sectoral agencies. This may be facilitated by introducing law and/or policy containing quotas or targets, or by making reasonable accommodations to make positions accessible to members of vulnerable groups.[821]
- **Consultation:** Mandating disaster preparedness and response institutions to directly engage with vulnerable groups in relation to the design, planning, implementation, monitoring and evaluation of all aspects of DPR activities. This includes risk, vulnerability and needs assessments and contingency plans.[822]
- **Training:** Mandating targeted training and other learning opportunities for vulnerable groups to enable them to participate in disaster preparedness and response, whether as civil servants, professionals or volunteers.[823]
- **Monitoring and evaluating:** Mandating monitoring, evaluating and public reporting on the participation and inclusion of vulnerable groups in DPR activities and institutions.[824]

SGBV protection

As indicated in section B above, many of the vulnerable groups identified in this Report are at heightened risk of SGBV during disasters and, therefore, have a strong need for SGBV protection.[825] There is already a substantial body of guidance and recommendations on SGBV protection during disasters, notably the Inter-Agency Standing Committee's *Guidelines for Integrating Gender-Based Violence Interventions in Humanitarian Action* (the **IASC GBV Guidelines**), the IFRC's *Global Study on Effective Law and Policy on Gender Equality and Protection from Sexual and Gender-Based Violence in Disasters* and the *Minimum Initial Service Package for Reproductive Health in Crises*.[826]

When developing law and/or policy for SGBV protection during disasters, decision-makers should refer directly to these resources for guidance. Some of the key actions identified in these resources are as follows:

- **Contingency planning:** Law and/or policy should require government entities responsible for SGBV protection during normal times to develop disaster contingency plans aimed at ensuring continuity of SGBV services during major disasters, including clinical management of sexual violence, and access to reporting systems and legal assistance.[827] Another key aspect of SGBV contingency planning should be safe and effective referral pathways to connect affected persons to services. Further, law and/or policy should allocate adequate resources to meet increased need for SGBV services during disasters.[828]
- **Post-disaster shelter:** Law and/or policy should mandate that post-disaster shelter is designed and managed in a manner that prevents and mitigates SGBV.[829] Practical design measures to prevent and mitigate SGBV include lockable sex-segregated toilets and showers, bright lighting in communal areas, partitioned family and sex-segregated sleeping areas, safe spaces for women and children, and gender-balanced security staff.[830]
- **Training and awareness-raising:** Law and/or policy should mandate SGBV-awareness training for government DPR actors, especially the military and the police, drawing on existing expertise from the international humanitarian community.[831] Further, law and/or policy should allocate adequate resources for this training.

ii. Specific recommendations for the protection of women and girls

DPR activities should be designed to address the specific needs of women and girls. The table on the following page identifies some of these needs and corresponding key actions that should be included as part of good programming. The table also identifies relevant guidelines, standards and tools, which decision-makers should refer to when developing disaster preparedness and response law and/or policy in this area.

Specific Need	Key Actions for DM Actors and Relevant Sectoral Actors	Relevant Guidelines, Standards and Tools
Sexual and reproductive health and rights	• Sexual violence care • Maternal and newborn care • HIV/STI prevention and care • Family planning	• *Sphere Minimum Standards* – Sexual and Reproductive Health Standard 2.3.1: Reproductive, Maternal and Newborn Healthcare – Sexual and Reproductive Health Standard 2.3.2: Sexual Violence and Clinical Management of Rape – Sexual and Reproductive Health Standard 2.3.3: HIV[832] • Inter-Agency Field Manual on Reproductive Health in Humanitarian Settings[833] – See especially Chapter 3: Minimum Initial Service Package (applicable from the onset of an emergency) • Adolescent Sexual and Reproductive Health Toolkit for Humanitarian Settings[834]
Menstrual hygiene management	• Menstrual hygiene products (MHP) and additional underwear • Access to safe and private bathing facilities, laundry and drying facilities, and MHP disposal mechanisms	• *Sphere Minimum Standards* Hygiene Promotion Standard 1.3: Menstrual Hygiene Management and Incontinence[835] • Toolkit for Integrating Menstrual Hygiene Management (MHM) into Humanitarian Response[836]
Nutrition for pregnant and lactating women	• Priority access to food, vouchers and cash transfers • Daily iron, folic acid or multiple micronutrient supplements	• *Sphere Minimum Standards* – Micronutrient Deficiencies Standard 3: Micronutrient Deficiencies – Infant and Young Child Feeding Standard 4.2: Multi-Sectoral Support to Infant and Young Child Feeding In Emergencies – Food Assistance Standard 6.1: General Nutrition Requirements[837]

iii. Specific recommendations for the protection of children

DPR activities should be designed to address the specific needs of children. The table on the following page identifies some of these needs and corresponding key actions that may be mandated or facilitated by law and policy. The table also identifies relevant guidelines, standards and tools, which decision-makers should refer to when developing disaster preparedness and response law and/or policy.

In addition to the key actions identified in the table below, further research should be undertaken on how general child protection laws, policies and systems operate during disasters, particularly whether they are able to provide continuity of services and meet increased demand. The results of this research should inform good programming, with relevant guidelines, standards and tools that could be considered in the development of law and policy.

Specific Need	Key Actions for DM Actors and Relevant Sectoral Actors	Relevant Guidelines, Standards and Tools
Child protection	• Training focal points on child protection, systematically monitoring child protection concerns and establishing referral mechanisms between different service providers • Providing age-, sex- and gender-sensitive multisectoral care for children that have been subjected to sexual violence, physical violence and other harmful practices • Establishing child-friendly spaces (**CFS**) in emergency shelters and disaster-affected communities, meaning safe spaces where children can access free and structured play, recreation, leisure and learning activities • Providing for continuity of birth registration through, for example, deployment of mobile birth registration clinics	• Child Protection Working Group's *Minimum Standards for Child Protection in Humanitarian Action*[838]
Nutrition for infants and young children	• Micronutrient supplements for children aged 6-59 months • Fortified and blended foods for children aged 6-59 months • Supporting mothers in relation to breastfeeding and complementary feeding • Providing breastmilk substitutes and feeding equipment	• *Sphere Minimum Standards* Food Security and Nutrition Minimum Standards: – Micronutrient Deficiencies Standard 3: Micronutrient Deficiencies – Infant and Young Child Feeding Standard 4.1: Policy Guidance and Coordination – Infant and Young Child Feeding Standard 4.2: Multi-Sectoral Support to Infant and Young Child Feeding In Emergencies – Food Assistance Standard 6.1: General Nutrition Requirements[839]

iv. Specific recommendations for the protection of UASC

In order to protect UASC, law and/or policy should specifically provide for the following key actions to be implemented during disasters:

- mitigating the risk of parent-caregiver separations;
- locating, identifying and documenting UASC;
- providing and monitoring alternative care arrangements for UASC;
- conducting family tracing and verification; and
- facilitating family reunification and integration.

The above key actions should be included either in general disaster contingency plans, or in contingency plans developed by relevant sectoral agencies.

The Inter-Agency Working Group on Unaccompanied and Separated Children (the **IAWG UASC**) and the Child Protection Working Group (**CPWG**) have prepared comprehensive practical guidance on all of the above actions. Decision-makers should refer directly to these resources when developing law and/or policy to protect UASC during disasters. The key resources are briefly summarized below:

- **UASC Field Handbook and Toolkit:** The IAWG UASC has prepared a *Field Handbook on Unaccompanied and Separated Children* (the **UASC Field Handbook**)[840] and a *Toolkit on Unaccompanied and Separated Children* (the **UASC Toolkit**).[841] The *UASC Field Handbook* provides detailed practical guidance about prevention, identification, documentation, alternative care, family tracing, verification, reunification and reintegration. The accompanying *UASC Toolkit* provides sample documents to be used in programming (e.g. assessment forms, checklists).
- **ACE Guidelines and Toolkit:** The IAWG UASC has also prepared *Guidelines for the Alternative Care of Children in Emergencies* (the **ACE Guidelines**), which were endorsed by the United Nations General Assembly in 2010,[842] and the *Alternative Care in Emergencies Toolkit* (the **ACE Toolkit**).[843] The ACE Toolkit provides detailed practical guidance on preparing and determining the need for interim care in emergencies, developing and delivering placements and ensuring effective case management for children in care. Similar to the *UASC Toolkit,* it provides sample documents to be used in programming.
- **MSCP Standard 13:** Standard 13 of the CPWG's *Minimum Standards for Child Protection in Humanitarian Action* (the **MSCP**) relates to UASC. It identifies key actions for the protection of UASC, provides guidance on how to implement the key actions, and stipulates performance indicators and targets.[844]

v. Specific recommendations for the protection of older persons and persons with disability

This section provides specific recommendations for the protection of older persons and persons with disability in disaster preparedness and response law and policy. These two groups are addressed together due to their high degree of overlap: as stated in section B above, approximately 46 per cent of people over the age of 60 have a disability. Further, both groups are addressed by the same key international guideline: the *Humanitarian Inclusion Standards for Older People and People with Disabilities* (**HISOPPD**).[845]

The table below identifies some of the specific needs of older persons and persons with disabilities, and corresponding key actions that should be included in good programming. When developing disaster preparedness and response law and policy, decision-makers should also consider the HISOPPD and the Inter-Agency Standing Committee's forthcoming *Guidelines on the Inclusion of Persons with Disabilities in Humanitarian Action*, due to be released in 2019.[846]

Need	Key Actions for DM Actors and Relevant Sectoral Actors	Relevant Guidelines, Standards and Tools
Nutrition for older persons and persons with disabilities	• Including older people and people with disabilities in nutrition assessments and monitoring • Monitoring appropriateness of food rations for older people and people with disabilities • Adapting criteria for supplementary feeding programmes to take into account the needs of older people and people with disabilities • Distributing food that meets the specific micronutrient requirements of older persons and persons with disabilities, and that is easy to chew or swallow	• *Sphere Minimum Standards* Food Assistance Standard 6.1: General Nutrition Requirements • HISOPPD Nutrition Inclusion Standards
Facilities and services that are accessible for people with impaired mobility or sensory impairment	• Applying the RECU principle (Reach Enter Circulate and Use) to the design of all physical structures (i.e. post-disaster shelters, settlements, WASH facilities and other buildings) • Conducting accessibility audits of all physical structures and services, including distribution points • Providing services through visits to institutions housing older people and people with disabilities (care homes, hospitals, orphanages etc)	• *HISOPPD* Key Inclusion Standard 2: Safe and Equitable Access • HISOPPD Shelter, Settlements and Household Items Inclusion Standards • HISOPPD Water, Sanitation and Hygiene Inclusion Standards
Information that is accessible to people with sensory or intellectual impairment	• Providing information through a range of communication channels • Using simple language and a variety of formats (i.e. braille, audio, sign language and easy-to-read print) • Consulting older people, people with disabilities, and their representative organizations about their communication preferences	• *HISOPPD* Key Inclusion Standard 2: Safe and Equitable Access
Healthcare for older persons and persons with disabilities	• Carrying out awareness-raising and training sessions to address negative attitudes to persons with disabilities • Including older people and people with disabilities in health assessments and monitoring activities • Providing appropriate medical treatments, drugs and assistive devices (e.g. wheelchairs, prostheses, hearings aids) • Planning for an uninterrupted supply of drugs required to treat non-communicable diseases that are highly prevalent amongst older persons • Providing access to sexual and reproductive health services in a confidential and discrete manner	• *HISOPPD* Key Inclusion Standard 2: Safe and Equitable Access • *Sphere Minimum Standards*: – Health Systems Standard 1.3: Essential Medicines and Medical Devices – Injury and Trauma Care Standard 2.4: Injury and Trauma Care

vi. Specific recommendations for the protection of sexual and gender minorities

Unlike for many other groups, there are no general international guidelines or standards for the protection of sexual and gender minorities in humanitarian assistance.[847] There is, however, a growing body of literature that identifies the specific needs of sexual and gender minorities and provides guidance about how to meet those needs. This includes IOM and UNHCR research on protecting asylum seekers and migrants that belong to sexual and gender minorities,[848] and case studies on the experience of sexual and gender minorities in Fiji during Tropical Cyclone Winston and in Haiti during the 2010 Earthquake.[849]

The table below identifies some of the specific needs of sexual and gender minorities and lists corresponding key actions that should be included in good programming. As a starting point, DPR actors should assume that sexual and gender minorities have the needs identified below, but may not be actively seeking assistance due to an unwillingness to publicly self-identify as part of a sexual or gender minority.[850] In addition to the key actions identified in the table below, further research on the protection of SGM should be undertaken in order to expand the existing body of guidance and to inform the development of law and policy.

Need	Key Actions for DM Actors and Relevant Sectoral Actors	Relevant Literature
Safe access to emergency shelter and WASH facilities	• Where possible, providing a range of options (including, where appropriate, separate facilities) and allowing sexual and gender minorities to select which option they consider to be safest and most appropriate[851] • Assisting sexual and gender minorities to find alternative arrangements (e.g. safe houses, private rental) when communal facilities are not appropriate (i.e. due to hostility or violence)[852]	• Edge Effect, 'Down by the River' (2018)[853] • Humanitarian Advisory Group, 'Taking Sexual and Gender Minorities out of the Too Hard Basket' (2018)[854] • UNHCR, 'Protecting Persons With Diverse Sexual Orientations And Gender Identities' (2015)[855] • IASC GBV Guidelines (2015)[856]
Provision of SGM-sensitive and SGM-specific healthcare	• LGBTI-specific psychosocial support from trained counsellors[857] • HIV/AIDS treatment; sexual and reproductive health services; menstrual hygiene management[858] • Private or extremely discrete provision of all of the above, in order to avoid publicly identifying a person as belonging to a sexual or gender minority[859]	• Edge Effect, 'Down by the River' (2018) • Humanitarian Advisory Group, 'Taking Sexual and Gender Minorities out of the Too Hard Basket' (2018) • UNHCR, 'Protecting Persons With Diverse Sexual Orientations And Gender Identities' (2015)
Privacy and data protection	• Only collecting data on sexual and gender minorities directly if it can be done safely[860] • Working with local CSOs before and during data collection in order to ensure 'do no harm' • If collecting data on SGM directly, ensuring this is done privately[861] • Protecting the personal data of people who do not wish to be publicly identified as part of a SGM[862]	• Humanitarian Advisory Group, 'Taking Sexual and Gender Minorities out of the Too Hard Basket' (2018) • Edge Effect, 'Down by the River' (2018)

vii. Specific recommendations for the protection of migrants

DPR activities should be designed to address the specific needs of migrants. The table below identifies some of these needs and corresponding key actions that may be mandated or facilitated by law and policy. When developing disaster preparedness and response law and/or policy, decision-makers should refer directly to the *Guidelines to Protect Migrants in Countries Experiencing Conflict or Natural Disaster* (the **MICIC Guidelines**),[863] which provide comprehensive guidance on protecting and including migrants.

In contrast to this Report, which adopts a very broad definition of 'migrant', the *MICIC Guidelines* define the term 'migrant' to exclude refugees, asylum-seekers, and stateless persons.[864] The key actions identified in the table below, and many of the other actions identified in the *MICIC Guidelines,* are, nonetheless, relevant to refugees, asylum-seekers and stateless migrants. These key actions should, therefore, be used to protect and include these groups in disaster preparedness and response.

Need	Key Actions for DM Actors and Relevant Sectoral Actors	Relevant Guidelines, Standards and Tools
Information that is accessible to migrants	• Providing information: – through a diverse range of communication channels including informal channels (e.g. mobile applications, social media);[865] – in languages spoken by migrant communities, in addition to official language(s) of host country;[866] – in a variety of formats (i.e. print, audio and infographics)[867] • Providing information and training regarding disaster risk, preparedness and response to migrants upon arrival[868]	MICIC Guidelines • Guideline 3 (Empower Migrants to Help Themselves, Their Families, and Communities during and in the Aftermath of Crises) • Guideline 6 (Communicate Effectively with Migrants) • Guideline 9 (Communicate Widely, Effectively, and Often with Migrants on Evolving Crises and How to Access Help)
Access to DPR activities for irregular migrants	• Separating immigration enforcement from access to DPR activities[869] • Providing identity cards or other documents to irregular migrants to promote their access to services[870] • Engaging civil society, especially migrant networks and faith-based actors, to provide information to irregular migrants[871]	MICIC Guidelines • Guidelines 9 (Communicate Widely, Effectively, and Often with Migrants on Evolving Crises and How to Access Help) • Guideline 11 (Provide Humanitarian Assistance to Migrants without Discrimination)

viii. Specific recommendations for other groups

There are no international guidelines or standards for the protection of the following groups in humanitarian assistance: racial, ethnic or religious minorities; indigenous groups; or other potentially vulnerable groups such as political minorities and marginalised classes, castes, clans or tribes. The six general recommendations provided in section i above are, however, applicable to these groups. If fully implemented, these recommendations are likely to significantly improve the protection and inclusion of these groups in disaster preparedness and response. It is also possible to make the following specific recommendations:

- **Communication with racial, ethnic and religious (RER) minorities:** The recommendations in the *MICIC Guidelines* for how to communicate effectively with migrants are also relevant to RER minorities, who may face language barriers to accessing DPR activities. Laws and policies should therefore require the provision of information in the languages used by RER minorities, in diverse formats and through multiple communication channels.

- **Evacuation and relocation of indigenous groups:** Decision-makers should ensure that laws and policies governing evacuations and relocations are consistent with the rights of indigenous groups, as recognized by the *United Nations Declaration on the Rights of Indigenous Peoples*.[872] Importantly, indigenous peoples should not be forcibly removed from their lands, and no relocation should take place without their free, prior and informed consent.[873]

In addition to these recommendations and the general recommendations in section i above, further research on the protection of racial, ethnic and religious minorities, and indigenous groups should be undertaken in order to inform the development of law and policy.

ix. Recommendations in relation to MHPSS

Decision-makers should consider introducing law and/or policy mandating contingency planning for MHPSS during disasters. This may be achieved by requiring the ministries and sectoral agencies responsible for MHPSS during normal times to develop contingency plans and/or incorporating MHPSS into general disaster contingency plans. Some of the key actions that MHPSS contingency planning should provide for are:

- conducting assessments of mental health and psychosocial issues;[874]
- training all staff and volunteers in mental health and psychosocial support;[875]
- disseminating information about coping methods to the general population;[876]
- providing psychological first aid to survivors of extreme stressors;[877] and
- providing basic clinical mental healthcare for survivors presenting with pathological distress by:
  - planning for an uninterrupted supply of essential psychotropics; and
  - ensuring primary health care teams include persons trained in mental health care.[878]

The above key actions are drawn from the existing body of guidance on MHPSS in disaster preparedness and response. When developing law and/or policy, decision-makers should refer directly to this guidance, particularly the following resources:

- the IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings (2007) provide detailed guidance on preparedness measures and minimum responses to be implemented during the acute phase of an emergency. They provide a set of 25 'Action Sheets' that explain how to implement each minimum response;

- the Operationalising Psychosocial Support in Crisis (OPSIC) Comprehensive Guideline on Mental Health and Psychosocial Support (MHPSS) in Disaster Settings (2016) is a more recent document based on an analysis of 282 existing psychosocial mental health guidelines.[879] Sixteen of the 51 'Action Sheets' are specifically designed to assist domestic decision-makers to incorporate MHPSS into general disaster contingency planning; and

- Sphere Minimum Standards Mental Health Standard 2.5: identifies nine key actions for MHPSS in humanitarian settings and six key indicators to assess the efficacy of MHPSS programs. This standard focuses on actions required by health actors, as opposed to other DPR actors.

In addition to the key actions identified above, further research on MHPSS in disasters should be undertaken to expand the existing body of guidance and to inform the development of law and policy.

10. Quality, accountability and prevention of fraud and corruption

A. Introduction

This Chapter analyses the following three related issues: first, the quality of assistance provided during disaster response; second, the use of post-disaster assessments to identify needs, losses and damages; third, the monitoring and evaluation of DPR activities; and fourth, the prevention of fraud and corruption in DPR activities. The urgency and chaos created by disasters poses serious challenges in each of these areas. Sudden and dramatic increases in humanitarian need place enormous strain on governmental and non-governmental actors' resources, with the result that some actors may fail, or find themselves unable, to meet minimum standards in the provision of water, food, healthcare and housing assistance during disasters.

Equally, in the midst of the urgency and chaos of disaster, monitoring and evaluation may be perceived as a relatively low priority. Yet, a failure to conduct rigorous monitoring and evaluation of DPR activities can undermine stakeholders' ability to hold DPR actors to account for the quality of their activities. It can also limit DPR actors' ability to continually improve their activities by identifying and implementing lessons or learnings from previous activities. Fraud and corruption can also be a severe problem in disaster response, with the effect of reducing the amount and quality of assistance available to disaster-affected persons. Indeed, disasters often create opportunities for unscrupulous individuals to commit fraud or corruption, due to the sudden influx of a large amount of resources combined with the tendency to relax or suspend ordinary controls.

Sections B, C, D and E below address each of the above four issues in detail; they discuss the key findings of the 20 Desktop Reviews and the literature in relation to each issue. Section F provides decision-makers with practical recommendations about how to develop law and/or policy to promote quality and accountability in disaster preparedness and response, and to prevent fraud and corruption.

B. Minimum standards in disaster response

It is trite to observe that disasters challenge domestic governments' ability to promote the full realization of the human rights to life, water, food, health and housing, as well as many other human rights. Disasters may damage or destroy existing government infrastructure and resources, and place what remains under severe strain by creating a sudden and large increase in need. The strain that disasters place on government infrastructure and resources is becoming more severe due to the increasing frequency and severity of disasters. This is also true for other DPR actors who, like governmental actors, have finite resources.

In this context, it is, perhaps, not surprising that there are examples of domestic governments and CSOs failing, or being unable, to deliver a minimum standard of food, water, housing and healthcare during disaster responses. A recent example is the United States' FEMA response to the 2017 hurricane season.[880] Poor planning combined with the unprecedented need created by three consecutive hurricanes (Harvey, Irma and Maria) led FEMA to exhaust not only stockpiled items, but also pre-negotiated contracts.[881] When Hurricane Maria, the third hurricane of the season, struck Puerto Rico in September 2017, it was alleged that FEMA had vastly inadequate supplies of water, meals, tarps and electricity generators, leaving urgent and life endangering needs unmet.[882]

Although disasters create extremely challenging environments, all people affected by disaster have a right to the basic conditions for life with dignity, which requires a minimum standard of water, food, shelter, healthcare, sanitation and hygiene.[883] In recognition of this,

since the 1990s, the international humanitarian community has become increasingly focussed on ensuring quality and accountability in responses to disasters and other crises. This has manifested in the *Sphere Minimum Standards*, initiated in the 1990s by a group of humanitarian non-governmental organizations and the IFRC and periodically updated.[884]

The *Sphere Minimum Standards* contains, amongst other things, four sets of technical minimum standards in the following areas: (i) water supply, sanitation, and hygiene promotion; (ii) food security and nutrition; (iii) shelter and settlement; and (iv) health.[885] Each minimum standard has the same structure: (i) the standard itself, which is a concise description of the universally accepted minimum level of assistance based on human rights; (ii) a list of key actions, which are the necessary steps or activities to achieve the standard; (iii) indicators, which should be used to assess whether the standard is being met; and (iv) guidance notes, which provide additional information to support the key actions.[886] While the *Sphere Minimum Standards* are designed to be universal, the indicators may need to locally contextualised 'to ensure that they are culturally appropriate and realistic'.[887] Although the *Sphere Minimum Standards* was originally developed by and for humanitarian actors, it is also suitable for use by governments and national civil society organizations.[888] Indeed, the third revision of the *Sphere Minimum Standards*, released in November 2018, has been designed to be more accessible to different users, including national disaster management authorities and other domestic government actors. In particular, the *Sphere Minimum Standards* are capable of providing governments with a quality benchmark to strive towards, as well as clear, practical guidance about how to achieve that benchmark.[889]

The Desktop Reviews do not address quality standards for DPR. There are, however, many examples of countries that have either adopted the *Sphere Minimum Standards*, or have used them to inform the development of national standards for humanitarian response.[890] As an example, in Ecuador, the *Sphere Minimum Standards* were adopted by ministerial decree in 2013 and, subsequently, incorporated into several sectoral agencies' policies and guidelines.[891] When the coast of Ecuador was struck by a major earthquake in April 2016, more than 10,000 people whose homes were damaged were housed in government-run transitional shelters.[892] The Sphere shelter and settlement standards were successfully used to guide the management of the transitional shelter and, in many cases, the Sphere indicators were not only met but exceeded.[893] As a further example, in October 2017, following extensive consultation with public institutions at all levels of government, Chile adopted a set of 35 *Standards for Emergency Response*.[894] These standards are a local contextualisation of the *Sphere Minimum Standards* in: water supply, sanitation and hygiene promotion; food security and nutrition; and shelter and settlement.[895]

A key issue that is addressed only briefly in the *Sphere Minimum Standards* is the management of dead bodies during disasters. The mass casualties caused by major disasters can be overwhelming to manage, particularly for the legal and institutional systems that deal with the identification and burial or disposal of the dead.[896] In such situations, there is often a concern about the health hazards posed by human remains, which can result in authorities resorting to rapid burials, including mass burials, without collecting information that may be used to identify the bodies. This not only undermines the dignity of the deceased, but can also have severely negative impacts on the deceased's family and community. First, the deceased may remain listed as 'missing,' which can be immensely distressing for families and communities. Further, it denies the deceased, their family and communities the right to follow cultural and/or religious burial practices, which may be a vital coping method.[897] Finally, a failure to identify the deceased may have legal ramifications for family members.

It may, for example, preclude, or make it more difficult for, surviving family members to inherit the deceased's property or to obtain custody over the deceased's children.

Although dead body management is only briefly addressed in the *Sphere Minimum Standards*, there is comprehensive international guidance on this topic in the form of a manual entitled *Management of Dead Bodies After Disasters: A Field Manual for First Responders*.[898] It is beyond the scope of this Report to summarize this Manual in detail, however some of the key good practices for dead body management are as follows. Rapid mass burials should *not* occur due to the traumatic effects and legal ramifications for families and communities.[899] Instead, dead bodies should be collected and stored, using refrigerated containers where possible or, if not possible, using temporary burial.[900] In order to facilitate identification of the deceased, photos should be taken of each body and information should be recorded about identifying features, clothing and personal effects.[901] These photos and information should be stored using a unique identifying code assigned to each body.[902] Identified dead bodies should be released to relatives or their communities for disposal according to local cultural and religious practices.[903]

From the 20 Sample Countries, only two countries — the Philippines and the UK — have laws and/or policies that specifically address the procedures for managing mass casualties during a disaster. Both countries' laws and policies provide examples of good practice in this area. Philippines law establishes a procedure for identifying persons that have died during a disaster, which involves notification of their next of kin.[904] Further, it provides that dead persons must be buried in accordance with their religious and cultural norms. Importantly, Philippines law explicitly prohibits unidentified human remains from being cremated or buried in mass graves.[905] In the UK, there are detailed policies, plans and procedures to deal with mass casualty events, which contemplate the identification of the dead and individual burial or cremation in accordance with the deceased's preference where possible.[906] The fact that only two of the 20 Sample Countries have laws and/or policies that specifically address procedures for managing mass causalities during a disaster indicates that there is large scope for improvement in this area. Section F below provides recommendations on this issue.

C. Post-disaster assessments

Rigorous and timely assessments of post-disaster needs, losses and damages are vital to ensuring the quality of disaster response and recovery. This is because accurate information about the nature, magnitude and geographic location of needs, losses and damages is necessary to plan and execute an effective response and recovery operation. Historically, there have been two main types of post-disaster assessments: (i) assessments focussed on identifying the impacts of disaster on affected people and their resulting needs (**needs assessments**); and (ii) assessments focussed on valuing physical damages and economic losses (**damage and loss assessments**).[907]

Needs assessment involves direct consultation with the affected population and typically focuses on urgent and/or basic needs including food, shelter, medical care, safe drinking water, sanitation and waste disposal, and psychosocial support.[908] Needs assessment initially takes the form of a 'rapid assessment' that is initiated immediately after a disaster, which is followed by a 'detailed assessment'.[909] Even once detailed assessment is complete, it is important to conduct ongoing needs assessments in order to identify changes in the affected population's needs over time.[910] In contrast to needs assessments, damage and loss assessments focus on valuing the physical damages and economic losses caused

by disaster in order to determine appropriate government interventions and the financial resources needed to achieve full reconstruction and recovery.[911] Damage and loss assessments principally rely on secondary economic data, including national accounts, which may be complemented by field visits to the affected population.[912]

The Desktop Reviews do not discuss post-disaster assessments. While loss and damage assessments are most commonly undertaken by national governments, National Societies and other authorized domestic agencies, the global literature in this area is focussed largely on the role of international actors, which often supplement national efforts in the event of large scale disasters. This literature indicates that there have been significant developments in this area during the past decade, which are also of relevance to the development of legal frameworks for domestic responders.

Historically, needs, loss and damages assessments have been undertaken by different agencies in parallel, and have varied in scope, rigor and timing.[913] In 2008, the EU, the World Bank (**WB**) and the United Nations Development Group (**UNDG**) agreed to mobilize member institutions and resources to harmonize and coordinate post-disaster assessment processes.[914] The result of this initiative is the development of a Post-Disaster Needs Assessment (**PDNA**) tool that synthesises both approaches to post-disaster assessment (i.e. identifying needs *and* quantifying damages and losses).[915] The PDNA is designed to be a government-led and government-owned process carried out with the participation of national and international agencies.[916] Since 2008, nearly 70 PDNAs have been prepared in over 40 countries in all regions.[917]

Although the PDNA offers a framework for a harmonized and coordinated approach to post-disaster assessments, it cannot fully replace the existing range of post-disaster assessments. Importantly, the process for establishing a PDNA requires a significant amount of time.[918] Once a government request for a PDNA has been received, various preliminary steps must be followed including: deliberation between the WB, UNDG and EU; developing a PDNA plan; and developing a resource mobilization strategy.[919] As a result, a PDNA may not be established until a number of weeks after a disaster. Thus, even where a PDNA is contemplated, it is important for DPR actors to conduct rapid needs assessments immediately after a disaster occurs in order to identify and meet the affected population's urgent needs. Section F below provides decision-makers with recommendations about how to develop law and/or policy relating to post-disaster needs assessments.

D. Monitoring and evaluation of DPR activities

Since the 1990s, there has been a growing focus within the international humanitarian community on quality and accountability in humanitarian action, with a view to maximizing the use of scarce resources.[920] This has led to widespread recognition of the importance of monitoring and evaluating humanitarian action and a corresponding proliferation of knowledge and practice in this area. Monitoring and evaluation (**M&E**) are complementary tools for appraising an activity, policy or programme. The term 'monitoring' refers to the systematic collection of data on specified indicators during the implementation of an activity, policy or programme.[921] The term 'evaluation' refers to a systematic and objective examination of an activity, policy or program to determine its significance or worth.[922]

Although there is no clear cut distinction between monitoring and evaluation, monitoring generally focuses on inputs and outputs, while evaluation generally focuses on outcomes and impacts.[923] For example, in a cash-transfer programme, monitoring may focus on how

many people receive a cash grant and the amount of money they receive.[924] Evaluation may focus on the broader consequences of the cash distribution, such as the impact of the cash grants on the target population and on local markets.[925] Many types of evaluation depend on data collected during the implementation of an activity, policy or program. However, some types of evaluation may be conducted in the absence of monitoring by using data collected *after* implementation that is obtained through, for example, interviews, debriefs or surveys.

The purpose of evaluation is to generate the information and analysis that is necessary to: (i) hold actors accountable to stakeholders for the impacts and results of their activities, policies or programmes; and (ii) improve future policy and practice drawing on the lessons from past experience.[926] There is, however, some tension between these two aims. Accountability-oriented evaluations are likely 'to place greater emphasis on objectivity and independence and adopt a more investigative style, seeking to attribute responsibility for both success and failure'.[927] They are typically conducted by an external evaluator and the results are made publicly available.[928] This format may, however, not be conducive to institutional learning, which may be better facilitated by an internal evaluator who provides participants with an opportunity to communicate confidentially about difficulties and, perhaps, mistakes.[929]

The Desktop Reviews indicate that in 14 of the 20 Sample Countries there is some form of monitoring and evaluation of DPR activities.[930] There is, however, significant variation in relation to *who* conducts monitoring and evaluation, and the *type* of evaluations that are conducted. Consistent with the literature, the Desktop Reviews illustrate that a key distinction is whether M&E is internal or external. M&E may be conducted *internally* by the institution that delivered the DPR activities under consideration. Alternatively, M&E may be conducted *externally*, by an institution that was not involved in the delivery of the DPR activities under consideration. The Desktop Reviews indicate that external M&E may be conducted by a variety of different types of actor including (but not limited to):

- an institution that is specifically dedicated to monitoring and evaluating disaster management activities. For example, in the State of Victoria, Australia, the law establishes the office of the Inspector General for Emergency Management, which is responsible for monitoring, reviewing and reporting on emergency management in Victoria.[931] A similar body also exists in the State of Queensland;[932]

- a disaster management institution that sits at the apex of the relevant disaster management system and has overall oversight of the system. For example, in the Philippines, the Office of Civil Defense is responsible for conducting periodic assessment and performance monitoring of regional disaster management institutions which, in turn, supervise and evaluate the activities of local disaster management institutions;[933] and

- a general public accountability institution that has a mandate to oversee all public entities and activities. For example, in Italy, the Independent Performance Evaluation Body (*Organismo Indipendente di Valutazione Della Performance*) is responsible for public sector oversight, including the institutions that are responsible for disaster preparedness and response.[934]

The Desktop Reviews also illustrate that the concept of 'evaluation' encompasses a broad range of activities that vary dramatically in scope depending on the entities, activities and time period under consideration. On one end of the spectrum, an evaluation may appraise a single entity's role in delivering a single type of DPR activity during a single disaster

response. On the other end of the spectrum, evaluation may take the form of a formal, system-wide review designed to instigate a comprehensive series of reforms. As an example of the latter, in the State of Victoria, Australia, a Royal Commission was tasked with investigating the preparation for, and response to bushfires that caused the death of 173 people on 7 February 2009, a day known locally as 'Black Saturday'.[935] From its investigation, the Royal Commission issued a set of 67 recommendations including enhanced warnings, clarification of ministerial powers and introduction of a graded scale of emergency declaration.[936] A substantial majority of the Commission's recommendations have now been implemented.[937]

Importantly, the forms of monitoring and evaluation discussed in the preceding paragraphs are not mutually exclusive, nor is one form of monitoring and evaluation inherently more important than others. To the contrary, the various types of monitoring and evaluation processes serve different yet complementary functions. As discussed above, some types of evaluation are predominantly learning-oriented, while others are accountability-oriented. Equally, some types of evaluation aim to support gradual, incremental change in relation to a particular activity or agency, while other types of evaluation aim to engender swift and systemic change. There is, therefore, a benefit in having a range of different monitoring and evaluation processes, both internal and external, and at micro (i.e. activity or agency focussed) and macro (i.e. system-wide) levels.

As discussed above, two common elements of accountability-oriented evaluations are: (i) the use of an independent external evaluator; and (ii) making the results of an evaluation publicly available. Several of the Desktop Reviews specifically note that the results of monitoring and evaluations are publicly available. One notable exception is, however, the State of Victoria, Australia, where the Minister for Emergency Services has a discretion regarding whether to publicly release reports produced by the office of the Inspector General for Emergency Management (**IGEM**).[938] The existence of this power creates the possibility that unfavourable reports will not be publicly released, thereby potentially limiting the general public's ability to hold its disaster management agencies to account. Good practice entails deciding at the outset of an evaluation whether its results will be made publicly available, without taking into account the probability that the results of the evaluation will be unfavourable.[939]

E. Prevention of fraud and corruption in DPR activities

Fraud and corruption are both terms to describe illegal and/or immoral conduct motivated by private gain. The distinguishing feature of corruption is the abuse of power, whereas the distinguishing feature of fraud is intentional deception.[940] Fraud and corruption are overlapping phenomena: some conduct is both fraudulent *and* corrupt. Perceptions of what constitutes fraud and corruption differ within and between cultures, and are often limited to actions motivated by financial gain.[941] Importantly, fraud and corruption also include actions motivated by other types of private gain, such as obtaining services, employment or sexual favours.[942]

Fraud and corruption can be a severe problem in disaster responses, with the effect of reducing the amount and quality of assistance available to disaster-affected persons.[943] Indeed, academic research has demonstrated a direct causal relationship between natural disasters and increased corruption levels.[944] The immense pressure for DPR actors to act quickly can lead to a lack of monitoring and documenting of decision-making, including by suspending or overlooking ordinary anti-corruption measures.[945] When combined with

a sudden influx of resources, this lack of transparency and accountability creates opportunities for unscrupulous individuals to commit fraud or corruption.

Disaster-related fraud and corruption can be committed by a very wide range of actors, including government agencies, UN actors, humanitarian organizations, other civil society organizations, private companies and disaster-affected persons themselves. It can also be committed by entities falsely claiming to be involved in providing DPR activities, or by persons falsely claiming to be affected by a disaster. The table below identifies some of the main types of fraud and corruption risks during disasters.[946]

Type of Actor	Types of Fraud or Corruption
Local authorities	• Demanding bribes in exchange for permits, access to public services or access to disaster-affected persons and areas • Imposing 'taxes' on relief items that have been distributed by non-governmental actors
Government or non-governmental entities involved in disaster preparedness and response	• Diverting assistance from the intended or worst-affected persons to other persons or groups (may be a result of coercion, bribery or bias) • Diverting assistance or equipment (e.g. vehicles, fuel, parts) from the intended recipients for personal use, or for sale to other persons • Extorting beneficiaries by requiring them to pay for, or perform sexual acts in exchange for, assistance • Turning a blind eye to contractors failing to supply goods or services of adequate quality/quantity (may be a result of coercion or bribery) • Accepting a bribe from a bidder in a procurement process in exchange for awarding the bidder the contract or providing them with an unfair advantage • Embezzlement of funds intended for DPR activities • Double funding of projects by separate donors • False or misleading reporting on effectiveness of DPR activities
Private individuals or entities	• Fraudulently claiming benefits or assistance that one is ineligible for, or claiming a greater amount than one is entitled to • Fraudulently holding oneself out as agent of a legitimate charity or creating a 'charity' that is, in fact, a sham

A large number of Desktop Reviews comment that the Sample Countries' domestic laws do not contain provisions that specifically target fraud during disasters and that, instead, ordinary fraud prevention laws continue to apply.[947] For example, in the UK, the main disaster law, the *Civil Contingencies Act 2004*, does not address the issue of fraud, but fraud is a criminal offence governed by generally applicable statues that apply to all persons and legal entities.[948] The situation is similar in Finland, Italy, Jordan, Kenya, Kyrgyzstan, Mexico and Senegal.[949]

The Desktop Reviews indicate that some countries' laws do, however, contain disaster-specific anti-fraud and corruption provisions. For example, the Philippines main disaster law enumerates a long list of prohibited acts that are punishable by fine and/or imprison-

ment.[950] These acts are highly specific to the disaster response context, including: preventing the entry and distribution of relief goods in disaster-stricken areas; diverting or misdelivery of relief goods and equipment; and misrepresenting the source of relief goods and equipment.[951] Philippines law also specifically prohibits any person from stealing, selling, buying, tampering or disassembling any government risk reduction and preparedness equipment.[952]

In addition to prohibiting corrupt or fraudulent acts, domestic disaster laws may also contain provisions designed to foster transparency and accountability in disaster relief activities. For example, in Korea, any person or organization that wishes to raise funds for disaster relief activities must first obtain approval from the Minister of Public Safety and Security by submitting a detailed plan listing the purpose, required amount of funds and relevant geographical area.[953] The Minister also has powers to scrutinise the use of the relief funds, by requiring the receiving organization or person to provide documents demonstrating the proper use of funds.[954]

As discussed in this section, experience from previous disasters demonstrates that fraud and corruption can be a severe problem in disaster response, with the effect of undermining the effectiveness of disaster response by reducing the amount and quality of assistance available for disaster-affected persons. Disaster-related fraud and corruption is, therefore, an issue that decision-makers should take seriously, particularly in countries that have high levels of both corruption and disaster risk. Section D provides decision-makers with suggestions about how to develop law and/or policy to mitigate the risk of fraud and corruption in disaster preparedness and response.

F. Recommendations

i. Minimum standards in disaster response

Although disasters are apt to create extraordinarily challenging environments, all actors involved in disaster response should strive and, importantly, *plan* to attain minimum quality standards in the provision of assistance. Decision-makers should consider developing minimum standards for the provision of food, water, sanitation, hygiene, healthcare and shelter during disasters. The *Sphere Minimum Standards* would be a prime starting point, though aspects may need to be adapted to local circumstances. In addition, decision-makers should consider amending law and/or policy to mandate DPR actors to use the minimum standards in developing and reviewing disaster contingency plans, and monitoring and evaluating disaster response.

As discussed in Section B above, the issue of dead body management is addressed only briefly in the *Sphere Minimum Standards*, yet it is a critical issue in disaster response. Decision-makers should consider developing policies or plans that specifically outline the process for managing mass casualties during a disaster. Importantly, rapid mass burials should be prohibited or, at a minimum, strongly discouraged. Policies or plans should outline processes for the temporary storage of bodies, the identification of bodies and the release of identified bodies to families or communities. These processes should be designed to respect the dignity of the deceased, the psychosocial needs of families and communities, and local cultural and religious practices. When developing policies or plans for the management of dead bodies, decision-makers should refer directly to *Management of Dead Bodies After Disasters: A Field Manual for First Responders*, which provides much more detailed guidance on this issue.

ii. Post-disaster assessments

Rigorous and timely assessments of post-disaster needs, losses and damages are vital to ensuring the quality of disaster response and recovery. In order to ensure that DPR actors are able to plan and execute an effective response, law and/or policy should mandate: rapid needs assessments to be conducted immediately after disaster; and ongoing needs assessments to be conducted throughout the response phase. Equally, law and/or policy should mandate assessments of damages and losses. Decision-makers should consider adopting a legal and/or policy framework that permits a coordinated, harmonized approach to post-disaster assessments. In particular, decision-makers should give consideration to the PDNA tool developed by the European Union, the World Bank and the United Nations Development Group.

iii. Monitoring and evaluation of DPR activities

There is a risk that, in the midst of the urgency and chaos of disaster, monitoring and evaluation may be perceived as a relatively low priority.[955] Yet, monitoring and evaluation is critical to accountability and learning. It generates the information and analysis required to: (i) hold actors accountable to stakeholders for the impacts and results of their activities; and (ii) improve future policy and practice by drawing on lessons from past experience.

Decision-makers should consider amending law and/or policy to encourage all DPR actors — both governmental and non-governmental actors — to conduct monitoring and evaluation at the activity and program levels subject to available resources. Law and/or policy should facilitate both learning-oriented and accountability-oriented evaluations. It should, therefore, require DPR actors to regularly commission and publish external evaluations of their activities and programs, while also permitting DPR actors to undertake internal evaluations that do not need to be made publicly available.

In some circumstances, a formal, system-wide review may be required to address fundamental and serious issues within the disaster management system. To the extent that it is not already the case, decision-makers should consider amending the law to ensure that government is empowered to conduct public inquiries in relation to DPR activities conducted by governmental actors.

iv. Prevention of fraud and corruption in DPR activities

During disaster response there is a tension between acting urgently to save lives and implementing anti-corruption and anti-fraud controls.[956] Rigid or extensive controls can cause delay, while weak or non-existent controls can create opportunities for fraud and corruption.[957] It is, however, possible to strike a balance between urgency and prudence by fostering organizational resilience to corruption and developing appropriate controls *prior* to disaster.

Transparency International, a leading global anti-corruption organization, has developed a *Handbook of Good Practices for Preventing Corruption in Humanitarian Operations*, which provides comprehensive guidance on this topic. Although targeted at managers and staff of humanitarian agencies, the *Handbook's* guidance is also highly relevant to government actors that are responsible for disaster preparedness and response. Some of the key actions identified by the *Handbook* are summarized in the sections below. Decision-makers should refer to the *Handbook* in its entirety when developing law and/or policy designed to counter corruption and fraud, as it is not possible to summarize all of the relevant actions identified in the *Handbook* in this Report.

Fostering organizational resilience to corruption and fraud

In order to mitigate the risk of employees or volunteers engaging in corrupt or fraudulent behaviour, decision-makers should develop laws and/or policies that promote organizational resilience to corruption and fraud. Specifically, law and/or policy should mandate DPR actors to:

- develop a code of conduct that defines, proscribes and mandates reporting of corruption and fraud;[958]
- develop a specific sexual exploitation and abuse (**SEA**) code of conduct that defines, proscribes and mandates reporting of SEA;[959]
- establish a confidential and culturally-appropriate whistleblowing mechanism for staff and volunteers to report fraud and corruption;[960]
- investigate allegations of fraud or corruption and take proportionate disciplinary action (including dismissal and referral to the police) when an investigation reveals fraud or corruption;[961] and
- require all new staff and volunteers to sign the codes of conduct and to complete anti-corruption training modules.[962]

Function-specific controls

Preventing fraud and corruption requires controls in the following areas: finance, human resources, procurement, asset management and transport. The table below identifies key actions in relation to good programming, which could also be considered in the development of law and policies.

Function	Key anti-corruption and anti-fraud measures
Finance	• Develop strict controls for using cash,[963] including: – giving and obtaining cash receipts; – maintaining a cash ledger; – using professional couriers to transport cash • Establish a threshold for requiring two signatures on cheques[964] • Conduct regular internal and external audits[965] • Require all financial transaction documentation to be kept and filed[966] • Separate responsibility for: – ordering, receiving and paying for goods; – keeping, reconciling and reviewing accounts; – approving and processing transactions[967] • Carry out unannounced spot checks[968]
Human resources	• Conduct thorough background checks of candidates[969] • Develop policies regarding nepotism and conflicts of interest[970] • Train staff and volunteers on how to respond to extortion, intimidation and coercion[971]

continued overleaf

Function	Key anti-corruption and anti-fraud measures
Procurement	• Separate responsibility for the different phases of procurement[972] • Thoroughly vet potential bidders[973] • Use standard specifications for high-use goods and services[974] • Use technical specialists to draft tender specifications[975] • Use clear and objective pre-qualification criteria[976] • Widely publicize the tender and provide adequate application time[977] • Adjudicate on bids using pre-determined and clear criteria[978]
Storage, transport and use of equipment and relief items	• Separate duties for receiving, storing and dispatching goods[979] • Closely monitor inventory, preferably with user-friendly IT systems[980] • Use secure warehouses and video surveillance (where possible)[981] • Strictly limit access to inventory systems and warehouses[982] • Use reliable transporters and insist on security measures[983] • Document the entire supply chain using logistics software[984] • Develop a clear policy for staff use of vehicles[985]

Preparedness measures

Effective disaster response requires DPR actors to rapidly mobilize staff, volunteers, equipment and relief items. Rapid hiring and procurement can create opportunities for corruption and fraud. In order to minimize the need for rapid hiring and procurement, law and/or policy should require DPR actors to implement the following measures during normal times:

- create a roster of screened and well-trained professionals that can be recruited and deployed at short notice in order to supplement the organization's ongoing staff and volunteers;[986] and
- create a list of pre-approved suppliers selected by a trained procurement team through a competitive process or market surveys.[987]

Even if the above measures are implemented, it may be necessary to conduct rapid hiring and procurement during an emergency. Law and/or policy should enable DPR actors to develop fast-track, simplified procurement and hiring procedures for the initial disaster response phase.[988] Importantly, these procedures should be strictly limited to the initial disaster response phase using qualitative or temporal criteria, and normal procedures should be resumed thereafter.[989] The *Handbook* provides further guidance on how to design fast-track, simplified procedures.[990]

Endnotes

Please note that this Report follows the referencing style prescribed by the Australian Guide to Legal Citation (AGLC). A copy of the AGLC is available for download at the following web address: <https://law.unimelb.edu.au/mulr/aglc/about>.

Terminology

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2 Child Protection Working Group, Minimum Standards for Child Protection in Humanitarian Action (cited above), 13.
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4 United Nations Office for Disaster Risk Reduction, 'Terminology' (2 February 2017) <https://www.unisdr.org/we/inform/terminology>.
5 Ibid.
6 The abbreviated terms 'DPR actors' and 'DPR activities' are used throughout this Report, with the acronym 'disaster preparedness and response' standing for 'disaster preparedness and response'. The acronym disaster preparedness and response is used for brevity only; this Report does not intend to introduce a new acronym or concept into the disaster management lexicon. Instead, this Report adopts the UNISDR's definitions of 'preparedness' and 'response'.
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8 International Federation of Red Cross and Red Crescent Societies, *Policy on Migration* (November 2009) <https://www.ifrc.org/Global/Governance/Policies/migration-policy-en.pdf> 2.
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14 Ibid 3.
15 This Report adopts the definition of 'sexual and gender minorities' used by Edge Effect, an organization that assists humanitarian and development organizations to work in genuine partnerships with sexual and gender minorities. See Edge Effect, 'About Edge Effect' (2018) <https://www.edgeeffect.org/about-edge-effect/>.
16 Emily Dwyer and Lana Woolf, 'Down by the River: Addressing the Rights, Needs and Strengths of Fijian Sexual and Gender Minorities in Disaster Risk Reduction and Humanitarian Response' (Edge Effect; Oxfam Australia; 2018) <https://www.edgeeffect.org/wp-content/uploads/2018/02/Down-By-The-River_Web.pdf> 2 (***Down by the River Report***).
17 For example, Vakasalewalewa is a term for third gender people in Fiji. However there is no V in LGBTIQ+ and Vakasalewalewa is not a synonym of Lesbian or Bisexual or Gay or Transgender or Intersex: Edge Effect, Down by the River Report, 2.
18 International Federation of Red Cross and Red Crescent Societies, 'Protection and Assistance for Children on the Move' (Position Paper, November 2017) <http://media.ifrc.org/ifrc/wp-content/uploads/sites/5/2017/11/IFRC-Position-Paper-Children-on-the-Move-LR.pdf> 4.

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International Cooperation on Humanitarian Assistance in the Field of Natural Disasters, from Relief to Development, GA Res 63/141, UN GAOR, 63rd sess, 68th plen mtg, Agenda Item 65(a), A/RES/63/141 (11 December 2008); *Strengthening Emergency Relief, Rehabilitation, Reconstruction and Prevention in the Aftermath of the Indian Ocean Tsunami Disaster*, GA Res 63/137, UN GAOR, 63rd sess, 68th plen mtg, Agenda Item 65(a), A/RES/63/137 (11 December 2008).

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1. Legal and institutional frameworks

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49 Finland Desktop Review, Annex (Question 2).

50 Ibid.

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68 *Sendai Framework*, Foreword, paras 19(d), 36(a).

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305 World Meteorological Organization, Multi-Hazard EWS Checklist (cited above), 10–11.
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307 WMO 2015 Report, (cited above) 17.
308 Ibid 23–24.
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313 See Emergency Management Victoria, 'Incidents and Warnings' <https://emergency.vic.gov.au/respond/>.
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318 World Meteorological Organization, 2015 Synthesis Report (cited above), 23–24.
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323 See, eg, Brazil Desktop Review, 16; Kazakhstan Desktop Review, 7; Korea Desktop Review, 10; Philippines Desktop Review, 11; Viet Nam Desktop Review, 18.
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336 IFRC, Save the Children, Oxfam, FAO, WFP, *Early warning early action, mechanisms for rapid decision making* (Nairobi, Kenya: IFRC, 2015), pp 3-4.
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339 Ibid 25 'Box 4'.
340 Ibid 23.
341 Ibid.
342 Ibid 14.
343 International Federation of Red Cross and Red Crescent Societies, 'Early Warning Early Action' (2008) <http://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2016/08/ew-ea-2008.pdf> 5.
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350 Ibid 15.
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352 Ibid.
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361 *International Covenant on Civil and Political Rights*, opened for signature 16 December 1966, 999 UNTS 171 (entered into force 23 March 1976) art 4; *Convention for the Protection of Human Rights and Fundamental Freedoms*, opened for signature 4 November 1950, 213 UNTS 221 (entered into force 3 September 1953) art 15; American Convention on Human Rights, opened for signature 22 November 1969, 1144 UNTS 123 (entered into force 18 July 1978) art 27.
362 ICCPR
363 Australia Desktop Review, 5.
364 See, eg, Finland Desktop Review, Annex Question 5(b); Jordan Desktop Review, Annex Question 5(b); Kazakhstan Desktop Review, Annex Question 5(b).
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366 Italy Desktop Review, 26–27.
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368 World Meteorological Organization, Multi-Hazard EWS Checklist (cited above), 6, 14.
369 Ibid 9.
370 Laurie A Morin, 'A Tale of Two Cities: Lessons Learned from New Orleans to the District of Columbia for the Protection of Vulnerable Populations from the Consequences of Disaster' (2009) 12:1 *University of the District of Columbia Law Review* 45.
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373 Philippines Desktop Review, 18.
374 Australia Desktop Review, Annex Question 5(b).
375 Ragan Adams, 'In Cities and on Ranches, Planning is Key to Protect Animals during Disasters' *The Conversation* (5 September 2017) <https://theconversation.com/in-cities-and-on-ranches-planning-is-key-to-protect-animals-during-disasters-83202>.
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377 Thomas Wilson et al, 'Modelling Livestock Evacuation following a Volcanic Eruption: An Example from Taranaki Volcano, New Zealand' (2009) 52(1) *New Zealand Journal of Agricultural Research* 99.
378 Ibid.
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380 Ibid.
381 Australia Desktop Review, Annex Question 5(b)(iv); Italy Desktop Review, 27; Kyrgyzstan Desktop Review, 11.
382 Italy Desktop Review, 27.
383 Australia Desktop Review, Annex Question 5(b)(iv).
384 Ibid.
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5. States of emergency and states of disaster

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and Epidemic Response).

395 Ibid 35–6.

396 Ibid. See also Michael Eburn, 'State of Emergency v State of Disaster and Others' (Australian Emergency Law Blog, January 2014) (accessed online at wordpress.com).

397 IFRC, Guidance Note on Legislative Issues in Disaster Management and Epidemic Response (cited above). See also Organization of American States - Department of Sustainable Development and the World Bank, 'Improving the Legal and Institutional Framework Related to State of Emergency' (Caribbean Emergency Legislation Project, 2011); Emmanuele Sommario 'Derogation from Human Rights Treaties in Situations of Natural or Man-Made Disasters' in Andrea de Guttry, Marco Gestri and Gabriella Venturini (eds) *International Disaster Response Law* (Springer TMC, 2012) 323; Nicholas Kanarev, 'Assessing the Legal Liabilities of Emergencies' (Paper presented at the Emergencies 2000 Conference, Sydney, 10 April 2000) 19.

398 This is especially true for the literature on rights implications. A notable exception is Sommario, Derogation from Human Rights Treaties in Situations of Natural or Man-Made Disasters (cited above).

399 The Organization of American States Review, for example, discusses 'constitutional' and 'legislative' SoEs in a manner broadly corresponding to SoEs and SoDs, respectively: Organization of American States - Department of Sustainable Development and the World Bank, 'Improving the Legal and Institutional Framework Related to State of Emergency' (Caribbean Emergency Legislation Project, 2011) 100 (***OAS Review***).

400 Australia Desktop Review, 7; Colombia Desktop Review, 7; Finland Desktop Review, 7; Italy Desktop Review, 3; Kazakhstan Desktop Review, 2; Korea Desktop Review, 6; Kyrgyzstan Desktop Review, 1; Madagascar Desktop Review, 1; Mexico Desktop Review, 6; Peroni Sosa Tellechea Burt & Narvaja Abogados, 'Assistance to International Federation of Red Cross and Red Crescent Societies re Checklist on Law and Disaster Preparedness' (Desktop Review, September 2017) 1 (***Paraguay Desktop Review***); Philippines Desktop Review, 1; South Africa Desktop Review, 5; UK Desktop Review, 6.

401 Brazil Desktop Review, 7; Ecuador Desktop Review, 1; Jordan Desktop Review, 6; John W Ffooks & Co, 'A4ID – Checklist on Law and Disaster Preparedness and Response in Senegal' (Desktop Review, September 2017) 1 (***Senegal Desktop Review***); Palestine Desktop Review, 4; Viet Nam Desktop Review, 9.

402 The Italian system, for example, is a unified procedure with certain SoE-like features (high-level authority, wide powers, 'all risk' approach, governance implications) but which delegates specific authorities and powers to a disaster management agency in a manner reflective of SoDs: Italy Desktop Review, 3–4.

403 Elliot Bulmer, 'Emergency Powers' (International IDEA Constitution-Building Primer 18, International Institute for Democracy and Electoral Assistance, Stockholm, 2018) 12. See also Scott P Sheeran, 'Reconceptualizing States of Emergency under International Human Rights Law: Theory, Legal Doctrine, and Politics' (2013) 34(3) *Michigan Journal of International Law* 491, 500 (***Reconceptualizing States of Emergency under International Human Rights Law***).

404 The Organization of American States review of emergency provisions endorses this approach: Organization of American States - Department of Sustainable Development and the World Bank, 'Legislative Checklist' (Caribbean Emergency Legislation Project, 2011) 10–11 (***OAS Checklist***).

405 The Organization of American States Review supports this approach: OAS Review (cited above), 99–114.

406 Bruce Ackerman adds that public information serves to reassure the public that efforts are being made in respect of extraordinary disasters: Bruce Ackerman, 'The Emergency Constitution' (2004) 113 *Yale Law Journal* 1029, 1033.

407 OAS Review (cited above).

408 Ministry of Home Affairs - Government of India, *Report of the Task Force: A Review of the Disaster Management Act 2005* (New Delhi, 2013) (***Indian Government Review***).

409 Ibid 38, 3.4.11.

410 Ibid; OAS Review (cited above), 100–107. See also Bulmer, Emergency Powers (cited above), 16–17, 34.

411 Australia Desktop Review, 8; UK Desktop Review, 7.

412 OAS Review (cited above), 116.

413 'State' includes Federal and overseas territories. Under the *Sandy Recovery Improvement Act* recognized tribal governments may also make a request. Under the *Compacts of Free Association* The Republic of the Marshall Islands and the Federated States of Micronesia are also eligible to make a request: See Federal Emergency Management Authority ('FEMA'), *The Disaster Declaration Process* (Online Resource available at https://www.fema.gov/declaration-process); 44 CFR Part 206, Subpart B; *Robert T Stafford Disaster Relief and Emergency Assistance Act* 42 USC 5121–5207, s 401.

414 Ackerman, The Emergency Constitution (cited above), 1055.

415 Ibid. The UK House of Lords case of *A v Secretary of State*, and the ECHR Judgment on the same matter, indicate the caution which must be taken in this regard, and the

fundamental principle that the threshold of threat is not a question only for subjective government determination. We should bear in mind Lord Hoffman`s warning that:
Terrorist violence, serious as it is, does not threaten our institutions of government or our existence as a civil community….[t]he real threat to the life of the nation, in the sense of a people living in accordance with its traditional laws and political values, comes not from terrorism but from laws such as these.
A v Secretary of State for the Home Department [2004] UKHL 5, [96]–[97] per Lord Hoffman (Dis.).

416 OAS Review (cited above), 70; Indian Government Review (cited above), 36–37; Bulmer, Emergency Powers (cited above), 15.
417 Bulmer, Emergency Powers (cited above), 15.
418 Ibid 18.
419 Jordan Desktop Review, 6.
420 See, eg, Colombia Desktop Review, 7–8.
421 See, eg, Philippines Desktop Review, 2.
422 Australia Desktop Review, 7; Colombia Desktop Review, 7; Finland Desktop Review, 7; Italy Desktop Review, 3; Kazakhstan Desktop Review, 2; Kenya Desktop Review; Korea Desktop Review, 6; Kyrgyzstan Desktop Review, 1; Madagascar Desktop Review, 1; Mexico Desktop Review, 6; Paraguay Desktop Review, 1; Philippines Desktop Review, 1; South Africa Desktop Review, 5; UK Desktop Review, 6.
423 Australia Desktop Review, 7–8; Ecuador Desktop Review, 1; Jordan Desktop Review, 6; Kyrgyzstan Desktop Review, 2; Mexico Desktop Review, 6; Palestine Desktop Review, 4; Paraguay Desktop Review, 1; Senegal Desktop Review, 1; South Africa Desktop Review, 5.
424 S 36A of the *Emergency Management Act 1986* (Vic) (Australia), for example, provides a 'senior police officer in attendance' at a disaster site to declare an 'emergency area' if necessary to ensure public safety, among other conditions.
425 See especially Belser on the difficulties in framing a disaster in terms of public order. In discussing the aftermath of Hurricane Katrina in Louisiana, USA, Belser points to the looting and violence perpetuated by law enforcement officers in the context of the order for police officers to 'abandon rescue efforts in order to focus entirely on controlling the looting' in the context of an already racially and class-stratified social relationship with police officers: Matthew S Belser 'Martial Law After the Storm: A Constitutional Analysis of Martial Law and the Aftermath of Hurricane Katrina' (2007) 35 *Southern University Law Review* 147. Similarly, L R McInnis has noted that, '[i]n domestic emergencies, governments wield a two-edged sword; cutting too deeply either in the direction of rights or self-preservation may inflict a civic wound that festers, rather than heals with time.': L R McInnis, 'The Municipal Management of Emergencies: The Houston Plan' (1999) 4 *Texas Forum on Civil Liberties and Civil Rights* 139, 141.
426 Australia Desktop Review, 7; Brazil Desktop Review, 7; Colombia Desktop Review, 7; Ecuador Desktop Review, 1; Italy Desktop Review, 3; Kenya Desktop Review, 3; Korea Desktop Review, 6; Mexico Desktop Review, 6; Paraguay Desktop Review, 2; South Africa Desktop Review, 5–6.
427 Brazil Desktop Review, 7; Italy Desktop Review, 3–4; Mexico Desktop Review, 6.
428 See especially Paraguay Desktop Review, 2.
429 Korea Desktop Review, 7; Kyrgyzstan Desktop Review, 2–3; Philippines Desktop Review, 2; Viet Nam Desktop Review, 10–11.
430 Philippines Desktop Review, 2; Kyrgyzstan Desktop Review, 2–3.
431 In the Philippines, the existence of very specific loss and damage thresholds has allowed opposition legislators to articulate concerns about the legitimacy of a declaration of a state of calamity in respect of a certain region impacted Cyclone Haiyan and, more importantly, the distribution of resources to other affected regions. In this way, the question of emergency measures was directed towards whether the most needful regions were being properly assisted: Philippines Desktop Review, 2.
432 Australia Desktop Review, 7; Italy Desktop Review, 4; Korea Desktop Review, 6; Madagascar Desktop Review, 1–2; Philippines Desktop Review, 1; South Africa Desktop Review, 5–6.
433 Australia Desktop Review, 7; Paraguay Desktop Review, 1–2; South Africa Desktop Review, 5–6.
434 Italy Desktop Review, 2; Korea Desktop Review, 6.
435 For example, both Colombia and Kazakhstan require consideration of the geographic scope of a disaster. However, while Colombia frames the criterion in terms of jurisdictional boundaries and capacities, Kazakhstan frames it in absolute terms. In both jurisdictions, direct consideration of sub-national management capacity is also required.
436 OAS Review (cited above), 103.
437 Kenyan Constitution Art 58(1), 132(4). Kenya Desktop Review, 1.
438 Kenya Desktop Review, 1.
439 See Eburn, State of Emergency v State of Disaster (cited above), 2.
440 For example, Article 1(9)(2) of the US Constitution, which authorizes the suspension of the writ of *habeas corpus* in certain emergencies, does not expressly specify who is authorized to exercise it.# While appearing in the chapter on Congressional powers, the power was exercised by Abraham Lincoln at the beginning of the Civil War. The constitutionality of this event is still in dispute: see, eg, Ackerman, The Emergency Constitution (cited above), 1053.

441 OAS Checklist (cited above), 7.
442 See, eg. Brazil Desktop Review; Senegal Desktop Review.
443 OAS Checklist (cited above),14.
444 Ibid.
445 Bulmer, Emergency Powers (cited above), 19–20.
446 See, eg. Korea Desktop Review, 6.
447 OAS Review (cited above), 107.
448 Bulmer, Emergency Powers (cited above), 24.
449 Ackerman, The Emergency Constitution (cited above); Hans Born, 'The Role of Parliaments' in Eden Cole, Philipp Fluri and Simon Lunn (eds) *Oversight and Guidance: Parliaments and Security Sector Governance* (Geneva Centre for the Democratic Control of Armed Forces and Nato Parliamentary Assembly, Geneva, 2015) 64.
450 Ackerman, The Emergency Constitution (cited above), 1066.
451 See, eg, the *Argentine Constitution* Article 99.3.
452 Kyrgyzstan Desktop Review, 2–3.
453 Ibid.
454 Philippines Desktop Review, 2.
455 David Fisher, 'Law and Legal Issues in International Disaster Response: A Desk Study' (International Federation of Red Cross and Red Crescent Societies, Geneva, 2007) 91; OAS Review (cited above), 104.
456 Paraguay Desktop Review, 1–2.
457 Eburn, State of Emergency v State of Disasters (cited above); Italy Desktop Review, 2–3; Mexico Desktop Review, 6; Philippines Desktop Review, 1–2.
458 In Kyrgyzstan, for example, special provision is made in art 24 of the *State Emergency Law* for the transfer of public service employees to different departments and positions in emergency conditions: Kyrgyzstan Desktop Review, 3. See also Brazil Desktop Review; Paraguay Desktop Review, 1; Senegal Desktop Review, 1; South Africa Desktop Review, 5–6.
459 See, eg, Ecuador Desktop Review, 1; Italy Desktop Review, 3; Palestine Desktop Review, 4.
460 Italy Desktop Review, 3.
461 For an overview, see especially Bulmer, Emergency Powers (cited above). See generally European Commission for Democracy Through Law (Venice Commission), 'Opinion on the Protection of Human Rights in Emergency Situations' (Opinion no 359/2005, Council of Europe Doc CDL-AD(2006)015 Or.Engl, Adopted at 66th Plenary Session, Venice 17-18 March 2006); Geneva Centre for the Democratic Control of Armed Forces, States of Emergency (Backgrounder Series Paper, Geneva, October 2005) 2; Sommario, Derogation from Human Rights Treaties in Situations of Natural or Man-Made Disasters (cited above).
462 Office of the High Commissioner for Human Rights and the International Bar Association, *Human Rights in the Administration of Justice: A Manual on Human Rights for Judges, Prosecutors and Lawyers* (United Nations, Geneva, 2003), 814 (***OHCHR Manual***).
463 Ibid. See also Sommario, Derogation from Human Rights Treaties in Situations of Natural or Man-Made Disasters (cited above), 333.
464 OHCHR Manual (cited above), 814. See also Dominic McGoldrick, 'The Interface Between Public Emergency Powers and International Law' (2004) 2(2) *International Journal of Constitutional Law* 380.
465 OHCHR Manual(cited above), 814. Rights instruments generally require States to report derogations to the relevant treaty body.
466 United Nations Human Rights Committee, 'General Comment No 29' (U.N. Doc. CCPR/C/21/Rev.1/Add.11 (2001)) para 5.
467 Sommario, Derogation from Human Rights Treaties in Situations of Natural or Man-Made Disasters (cited above), 326–7; Nicholas Kanarev, Assessing the Legal Liabilities of Emergencies (cited above), 19-20; Manfred Nowak, *UN Covenant on Civil and Political Rights: ICCPR Commentary*, (Kehl, 2005, 2nd ed) 280.
468 See generally Sommario, Derogation from Human Rights Treaties in Situations of Natural or Man-Made Disasters, 326; OHCHR Manual (cited above), 814–28. See also Claudio Grossman, 'A Framework for the Examination of States of Emergency Under the American Convention on Human Rights' (1986) 1(1) *American University International Law Review* 35; European Court of Human Rights, 'Derogation in Time of Emergency' (Press Unit Factsheet, 2018). On customary international law rules governing the matter see especially Jaime Oraá, *Human Rights in States of Emergency in International Law* (Oxford University Press, 1992).
469 Dominic McGoldrick, 'The Interface Between Public Emergency Powers and International Law' (2004) 2(2) *International Journal of Constitutional Law* 380.
470 Geneva Centre for the Democratic Control of Armed Forces (cited above), States of Emergency, 2.
471 *Siracusa Principles on the Limitation and Derogation of Provisions in the International Covenant on Civil and Political Rights*, Annex, UN Doc E/CN.4/1984/4 (1984) Prr 1-14 ('Siracusa Principles'). Though the Siracusa principles relate specifically to the ICCPR, Olivier De Schutter has compellingly argued that all limitation regimes follow the same pattern: Olivier De Schutter, *International Human Rights Law: Cases, Materials, Commentary* (Cambridge University Press, 2010) 290. See also Sommario, Derogation from Human Rights Treaties in Situations of Natural or Man-Made Disasters (cited above), 326.
472 See especially Evan Criddle and Evan Fox-Decent, disputing the classic 'sovereign'

conception of the State of Emergency suggested by Carl Schmitt: Evan J Criddle and Evan Fox-Decent, 'Human Rights, Emergencies and the Rule of Law' (2012) 34 *Human Rights Quarterly* 39. See also Mark Klamberg, 'Reconstructing the Notion of State of Emergency under Human Rights Law' (April 14 2016). Raphaël Comte argues that little deference is given to States in respect of determinations of 'necessity' in emergency situations: Raphaël Comte, 'State of Emergency: Proportionality Issues Concerning Derogations under Article 15 of the European Convention on Human Rights' (Information Note to the Committee on Legal Affairs and Human Rights, Council of Europe Parliamentary Assembly, Strasbourg, February 2017) para 8 (***State of Emergency Proportionality Issues***).

473 Ibid 7, 9.

474 Ecuador Desktop Review, 1; Finland Desktop Review, 7; Italy Desktop Review, 3; Kazakhstan Desktop Review, 2; Kenya Desktop Review, 2; Kyrgyzstan Desktop Review, 1; Palestine Desktop Review, 4; Senegal Desktop Review, 1; South Africa Desktop Review, 5. South Africa, Finland and Kenya specifically provide in their Constitutions that any departure must be compatible with the State's international human rights obligations.

475 Australia Desktop Review, 6–8; Brazil Desktop Review, 7; Colombia Desktop Review, 8; Korea Desktop Review, 6–7; UK Desktop Review, 10–11.

476 Jordan Desktop Review, 6; Madagascar Desktop Review, 1; Paraguay Desktop Review, 1; Philippines Desktop Review, 1-3; Viet Nam Desktop Review, 9-10.

477 See, eg, Bulmer, Emergency Powers (cited above); Ackerman, the Emergency Constitution (cited above); Comte, State of Emergency Proportionality Issues, para 3; Sheeran, Reconceptualizing States of Emergency under International Human Rights Law (cited above), 500–502; Born, The Role of Parliaments (cited above), 64; Simon Lunn 'Democratic Oversight and the Changing Security Context' in Eden Cole, Philipp Fluri and Simon Lunn (eds) *Oversight and Guidance: Parliaments and Security Sector Governance* (Geneva Centre for the Democratic Control of Armed Forces and Nato Parliamentary Assembly, Geneva, 2015) 12.

478 Born, The Role of Parliaments (cited above), 71–72.

479 Geneva Centre for the Democratic Control of Armed Forces, States of Emergency (cited above), 4. See also Comte, State of Emergency Proportionality Issues.

480 OAS Review (cited above), 100; Bulmer, Emergency Powers (cited above), 14–15.

481 Bulmer, Emergency Powers (cited above), 14–15.

482 In Ukraine, parliament must assemble within two days of the declaration of an SoE in order to consider the matter: Ibid.

483 Ibid; Elliot Bulmer, 'Dissolution of Parliament' (International IDEA Constitution-Building Primer 16, International Institute for Democracy and Electoral Assistance, Rev Ed October 2017).

484 Ackerman, The Emergency Constitution (cited above), 1051; Born, The Role of Parliaments (cited above), 74–75; Brazil Desktop Review; Viet Nam Desktop Review.

485 Bulmer, Emergency Powers (cited above), 14–20; Ackerman, The Emergency Constitution (cited above) , 1050-1060.

486 Bulmer, Emergency Powers (cited above), 19; Ackerman, The Emergency Constitution (cited above), 1050.

487 Ackerman suggests a period of two months renewal on an absolute majority, followed by 'sixty percent for the next two months; seventy for the next, and eighty thereafter.' South Africa provides for a simplified 'escalator' whereby an absolute majority is required for approval, but all subsequent approvals require a three-fifths majority: Ackerman, The Emergency Constitution (cited above), 1066.

488 For example, the Venice Commission has insisted that the right of access to a Court and the right to an effective remedy in ECHR Arts 5 and 13, respectively, must be non-derogable as a result 'subject to the inherent limitations of the context': see Holger Haibach, 'The Protection of Human Rights in Emergency Situations' (Report Doc 11858, European Parliamentary Committee on Legal Affairs and Human Rights, 9 April 2009) paras 12–14.

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490 Ecuador Desktop Review. In contrast, the French Constitution gives the Constitutional Court an advisory role, requiring the President to consult with the Court and to consider its ultimate public advisory opinion, but does not make the Court's opinion binding. See Ackerman, The Emergency Constitution (cited above), 1066.

491 Born, The Role of Parliaments (cited above), 3. Bruce Ackerman has argued against this on the basis that 'serious judicial review' takes too much time, but it is not suggested that emergency responses be suspended during review.

492 OAS Checklist (cited above), 13. Bruce Ackerman recommends a broad right to financial compensation for innocent persons detained while *habeas corpus* rights are suspended, which may be extended to proprietary and other rights wrongfully affected in emergency conditions: Ackerman, The Emergency Constitution (cited above), 1062.

493 OAS Checklist (cited above), 13.

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Bulmer suggests that, in most cases, SoEs/SoDs are designed to lapse after two to six months without ratification, extension or termination.

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666 These indicia of tenure were identified by participants in the Roundtable on Security of Tenure in Humanitarian Shelter, Programming for the Most Vulnerable held in Geneva on 28 June 2013: IFRC and Norwegian Refugee Council, Security of Tenure in Humanitarian Shelter Operations, 18. This source also provides a longer list of indicia, which is separated into two categories: (1) indicia of secure tenure at the place of displacement; and (2) indicia of secure tenure at the place of return/resettlement: see page 20.

667 See IFRC, Addressing Regulatory Barriers to Providing Emergency and Transitional Shelter in a Rapid and Equitable Manner After Natural Disasters, (cited above) 18.

668 Ibid.

669 International Network for Education in Emergencies, Minimum Standards Handbook, 60.

670 Allison Anderson et al, Asia Pacific Coalition for School Safety, 'Policy Brief and Practice Guidance: Limiting and Planning for Schools as Temporary Evacuation Centres in Emergencies' (Asia Pacific Coalition for School Safety, November 2017) <https://reliefweb.int/sites/reliefweb.int/files/resources/55716_55716stc01439schoolsasevacuationcen.pdf>.

671 International Network for Education in Emergencies, Minimum Standards Handbook.

672 See Asia Pacific Coalition for School Safety, 'Policy Brief and Practice Guidance: Limiting and Planning for Schools as Temporary Evacuation Centres in Emergencies'.

9. Protection and inclusion of particular vulnerable groups

673 International Federation of Red Cross and Red Crescent Societies, 'Legislative Issues in Disaster Management and Epidemic

Response: Humanitarian Diplomacy Guidance Note No.2' (2011) <http://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2016/09/Humanitarian_Diplomacy-Guidnace-Note-2.pdf> 36.

674 Ibid 2; *Universal Declaration of Human Rights*, GA Res 217A (III), UN GAOR, 3rd sess, 183rd plen mtg, UN Doc A/810 (10 December 2048); *International Covenant on Civil and Political Rights*, opened for signature 20 December 2066, 999 UNTS 171 (entered into force 23 March 2076); *International Covenant on Economic, Social and Cultural Rights*, opened for signature 16 December 2066, 993 UNTS 3 (entered into force 3 January 2076).

675 This Report adopts the same terminology as the IFRC's Minimum Standards For Protection, Gender And Inclusion In Emergencies: see IFRC, 'Minimum Standards For Protection, Gender And Inclusion In Emergencies' (2018, 2nd ed) <https://media.ifrc.org/ifrc/wp-content/uploads/sites/5/2018/11/Minimum-standards-for-protection-gender-and-inclusion-in-emergencies-LR.pdf>.

676 *Sendai Framework* (cited above), paras 7, 20(d).

677 Ibid paras 20(d), 36(a). See also *Transforming Our World: The 2030 Agenda for Sustainable Development*, GA Res 70/1, UN GAOR, 70th sess, Agenda Items 15 and 116, UN Doc A/RES/70/1 (21 October 2015) Preamble, para 17.16.

678 See, eg, *Convention on the Elimination of All Forms of Discrimination against Women*, opened for signature 18 December 1979, 1249 UNTS 13 (entered into force 3 September 1981); *Convention on the Rights of Persons with Disabilities*, opened for signature 30 March 2007, 2515 UNTS 3 (entered into force 3 May 2008); *Convention on the Rights of the Child*, opened for signature 20 November 1989, 1577 UNTS 3 (entered into force 2 September 1990); International Convention on the Elimination of All Forms of Racial Discrimination, opened for signature 7 March 1966, 660 UNTS 195 (entered into force 4 January 1969); International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, opened for signature 18 December 1990, 2220 UNTS 3 (entered into force 1 July 2003).

679 Inter-Agency Standing Committee, 'Inter-Agency Standing Committee Policy on Protection in Humanitarian Action' (2016) <https://interagencystandingcommittee.org/system/files/iasc_policy_on_protection_in_humanitarian_action_0.pdf>

680 Alice Fothergill et al, 'Race, Ethnicity and Disasters in the United States: A Review of the Literature' 23(2) *Disasters* (2099) 156, 159–160, 163–165, 167 (***Race, Ethnicity and Disasters in the United States***); Kevin Blanchard et al, 'Consideration of Marginalized and Minority Groups in a National Disaster Risk Assessment' (UNISDR; Words into Action Guidelines: National Disaster Risk Assessment, 2017) <https://www.unisdr.org/files/52828_kconsiderationofmarginalized%5B1%5D.pdf> 3–4.
Fothergill, Race, Ethnicity and Disasters in the United States (cited above), 160–161.

681 Australia Desktop Review, 7, 22–23; Finland Desktop Review, 3, 4, 17; Italy Desktop Review, 38; Jordan Desktop Review, 4, 22; Kazakhstan Desktop Review, 13–14; Korea Desktop Review, 5, 14, 22; Kenya Desktop Review, 20; Palestine Desktop Review, 17–20; South Africa Desktop Review, 4, 12; John W Ffooks & Co, 'A4ID – Checklist on Law and Disaster Preparedness and Response in Senegal' (Desktop Review, Date TBC) 12 (*Senegal Desktop Review*); Brazil Desktop Review, 7.

682 Viet Nam Desktop Review, 24; Mexico Desktop Review, 18.

683 For example, Brazilian disaster law recognizes the needs of children, elderly persons and persons with disabilities, while Colombian disaster law recognizes gender specific needs and risks: Brazil Desktop Review, 31–33; Colombia Desktop Review, 21.

684 Picard, SGBV Global Study (cited above), 49–51.

685 Elizabeth G Ferris et al, 'Unseen, Unheard: Gender-Based Violence in Disasters: Global study' (International Federation of Red Cross and Red Crescent Societies, 2015) <https://www.ifrc.org/Global/Documents/Secretariat/201511/1297700_GBV_in_Disasters_EN_LR2.pdf> 20–25 (the ***Unseen, Unheard Report***); International Federation of Red Cross and Red Crescent Societies, 'The Responsibility to Prevent and Respond to Sexual and Gender-Based Violence in Disasters and Crises' (24 July 2018) <http://media.ifrc.org/ifrc/wp-content/uploads/sites/5/2018/07/17072018-SGBV-Report_Final.pdf.pdf> (the ***Responsibility to Prevent and Response to SGBV during Disasters and Crises Report***); Picard, SGBV Global Study (cited above), 33–35, 41, 43–44.

686 Picard, SGBV Global Study (cited above), 33–36.

687 Ferris et al, Unseen, Unheard Report (cited above), 8.

688 Ibid.

689 The Desktop Reviews that do not provide information on SGBV are Madagascar, Paraguay and Kazakhstan.

690 Colombia Desktop Review, 21; Philippines Desktop Review, 20. A third country, Kyrgyzstan, is in the process of developing a regulation on SGBV in disasters: Kyrgyzstan Desktop Review, 17–18.

691 The eight countries are Australia, Brazil, Finland, Italy, Kyrgyzstan, Mexico, Senegal, UK and Viet Nam: Australia Desktop Review, 17, 21; Brazil Desktop Review, 35; Finland Desktop Review, Annex question 7(e); Italy Desktop Review, 37;

Kyrgyzstan Desktop Review, 17–18; Mexico Desktop Review, 20; Senegal Desktop Review, 11; UK Desktop Review, 34; Viet Nam Desktop Review, 24. The remaining five countries have very weak, or non-existent, legal and/or institutional frameworks for the prevention of SGBV in normal times: Jordan Desktop Review, 21; Korea Desktop Review, 21; Kenya Desktop Review, 20; Palestine Desktop Review, Annex question 4(e); South Africa Desktop Review, 11.

692 Brazil Desktop Review, 35; Korea Desktop Review, Annex question 7(e); Viet Nam Desktop Review, 26; Australia Desktop Review, Annex question 7(e); Finland Desktop Review, Annex question 7(e); Italy Desktop Review, 37; Viet Nam Desktop Review, 26.

693 Picard, SGBV Global Study (cited above), 38, 40, 43, 45.

694 Ibid.

695 Ibid 10.

696 Inter-Agency Standing Committee, 'Guidelines for Integrating Gender-Based Violence Interventions in Humanitarian Action: Reducing Risk, Promoting Resilience and Aiding Recovery' (2015) <https://gbvguidelines.org/wp/wp-content/uploads/2015/09/2015-IASC-Gender-based-Violence-Guidelines_lo-res.pdf> Part 3, Chapter 1 (Camp Coordination and Camp Management), Chapter 11 (Shelter, Settlement and Recovery), Chapter 12 (Water, Sanitation and Hygiene) (***GBV Guidelines***); IFRC, Responsibility to Prevent and Respond to SGBV during Disasters and Crises Report, 54.

697 Philippines Desktop Review, 20.

698 Brazil Desktop Review, 21.

699 Ibid 50.

700 Ibid.

701 UK Desktop Review, 26; South Africa Desktop Review, 11; Kyrgyzstan Desktop Review, 11, 16; Italy Desktop Review, 26; Thomas J Treutler and Vinh Quoc Nguyen, 'Viet Nam: Checklist on Law and Disaster Preparedness and Response' (Desktop Review, Tilleke & Gibbins, September 2017) 20–21; Juan De Jesús Piraquive-Sánchez, 'Disaster Prevention and Management Mechanisms in Colombia' (Gómez Pinzón Zuleta Abogados, 2017) 20.

702 Sabin Shrestha et al, 'Nepal Country Case Study: Effective Law and Policy on Gender Equality and Protection from Sexual and Gender-Based Violence in Disasters' (International Federation of Red Cross and Red Crescent Societies, 2017) <https://redcross.eu/uploads/files/Positions/Humanitarian%20aid/SGBV%20in%20disasters/Gender%20SGBV%20Report_%20Nepal%20HR.pdf> (***Nepal SGBV Case Study***).

703 Picard, SGBV Global Study (cited above), 50.

704 Picard, SGBV Global Study (cited above), 35; Sabin Shrestha et al, Nepal SGBV Case Study (cited above), 43. For example, a grandmother head-of-household was refused relief until she agreed to register her 18-year-old grandson as the male head of household: Picard, SGBV Global Study (cited above), 35; Sabin Shrestha et al, Nepal SGBV Case Study (cited above), 38.

705 Picard, SGBV Global Study (cited above), 35.

706 Picard, SGBV Global Study (cited above), 35; Sabin Shrestha et al, Nepal SGBV Case Study (cited above), 44. For example, a woman who was widowed during the earthquake was unable to receive a housing reconstruction grant because the land on which her house was built was in her late husband's name: Picard, SGBV Global Study (cited above), 35; Sabin Shrestha et al, Nepal SGBV Case Study (cited above), 37.

707 See *The Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health*, UN GAOR, 61st sess, Agenda Item 66(b), UN Doc A/61/338 (13 September 2006); Committee on the Elimination of Discrimination against Women, *Statement of the Committee on the Elimination of Discrimination against Women on Sexual and Reproductive Health and Rights*: Beyond 2014 ICPD Review, 55th sess, (10–28 February 2014); UN Committee on Economic, Social and Cultural Rights, *General Comment No. 22: Right to Sexual and Reproductive Health* (Art. 12 of the Covenant) E/C.12/GC/22 Geneva: UN Committee on Economic, Social and Cultural Rights.

708 See Office of the High Commissioner for Human Rights, 'Sexual and Reproductive Health Rights' (2018) <https://www.ohchr.org/en/issues/women/wrgs/pages/healthrights.aspx>.

709 Reproductive Health Sub-working Group of the ISDR/WHO Thematic Platform for Disaster Risk Management for Health, 'Integrating Sexual and Reproductive Health into Health Emergency and Disaster Risk Management' (Policy Brief, October 2012) <http://www.who.int/hac/techguidance/preparedness/SRH_HERM_Policy_brief_A4.pdf?ua=1>.

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711 Ibid 21, 47.

712 United Nations Population Fund, 'Addressing Violence Against Women and Girls in Sexual and Reproductive Health Services: A Review of Knowledge Assets' (2010) <https://www.unfpa.org/sites/default/files/pub-pdf/addressing_violence.pdf> 14–15.

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715 Margaret L Schmitt et al, 'Understanding the

Menstrual Hygiene Management Challenges Facing Displaced Girls and Women: Findings From Qualitative Assessments in Myanmar and Lebanon' 11(19) (2017) *Conflict and Health* 1.

716 Ibid.

717 The Desktop Reviews that do not provide information on gender-specific needs in disaster preparedness and response are Madagascar, Paraguay and Senegal.

718 The eleven countries are Brazil, Finland, Italy, Jordan, Kazakhstan, Kenya, Korea, Kyrgyzstan, Mexico, Palestine and the UK: Brazil Desktop Review, 35; Finland Desktop Review, Annex question 7(e); Italy Desktop Review, 37; Jordan Desktop Review, 21; Kazakhstan Desktop Review, 11; Kenya Desktop Review, 22; Korea Desktop Review, 22; Kyrgyzstan Desktop Review, 17–18; Mexico Desktop Review, 20; Palestine Desktop Review, 16; South Africa Desktop Review, 11; UK Desktop Review, 34.

719 The four countries are Australia, the Philippines, South Africa and Viet Nam: Australia Desktop Review, 17, Annex Question 7(f); Philippines Desktop Review, 6, 20; South Africa Desktop Review, 11, Annex question 7(c); Viet Nam Desktop Review, 26.

720 Colombia Desktop Review, 21.

721 Ibid 21.

722 *Convention on the Rights of the Child*, opened for signature 20 November 1989, 1577 UNTS 3 (entered into force 2 September 1990) art 1.

723 See Child Protection Working Group, Minimum Standards for Child Protection in Humanitarian Action (cited above), 221.

724 Sarah Uppard and Lili Birnbaum, 'Toolkit on Unaccompanied and Separated Children' (Inter-Agency Working Group on Unaccompanied and Separated Children, 2017) <https://resourcecentre.savethechildren.net/node/12207/pdf/tools-web-2017-0322.pdf> 9-18 (***UASC Toolkit***).

725 Ibid 13, 143.

726 See *The Right to Education in Emergency Situations*, GA Res 64/290, UN GAOR, 64th sess, 106th plen mtg, Agenda Item 114, UN Doc A/RES/64/290 (9 July 2010).

727 Ibid 53–4.

728 Ibid 59.

729 Ibid 9–18.

730 See Joseph Lelliott, 'Italy's 'Zampa' Law: Increasing Protection for Unaccompanied Children' 57 Forced Migration Review (February 2018) 79.

731 Brazil Desktop Review, 31–33; Philippines Desktop Review, 17–18. Additionally, it is worth noting that Colombian legislation establishes that children have a right to be protected from the risks and consequences produced by natural disasters and other emergencies, and empowers disaster management agencies to take appropriate measures to protect children's rights: Colombia Desktop Review, 20.

732 Brazil Desktop Review, 31–33.

733 Ibid.

734 Ibid.

735 Philippines Desktop Review, 18.

736 Ibid.

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738 LS Fernandez, D Byard et al., 'Frail Elderly as Disaster Victims: Emergency Management Strategies', *Prehospital and Disaster Medicine* (2002) Vol 17, No 2, 67.

739 IASC GBV Guidelines (cited above), 12.

740 HelpAge International, 'Older People in Emergencies: Identifying and Reducing Risks' (2012) <http://www.helpage.org/silo/files/older-people-in-emergencies--identifying-and-reducing-risks.pdf> 2;

741 Ibid.

742 Ibid 5–6.

743 HelpAge International, 'Older People in Disasters and Crises: Guidelines for Best Practice' <http://www.helpage.org/silo/files/older-people-in-disasters-and-humanitairan-crises-guidelines-for-best-practice.pdf> 8–9.

744 Ibid.

745 Ibid.

746 See, eg, Australia Desktop Review, Annex Question 7(c); Brazil Desktop Review, 33; Colombia Desktop Review, 20; Korea Desktop Review, Annex Question 7 (c); South Africa Desktop Review, Annex question 7(c).

747 The four countries are Australia, Brazil, Italy and Kazakhstan: Australia Desktop Review, Annex Question 5(b); Brazil Desktop Review, 33; Italy Desktop Review, 27, 35, 38–39; Kazakhstan Desktop Review, 11. See also *Joint National Protocol for the Comprehensive Protection of Children and Adolescents, Elderly Persons and Persons with Disabilities during Disasters* (Brazil, Human Rights Secretariat, September 2013).

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749 Australia Desktop Review, Annex Question 5(b)).

750 World Health Organization and the World Bank, 'World Report on Disability' (2011)

<http://www.who.int/disabilities/world_report/2011/report.pdf> 29.

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753 See Human Rights Watch, 'Women and Girls with Disabilities' <https://www.hrw.org/legacy/women/disabled.html>; European Women's Lobby, 'Women More Prone to Disability than Men, and Particularly Vulnerable to Discrimination and Violence' (17 May 2011) <https://www.womenlobby.org/Women-more-prone-to-disability-than-men-and-particularly-vulnerable-to>; Kirsten Naumann Murtagh and Helen Hubert, 'Gender Differences in Physical Disability Among an Elderly Cohort' (2004) 94(8) *American Journal of Public Health* 1406.

754 Handicap International, 'Disability in Humanitarian Context: Views from Affected People and Field Organizations' (2015) <https://d3n8a8pro7vhmx.cloudfront.net/handicapinternational/pages/1500/attachments/original/1449158243/Disability_in_humanitarian_context_2015_Study_Advocacy.pdf?1449158243> (***Disability in Humanitarian Context***).

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756 *Convention on the Rights of Persons with Disabilities*, opened for signature 30 March 2007, 2515 UNTS 3 (entered into force 3 May 2008) art 11.

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759 Handicap International, Disability in Humanitarian Context, 6, 10–14.

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761 See, eg, Australia Desktop Review, Annex Question 7(c); Brazil Desktop Review, 33; Colombia Desktop Review, 20; Korea Desktop Review, Annex Question 7 (c); South Africa Desktop Review, Annex question 7(c).

762 The four countries are Australia, Brazil, Italy and Kazakhstan. Australia Desktop Review, Annex Question 5(b); Brazil Desktop Review, 33; Italy Desktop Review, 26–27, 35, 38–39; Kazakhstan Desktop Review, 11. See also *Joint National Protocol for the Comprehensive Protection of Children and Adolescents, Elderly Persons and Persons with Disabilities during Disasters* (Brazil, Human Rights Secretariat, September 2013).

763 Alice Fothergill et al, Race, Ethnicity and Disasters in the United States, 156, 159–160, 163–165, 167; Kevin Blanchard et al, 'Consideration of Marginalized and Minority Groups in a National Disaster Risk Assessment' (UNISDR; Words into Action Guidelines: National Disaster Risk Assessment, 2017) <https://www.unisdr.org/files/52828_kconsiderationofmarginalized%5B1%5D.pdf> 3–4.
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767 Lorenzo Guadagno et al, 'Migrants in Disaster Risk Reduction: Practices for Inclusions' (Migrants in Countries in Crisis Initiative, 2017) 9.

768 Shinya Uekusa, 'Social Vulnerability in Disasters: Immigrant and Refugee Experiences in Canterbury and Tohoku' in William L. Waugh, Jr., Ziqiang Han (eds) *Recovering from Catastrophic Disaster in Asia (Community, Environment and Disaster Risk Management, Volume 18)* Emerald Publishing Limited, 127–144.

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770 Ibid 8–11.

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773 *Sendai Framework* (cited above), para 24(c)(i).

774 Ibid 36(a)(v).

775 Ayu Suciani et al, '"Smong" as Local Wisdom for Disaster Risk Reduction' (2018) *IOP Conf. Series: Earth and Environmental Science* 148, 1.
776 Ibid 1.
777 Ibid.
778 Ibid.
779 The main Philippines disaster law provides that it is State policy that disaster risk reduction and climate change measures are sensitive to indigenous knowledge systems, however this law does not contain any measures for the protection and inclusion of indigenous groups in disaster preparedness and response: Philippines Desktop Review, 17 citing *Republic Act No. 1012*1 (Philippines) (2010) s2.
780 Colombia Desktop Review, 20.
781 Philippines Desktop Review, 17.
782 Edge Effect, Down by the River Report, 7.
783 Ibid 15–16.
784 Ibid.
785 Oxfam, 'Life as a Gay Man in a Resettlement Site' <https://philippines.oxfam.org/life-gay-man-resettlement-site>.
786 Jennifer Rumbach and Kyle Knight, 'Sexual and Gender Minorities in Humanitarian Emergencies' in Larry W. Roeder Jr (ed) *Issues of Gender and Sexual Orientation in Humanitarian Emergencies* (2014, Springer International Publishing) 33.
787 Ibid.
788 Ibid.
789 Edge Effect, Down by the River Report, 24.
790 Inter-Agency Standing Committee, 'IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings' (2007) <https://interagencystandingcommittee.org/system/files/legacy_files/Guidelines%20IASC%20Mental%20Health%20Psychosocial%20%28with%20index%29.pdf> 2 (the ***IASC Guidelines on MHPSS***).
791 Operationalising Psychosocial Support in Crisis Project 'The Comprehensive Guideline on Mental Health and Psychosocial Support (MHPSS) in Disaster Settings' (June 2016) <https://www.uibk.ac.at/psychologie/fachbereiche/psychotraumatology/resources/opsic-mhpss-comprehensive-guideline-june-2016.pdf> 22.
792 Ibid 1; International Federation of Red Cross and Red Crescent Societies Reference Centre for Psychosocial Support 'Key Actions for Psychosocial Support in Flooding: Creating Resilience in Urban Areas' (2016) <http://pscentre.org/wp-content/uploads/Key_Actions-for-PSS-in-Flooding.pdf>.
793 IASC Guidelines on MHPSS (cited above), 2.
794 Ibid 1.
795 Ibid.
796 Ibid 1–2.
797 Ibid.
798 Ibid 106–109 (Action Sheet 5.3: Facilitate conditions for appropriate communal cultural, spiritual and religious healing practices), 110–111 (Action Sheet 5.4: Sheet 5.4 Facilitate support for young children (0–8 years) and their care-givers).
799 Sphere Minimum Standards (cited above), 341.
800 Ibid.
801 For a discussion of this point in the context of SGBV see: Picard (cited above), SGBV Global Study, 9.
802 The following key international guidelines, standards and reports emphasize the importance of non-discrimination in the provision of humanitarian assistance: Age and Disability Consortium, 'Humanitarian Inclusion Standards for Older People and People with Disabilities' (2018) <https://www.cbm.org/fileadmin/user_upload/Publications/Humanitarian_inclusion_standards_for_older_people_and_people_with_disabi....pdf> 9, 11, 29–30 (***Humanitarian Inclusion Standards for Older People and People with Disabilities***); International Network for Education in Emergencies, Minimum Standards Handbook, 55–6; Migrants in Countries in Crisis Initiative, 'Guidelines to Protect Migrants in Countries Experiencing Conflict or Natural Disaster' (June 2016) <https://micicinitiative.iom.int/sites/default/files/document/micic_guidelines_english_web_13_09_2016.pdf> 34 (***MICIC Guidelines***); Picard (cited above), SGBV Global Study, 60.
803 See Picard (cited above), SGBV Global Study, 60.
804 As per the 'Terminology' section of this Report, 'regular DPR activities' refers to DPR activities that are designed for the general public, rather than specifically for one or more of the vulnerable groups discussed in this Chapter 9.
805 The following key international guidelines, standards and reports emphasize the importance of including vulnerable groups in risk assessments, needs assessments and contingency planning: Edge Effect, Down by the River Report, 10–11, 16, 34, 38, 41; Age and Disability Consortium, Humanitarian Inclusion Standards for Older People and People with Disabilities (cited above), 18–26; International Network for Education in Emergencies, Minimum Standards Handbook, 33, 40; Picard, SGBV Global Study (cited above), 51; MICIC Guidelines (cited above), 27–28, 42–43, 127–128; Oxfam, *Oxfam Minimum Standards for Gender in Emergencies* (2013) <https://www.oxfam.org/en/research/minimum-standards-gender-emergencies> Minimum Standard 5 (***Oxfam Minimum Standards for Gender in Emergencies***); 12; Humanitarian Advisory Group, 'Taking Sexual and Gender Minorities out of the Too Hard Basket' (Humanitarian Horizons Practice Paper Series, June 2018) 12.
806 Ibid.
807 Picard, SGBV Global Study (cited above), 60–61; Age and Disability Consortium, Humanitarian Inclusion Standards for Older

People and People with Disabilities (cited above), 20–21.

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809 Ibid.

810 Ibid 21. The WGSS were developed by the Washington Group on Disability Statistics, a UN City Group established under the United Nations Statistical Commission. For more information on the WGSS see Washington Group on Disability Statistics, 'Short Set of Disability Questions' <http://www.washingtongroup-disability.com/washington-group-question-sets/short-set-of-disability-questions/>.

811 Humanitarian Advisory Group, Taking Sexual and Gender Minorities out of the Too Hard Basket (cited above), 12.

812 Humanitarian Advisory Group, Taking Sexual and Gender Minorities out of the Too Hard Basket (cited above), 6; Pride in the Humanitarian System, 'No Longer Left Behind' (June 2018) <https://apcom.org/wp-content/uploads/2018/07/PrideInTheHumanitarianSystem-Rev4.pdf> 4.

813 Ibid.

814 Pride in the Humanitarian System, 'No Longer Left Behind' (June 2018) <https://apcom.org/wp-content/uploads/2018/07/PrideInTheHumanitarianSystem-Rev4.pdf> 4.

815 Ibid; Age and Disability Consortium, Humanitarian Inclusion Standards for Older People and People with Disabilities (cited above), 20.

816 Age and Disability Consortium, Humanitarian Inclusion Standards for Older People and People with Disabilities (cited above), 20.

817 Humanitarian Advisory Group, Taking Sexual and Gender Minorities out of the Too Hard Basket (cited above), 6.

818 Age and Disability Consortium, Humanitarian Inclusion Standards for Older People and People with Disabilities (cited above), 33, 47, 80–82; IASC GBV Guidelines (cited above), 20, 48; International Network for Education in Emergencies, Minimum Standards Handbook, 27, 33; Picard, SGBV Global Study (cited above), 53, 61; MICIC Guidelines (cited above), 31; Oxfam Minimum Standards for Gender in Emergencies (cited above); Humanitarian Advisory Group, Taking Sexual and Gender Minorities out of the Too Hard Basket (cited above), 12–13; Pride in the Humanitarian System, 'No Longer Left Behind' (June 2018) <https://apcom.org/wp-content/uploads/2018/07/PrideInTheHumanitarianSystem-Rev4.pdf> 4.

819 Picard, SGBV Global Study (cited above), 61.

820 Ibid. This recommendation also draws on guidance from the humanitarian sector in relation to multi-stakeholder coordination mechanisms: See, eg, Age and Disability Consortium, Humanitarian Inclusion Standards for Older People and People with Disabilities (cited above), 66–71.

821 Picard, SGBV Global Study (cited above), 61; MICIC Guidelines (cited above), 27.This recommendation also draws on guidance from the humanitarian sector that identifies the importance of recruiting vulnerable groups as staff or volunteers for humanitarian programs: Edge Effect, Down by the River Report, 11; Age and Disability Consortium, Humanitarian Inclusion Standards for Older People and People with Disabilities (cited above), 45, 114–115, 200, 245; IASC GBV Guidelines (cited above), 10, 23–24, 38–39.

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825 The following sub-groups are especially at risk: adolescent girls; elderly women; women and child heads of households; girls and women who bear children of rape, and their children born of rape; indigenous people; ethnic and religious minorities; sexual and gender minorities; unaccompanied and separated children; women and men involved in forced and/ or coerced prostitution, and child victims of sexual exploitation; people living with HIV; people with disabilities; survivors of violence: IASC GBV Guidelines (cited above), 12–13.

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10. Quality, accountability and prevention of fraud and corruption

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The Fundamental Principles of the International Red Cross and Red Crescent Movement

Humanity / The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.

Impartiality / It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

Neutrality / In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.

Independence / The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

Voluntary service / It is a voluntary relief movement not prompted in any manner by desire for gain.

Unity / There can be only one Red Cross or Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

Universality / The International Red Cross and Red Crescent Movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.