

JANUARY 2014



Feinstein International Center

Strengthening the humanity and dignity of people in crisis through knowledge and practice



Experiences of National Governments in Expanding Their Role in Humanitarian Preparedness and Response

Jeremy Harkey



Tufts
UNIVERSITY

Gerald J. and Dorothy R.
Friedman School of
Nutrition Science and Policy

Cover photos: 1st row, left: A member of a community disaster management council points out the most vulnerable neighborhoods in his town in the Philippines.

1st row, right: Members of a Community Commission on Civil Protection and Disaster Prevention and Mitigation in Bajo Lempa, El Salvador.

2nd row, left: A Salvadoran Ministry of the Environment official points out a reforestation project along a flood-prone riverbank.

2nd row, right: A staff member monitors seismic activity at the Salvadoran government's Center for Integrated Monitoring of Natural Threats.

Photo credits: Jeremy Harkey

©2014 Feinstein International Center. All Rights Reserved.

Fair use of this copyrighted material includes its use for non-commercial educational purposes, such as teaching, scholarship, research, criticism, commentary, and news reporting. Unless otherwise noted, those who wish to reproduce text and image files from this publication for such uses may do so without the Feinstein International Center's express permission. However, all commercial use of this material and/or reproduction that alters its meaning or intent, without the express permission of the Feinstein International Center, is prohibited.

**Feinstein International Center
Tufts University
114 Curtis Street
Somerville, MA 02144
USA
tel: +1 617.627.3423
fax: +1 617.627.3428
fic.tufts.edu**

Acknowledgements

This report is the result of a collaboration project between Oxfam America and the Feinstein International Center.

The author thanks Oxfam America and the Oxfam offices in each of the study countries for their help in preparing for this research. He thanks and recognizes each of the informants and their institutions for taking the time to share their knowledge and expertise. Finally, he thanks Peter Walker of the Feinstein International Center for his guidance throughout the project.

About the Author

Jeremy Harkey is an independent research consultant. He is the head of Harkey International Consulting.

Contents

Executive Summary	6	
A. Key Lessons: What Works for Strengthening National Disaster Management Capacity	6	
B. Key Lessons: What Needs to Happen to Continue to Effectively Strengthen National Disaster Management Capacity	8	
1. <i>Lessons for National Governments</i>	8	
2. <i>Lessons for International Actors that Implement Disaster Management Programming</i>	8	
3. <i>Lessons for Donors that fund Disaster Management Programming</i>	9	
I. Introduction	10	
A. Presentation of Study	10	
B. Purpose of the Report	10	
C. Literature Review	10	
D. Methodology	12	
E. Key Terms	13	
II. Means Through Which National Governments Strengthen Capacity	14	
A. Creating and Revising National Legislation	14	
1. <i>The Impetus for Legislation-Building</i>	14	
<i>Civil Society Advocacy Mechanisms</i>	15	
<i>Major Disasters</i>	16	
2. <i>Contributors to the Legislation Crafting Process</i>	17	
<i>Government</i>	17	
<i>Civil Society Actors</i>	18	
<i>International Actors</i>	19	
3. <i>Ongoing Legislative and Public Policy Work</i>	19	
B. Strengthening Government Institutions	20	
1. <i>National Disaster Management Systems</i>	20	
<i>Capacity Strengthening Mechanisms for National Disaster Management Systems</i>	21	
2. <i>Sub-National Coordination Mechanisms</i>	22	
<i>Capacity Strengthening Mechanisms for Sub-National Disaster Management Agencies</i>	23	
3. <i>Line Ministries</i>	26	
<i>Capacity Strengthening Mechanisms for Line Ministries</i>	27	
C. Community Level	28	

III. Findings and Observations	32	
A. Examples of Partnerships for Capacity Strengthening	32	
1. <i>Legislation: Civil Society Leadership in El Salvador</i>	32	
2. <i>National Disaster Management Coordination: Institution Strengthening in Mozambique</i>	33	
3. <i>Sub-National Disaster Management: Local Action in Indonesia</i>	35	
4. <i>Line Ministries: Disaster Risk Reduction and Climate Change Adaptation Mainstreaming in the Philippines</i>	36	
B. Best practices for Strengthening National Capacity	37	
C. Worst practices in Strengthening National Capacity	38	
D. Perceived Gaps in Donor Attention to Disaster Management Interventions	39	
IV. Conclusions and Recommendations	41	
A. Recommendations	42	
1. <i>National Governments</i>	42	
2. <i>National Civil Society Actors</i>	43	
3. <i>International Actors that Implement Disaster Management Programming</i>	43	
4. <i>Donors</i>	44	
V. Appendix 1: Capacity Strengthening of the Natural Disaster Management System of El Salvador	45	
VI. Appendix 2: Capacity Strengthening of the Natural Disaster Management System of Mozambique	56	
VII. Appendix 3: Capacity Strengthening of the Natural Disaster Management System of the Philippines	66	
VIII. Appendix 4: Capacity Strengthening of the Natural Disaster Management System of Indonesia	76	
Endnotes	85	

EXECUTIVE SUMMARY

This paper presents the findings of four case studies of how national governments strengthen capacity to manage natural disasters. It looks at what factors contributed to each country's decision to strengthen the national system, what the strengthening process has consisted of, and what role different actors have played in the processes. The four case study countries are El Salvador, Mozambique, the Philippines, and Indonesia.

In these countries, national governments are responsible for leading disaster management systems and for managing the mechanisms, tools, and resources that serve as the backbone, and the operational drive, of the systems. Many actors play important roles in the national disaster management systems, including government agencies, civil society groups, the private sector, and the population itself. In practice, however, thorough strengthening of disaster management systems requires government leadership and commitment to change.

Many countries' governments are slow to assume this leadership and to commit to developing an effective and comprehensive disaster management system. Reasons for this include a lack of government leadership, minimal popular support for changes or governments' undervaluing of popular will, and a lack of national expertise on the issues. The human, natural, and economic implications of not having an effective and comprehensive disaster management system can be grave. However, governments and populations of disaster-prone countries cope with natural disasters in many ways, and thus endure disaster cycles even without the means to fully and effectively manage them.

This paper examines how, in the four studied countries, the governments have emerged from a history of great suffering from the effects of natural disasters to strengthen the countries' ability to reduce risk of, prepare for, respond to, and recover from natural disasters. It lays out and analyzes the processes by which the national disaster management systems have been

strengthened, by considering which factors led to changes, what changes have been made from the national level down to the community level, and which national and international actors have contributed to these changes.

The principal objectives of the research were:

- Create a credible base of information about what steps national governments have taken in order to establish leadership to manage the whole cycle of disaster management
- Identify lessons and best practices in national capacity strengthening
- Provide recommendations on policy and practice regarding the strengthening of national disaster management capacity for national governments, national civil societies, international actors, and donors.

A. Key Lessons: What Works for Strengthening National Disaster Management Capacity

- **Impetus for Change:** National governments need to recognize that they must make changes in order to strengthen and increase the comprehensiveness of the disaster management system, commit to making those changes, and delineate how they will do so. Each of the countries studied, after decades of experiencing deadly and expensive natural disasters, passed a turning point, after which the government assumed greater leadership in strengthening the national disaster management system. The factors that contributed to this deepened assumption of leadership varied; however, two elements stand out from the case studies as key to this change.

The **first** is recognition by the government that the country *has* to strengthen its approach to disaster management. Particularly in Indonesia and the Philippines, this was brought about by a specific natural disaster that caused substantial damage and cast national and international light upon the weaknesses and unsustainable nature of the existing system. The **second** factor was

strong civil society advocacy for responsible and effective disaster management. Civil society groups understood the need for improved government action on disaster management. They educated the public and drew popular support for legislative and institutional strengthening, and lobbied their government for changes. This advocacy, as well as civil society technical support for changes in legislation, helped bring about capacity strengthening changes and improve the quality of the legislation.

- **National and Sub-National Institutional Strengthening:**

National disaster management architecture needs to extend from national to community level. National-level changes are essential, as they designate laws, policies, and resources that will guide the system. These are also essential to determining how the national government will support the operation and the capacity strengthening of the sub-national system. In turn, the sub-national level is essential for ensuring the strengthening of local systems that are charged with designing and implementing locally adjusted risk mitigation, preparedness, response, and recovery tools.

The strengthening of sub-national institutions, such as provincial, district, and community disaster management committees, has been one of the most important factors contributing to national strengthening in the four studied countries. It is a challenge to extend capacity and initiative to the local level, particularly in terms of ensuring appropriate administrative, funding, and human resources. Nonetheless, the creation and strengthening of local mechanisms, which government officials and populations alike are familiar with and involved with, is a powerful means of ensuring local ownership of and effectiveness in the disaster management cycle.

- **Partnerships:** The capacity strengthening that each of the countries has experienced is the product of partnership between government, civil society, community, and international actors. Throughout the

processes of strengthening such important elements as legislation and the national, sub-national, and the local systems, a varying combination of these actors has contributed to the deepening of capacity. It is important to recognize the need for government leadership in disaster management systems, as well as government leadership in national capacity strengthening. It is also important to recognize the technical skills and local perspective that other national actors may contribute to the strengthening processes and to the substance and sustainability of the results.

- **Mainstreaming of Disaster**

Management: Governments need to assume a comprehensive view of the disaster management cycle in order to ensure comprehensive protection against natural disasters. One particularly effective way of implementing this view is to mainstream disaster management responsibilities throughout the policies and initiatives of government ministries. Strengthening the ability of line ministries to contribute to disaster management facilitates the best use of all government resources. Beyond disaster response, this is particularly important in terms of preparedness and risk reduction. Strong examples of governments mainstreaming risk reduction into line ministries' work—for example, by adjusting land development and agricultural practice to consider climate change predictions—show the power that can be harnessed when a wide variety of government actors strengthen their ability to consider disaster management.

- **Adequate Government Strategizing on Approach to Capacity Strengthening:** Governments ought to have national capacity strengthening needs assessments and a system to distribute and track the interventions of all actors. Without these tools, it is difficult for them to prioritize resource allocation, track capacity strengthening impact, and facilitate coordination between government, national, and international actors involved in capacity strengthening.

- **Local Capacity Strengthening Coordinated with Government Mechanisms:** Sub-national disaster management capacity strengthening needs to be done in such a way as to not marginalize local systems from official sub-national and national systems. When national and international actors conduct projects whose outputs include disaster committees, early warning systems, and disaster management plans, these should follow standard guidelines and link to official systems. Creating parallel systems may reduce communities' access to important government resources such as capacity strengthening needs assessments and resource allocations. It may also lead to a dangerous lack of coordination in disaster contexts.
- **Coordination between Similar Government Initiatives:** Government agencies implementing Climate Change Adaptation and Disaster Risk Reduction initiatives should coordinate methodologies, and identify and seize opportunities to collaborate when addressing related problems. Failing to do so may result in competing for funds and other national and international resources, confusion and animosity, and lost opportunities to combine strengths.
- **Sufficient Time Allowance for Community-Based Projects:** Community-level work that requires high involvement and ownership by the population to succeed should be allowed sufficient time and resources for implementation and for follow-up. Failing to do so, for example when establishing a community disaster committee or an early warning system, may render the outputs unsustainable in the short and/or long term.

B. Key Lessons: What Needs to Happen to Continue to Effectively Strengthen National Disaster Management Capacity

1. Lessons for National Governments

- **Legislation:** Ensure that legislation properly delineates the disaster management system,

and is appropriate to the current context. Adopt public policies that push the government toward effective disaster management and a proactive role in DRR (Disaster Risk Reduction).

- **Funding:** Establish funding structures to fund all levels of the national disaster management system. Ensure that funding will be available to sub-national structures.
- **Partnerships:** Identify national and international actors who are able to contribute to capacity strengthening, and coordinate their working within the framework of a capacity strengthening plan, so as to best distribute functions between partners and ensure strategic use of resources.
- **Sub-National Strengthening:** Assess the type and extent of sub-national disaster coordination mechanisms and offices' capacity strengthening needs and, together with partners, adopt a plan and allocate resources for addressing them. Regularly update this assessment, and adjust allocation of resources according to needs.
- **Mainstreaming Disaster Management:** Assess and strengthen the degree to which disaster management is considered in line ministries' mandates and plans, so as to ensure that responsibilities are mainstreamed throughout the government structure.
- **Community-Level Work:** Improve government actors' ability to work with communities to strengthen disaster management capacity.

2. Lessons for International Actors that Implement Disaster Management Programming

- **Official Capacity Strengthening Plans:** Strategize interventions so as to work within governments' national capacity strengthening frameworks and plans. If these do not exist, encourage and as possible contribute to their elaboration and application.

- **National Capacity Strengthening Mechanisms:** Assess, and address as possible, governments' needs for support to strengthen their institutional capacity strengthening and human resources training systems. This should consider the national system comprehensively, including line ministries and sub-national institutions.
- **Strengthen Civil Society:** Expand initiatives to strengthen national civil society actors' technical involvement in the disaster management system, their ability to contribute to national capacity strengthening, and their presence and strength as advocates before national and sub-national government actors. Support these actors in line with an organizational sustainability plan.
- **Disaster Management Mainstreaming:** Promote the incorporation of regularized tools for the mainstreaming of disaster management into government programs.
- **Coordinate Local Interventions with Government Mechanisms:** Ensure that interventions to strengthen local disaster preparedness, such as early warning systems and community and municipal disaster coordination mechanisms, are conducted in coordination with government authorities and other important actors.

3. *Lessons for Donors that fund Disaster Management Programming*

- **Middle Income Countries' Capacity Strengthening Needs:** When considering requests for funding for DRR and preparedness projects in middle-income countries, ensure that an assessment of national financial and operational capacity to indeed fulfill those needs is provided. This will help avoid missing opportunities to fund projects that could make valuable contributions to national capacity strengthening.
- **Partnership:** Encourage international actors

to orient their disaster management activities toward partnership with, and capacity strengthening of, government and civil society actors. This relationship should go beyond an implementation partnership to one of institutional strengthening for the local actor.

- **Joint Capacity Strengthening:** Encourage international actors and national governments to conduct joint capacity strengthening activities for the national system, particularly in areas of required skills strengthening for the government implementation and training mechanisms. This should include such areas as community disaster management system strengthening and community-based DRR.
- **Support for Civil Society Advocacy:** Encourage international actors to partner with national civil society actors (and networks) that lobby for increased effectiveness in and responsibility for disaster management, and that are involved with implementation of disaster management activities. ■

I. INTRODUCTION

A. Presentation of Study

El Salvador, Mozambique, the Philippines, and Indonesia are four countries that are highly prone to experience multiple sorts of natural disasters. In recent decades, each of these countries has strengthened its ability to reduce disaster risks, prepare for disasters, respond to them, and recover from them. They have strengthened disaster management laws, systems, and mechanisms that allow national actors to be stronger protagonists in their local system, and have tested these systems during multiple disaster scenarios. The systems involve national government, sub-national government structures, communities, and civil society actors. They continue to receive support from international actors, who play a supporting role in the governments' operations as well as in the process of capacity strengthening.

This report will examine how countries can develop national capacity for disaster management, based on evidence from El Salvador, Mozambique, the Philippines, and Indonesia. It will examine the role that national legislation, government structures, and community can play in the strengthening of the national system, and how national and international actors may partner to make contributions to the capacity strengthening process. The report will emphasize the lessons that may be drawn from these countries in order to understand how they may be applied elsewhere.

The research findings for each country are compiled in country profiles that are appended to this report. The profiles examine key moments in the history of capacity strengthening for each country and some of the gaps that remain in each national system. These accounts are important to understanding the broader picture for each country, given what they have achieved and how they have done so. They also help understand what remains to be strengthened and why. These gaps and challenges are very important to understand, because just as they represent some of the obstacles in the process

heretofore, governments and their partners must address them in the course of continued capacity strengthening efforts.

B. Purpose of the Report

This research was commissioned by Oxfam America. The purpose of this research was to explore the experiences of national governments that have strengthened their capacity to play a lead role in disaster management in their countries, particularly in terms of disaster preparedness and response. The research sought to understand what led the countries to strengthen their capacity, what the process has been and how it has progressed, and what contributions different national and international actors have made. It is intended to shed light on these processes and draw lessons and best practices based on these examples.

C. Literature Review

There is ample grey literature produced by such actors as NGOs, UN agencies, the World Bank, and the Global Facility for Disaster Reduction and Recovery, as well as national government agencies themselves, regarding disaster management practice in each of the four countries. This literature provides concise information regarding specific elements of the local disaster management systems in each country, such as the institutional makeup, policies, and projects to strengthen the system. They also analyze specific disasters in order to explain the roles played by national and international actors, assess the challenges that were faced and the institutional and partnership strengths and weakness that were revealed, and describe the effects of the disaster on the nation.

This grey literature was useful in preparing for the field research, as it helped clarify some of the institutional makeup, the different actors involved in the national system, and some of the challenges that the countries have faced through the years. Nonetheless, these documents for the most part were better at providing snapshot images of the capacity strengthening processes of

each country, rather than helping to clarify the history of capacity strengthening and how changes came about through the years. Following is a selective review of the literature resources that were most valuable in preparing for the field research.

The Feinstein International Center published a paper in 2011 titled “International Dialogue on Strengthening Partnership in Disaster Response: Bridging National and International Support. Background Paper 3: Best Practices at the National Level” that examines relationships between international actors and national disaster management systems in Mozambique, Indonesia, and Colombia. Under the lens of seeking to understand how international actors can support national governments to strengthen their capacity to manage disasters and contribute to disaster responses without overwhelming the government’s management responsibility, the paper examines the governmental disaster management system in each country and its interface with international actors. It provides a breakdown and analysis of the key ingredients of each country’s disaster management system and some of the history of their strengthening processes, looking at, inter alia, the national disaster management structure, legislation and policy, and coordination mechanisms.¹

The following three papers were prepared as case studies under the Overseas Development Institute’s project, “The Role of the Affected States in Humanitarian Action.”² The case studies are the most precise and analytical pieces in capacity strengthening for disaster management systems on the four countries.

Barnaby Willitts-King’s 2008 working paper, “The Role of the Affected State in Humanitarian Action: A Case Study on Indonesia” examines the path the government and other local actors have taken to build capacity for disaster management. Willitts-King traces the institutional roots of the current national system, the disaster events that encouraged change, and the contemporary national structure for disaster management. He examines, based on his research, the key contributions that international actors make to the national humanitarian system, given the

country’s preference for sovereign control, its developing capacities, and its strong financial resources. International actors have contributed to *bringing external capacity* by bringing in additional response capacity to supplement local skills in disaster situations, and contributing to policy discussion with technical inputs. The second contribution they have made relates to *funding*, with regards to co-financing for some projects, such as early warning systems, and helping the government attain international funds in emergency situations. The third contribution is *building capacity*, in reference to training of staff for prevention and response activities. The fourth contribution is *linking different actors*, which refers to developing pilot projects to attempt new approaches in the system, and convening discussions between national civil society and government actors. The final contribution is facilitating *military to military* contact, for the purposes of coordination in the context of large natural disasters.³

Conor Foley’s 2007 working paper, “Mozambique: A Case Study in the Role of the Affected State in Humanitarian Action” examines the capacity strengthening process of Mozambique’s disaster management system, through the lens of an analysis of the government’s response to floods in 2007. Foley explains the disaster response by breaking down the respective roles of different national and international actors. In the course of this, he illustrates the government’s growing strengths under the leadership of its disaster management agency Instituto Nacional de Gestão de Calamidades (INGC by its Portuguese acronym), such as its disaster management coordination center. He also highlights the active role of local populations in preparedness and response activities.⁴

Patricia Fagen’s 2008 working paper, “El Salvador: A Case Study in the Role of the Affected State in Humanitarian Action” examines the Salvadoran government’s capacity strengthening process in the light of its performance during natural disasters in the period of 2001–2005. She lays out the role that the government has played in its strengthening, such as its adoption of new disaster management legislation in 2005 and the empowering of

various line ministries to play a role in disaster preparedness and response. Fagen focuses on the contributions of international actors to capacity strengthening as well as response operations, and the government's current relationship with these actors given its continued need for financial and operational support in disaster responses. Fagen recommends that the government better incorporate disaster management into its development process to promote greater resilience in the population, and expand programs at the local level.⁵

D. Methodology

CASE SELECTION

The research examines El Salvador, Mozambique, the Philippines, and Indonesia as case studies. Because the aim of the research was to ascertain factors that have led to the successful build-up of national- and local-level humanitarian response capacity and to start to identify best practices, Oxfam selected these countries because they are natural disaster prone and have seemingly developed a significant degree of local capacity for disaster management in the last two decades. Regional distribution was a secondary consideration.

RESEARCH METHODOLOGY

The research for this study included a selective desk review of existing literature on the context and the capacity strengthening process of each country. This covered academic as well as grey literature. The field research was conducted between December 2012 and April 2013, with five to ten days allocated per country. The principal researcher held semi-structured interviews with representatives of key government institutions, national civil society actors, and international actors including non-governmental organizations (NGOs), agencies of the United Nations, and donors. Initial contact was made with interviewees with the support of the local Oxfam office in each country and the Feinstein International Center. In some instances, the principal researcher secured additional interviews once in the country, based on the recommendation of other interviewees.

ANALYTICAL FRAMEWORKS

This research was guided by two analytical frameworks, which informed the principal researcher's field data collection and his analysis of the findings. The first is the rights-based framework. This framework focuses on the importance of identifying structural impediments to citizens' realization and exercise of their rights, and it assigns a role for citizens and communities to play a part in addressing these impediments. It is based on an understanding that communities affected by obstacles to development understand what these are, and are essential to the process of addressing them.⁶ The second framework was that of governance and aid effectiveness, which recognizes the importance of an effective relationship of government responsibility to citizens' needs and rights, and to the process of development and healthy democratic governance. It emphasizes the importance of active citizen engagement with the government to call attention to citizens' needs and to hold government responsible for helping ensure their satisfaction through the functioning of the state system. The framework emphasizes that international aid can either impede this relationship or encourage it, insofar as it helps improve government accountability, and supports citizen efforts to ensure that the government fulfills its responsibilities to citizens.⁷

LIMITATIONS

It is important to note that the principal researcher experienced limitations in securing the desired breadth and depth of key actor interviews. This was particularly due to the fact that intended interviewees were occupied with professional duties during the researcher's travel to the countries. In Mozambique, the Philippines, and Indonesia, this was due in large part to the fact that the visits took place in the context of ongoing or recent natural disasters.

SOURCE CITATIONS

Due to confidentiality concerns, and as promised to each interviewee, this paper will not specify the names of individual sources. Rather, it will cite sources by the category of their position, the sort of agency with which they work, and the country in which they work.⁸

E. Key Terms

Capacity: The report will use the United Nations Office for Disaster Risk Reduction (UNISDR) definition: “The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals.”⁹

Capacity Strengthening (in the disaster management context): Utilizing the above definition of “capacity,” this refers to the development and improvement of skills, tools, knowledge, and methodologies related to disaster management, and their incorporation into systems and practice within a state or non-state entity.

International Actor: The term is used as an all-encompassing term to refer to such entities as international NGOs, national development aid and development cooperation agencies, United Nations and other multilateral agencies, and donors.

Disaster Management Cycle: The report will use this term to refer to a cycle consisting of prevention, mitigation and preparedness before a natural disaster, and response, recovery, and rebuilding following a disaster.¹⁰

Disaster Risk Reduction (DRR): The report will use the UNISDR definition: “The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.”¹¹

Mitigation: The report will use the UNISDR definition: “The lessening or limitation of the adverse impacts of hazards and related disasters.”¹²

Preparedness: The report will use the UNISDR definition: “The knowledge and capacities developed by governments, professional response and recovery

organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.”¹³

Prevention: The report will use the UNISDR definition: “The outright avoidance of adverse impacts of hazards and related disasters.”¹⁴

Response: The report will use the UNISDR definition: “The provision of emergency services and public assistance 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.”¹⁵ ■

II. MEANS THROUGH WHICH NATIONAL GOVERNMENTS STRENGTHEN CAPACITY

A. Creating and Revising National Legislation

Disaster management legislation is one of the most important tools for governments in strengthening their ability to lead and structure disaster management work. Legislation can provide a framework for ordered and distributed responsibility in the disaster management system, and provide the institutional and financial tools necessary to successfully implement the system. Particularly in national contexts in which not all elements of the disaster management cycle have previously been considered, and institutional structure and responsibilities are not sufficiently strengthened and distributed, legislation can serve as a stepping-off point into a new disaster management structure, approach, and level of proactivity. This is particularly true when national governments are strengthening throughout, such as in the context of evolving democracies and countries emerging from periods of armed conflict, where existing legislation and the disaster management system do not adequately respond to the nature and extent of natural disasters in the country.¹⁶

In El Salvador, Indonesia, and the Philippines, legislation brought a new structure to systems that had been perceived as disorganized and overly focused on disaster response at the expense of other phases of the disaster management cycle, among other inefficiencies. In each of these countries, the passage of contemporary legislation was a landmark event in the course of capacity strengthening.¹⁷ This is because of the changes that the legislation brought to the system, in terms of the technicalities of what the government would address in the disaster management system and how it would do so; and in terms of the momentum that a clarified and expanded mandate created.

In the case of Mozambique, it was not legislation that was similarly transformational, but a policy plan called “Master Plan: Director Plan for Prevention and Mitigation of Natural Disasters”

(hereafter, “Master Plan”) of October 2006. The Master Plan was created to make important changes to national institutions and priorities, based on gaps in the government’s addressing of natural disasters, and the distribution of functions between national and international actors.¹⁸ Disaster management legislation was being finalized in Mozambique at the time of this research.

1. *The Impetus for Legislation Building*

In each of the studied countries, it took a major push from outside the national government to create enough momentum to adapt or create legislation that would lay the groundwork for deep changes. One such external push factor is a **national civil society advocacy mechanism** that successfully develops sufficient momentum to push the government to commit to making legislative changes. Such civil society mechanisms not only rally public support and lobby for the changes, but also may make contributions to the actual drafting of the legislation. This was a major factor in El Salvador, Indonesia, and the Philippines. A second external push factor is the **occurrence of a major disaster that highlights weaknesses in the government’s system**, both in its response to the disaster and in terms of what it could have done to encourage preparedness and mitigate risks. This was a major factor in Indonesia and the Philippines. These major factors in effect act to push, or even shock, the government and national players such as civil society actors into making changes that the government had not previously been willing or able to make.

The countries examined in this study are disaster-prone countries in which the populations have lived with natural disasters for a long time and have employed a variety of means to cope with them. On the part of the national governments, these coping mechanisms include making gradual changes and improvements to the system, counting on communities to organize themselves to react to disasters, and relying on international actors for support.

The evolution of the disaster management systems in the studied countries was affected by many factors that influence the government's degree of proactivity in strengthening national capacity and the pace of change. These factors include the stability of the government, its sense of responsibility toward and responsiveness to the needs of the country's population and infrastructure, its expertise in disaster management and its ability to institutionalize that, and the types and extent of (human and natural) disasters that the country experiences. These and other factors may affect government willingness to assume a role of responsibility in disaster management, and its willingness to make necessary changes such as legislative and institutional strengthening.¹⁹ It is against these factors, and the inertia that they can create, that the **national civil society advocacy mechanisms** and **major weakness-highlighting disasters** push when they successfully create momentum for change.

Civil Society Advocacy Mechanisms

In the course of these evolutionary processes of capacity strengthening, insofar as governments do not make substantial changes to their disaster management system because they do not want to and/or do not know how to, civil society advocacy mechanisms may function as catalysts for change. Civil society advocacy mechanisms, a term which in this case refers to a network or consortium of civil society actors allied to work together toward a common goal, function as protagonists for change within the framework of pressuring the government to fulfill its responsibilities to the country's citizens. Such advocacy mechanisms may focus exclusively on advocating for changes to legislation, or they may have a broader mandate. Advocacy groups may understand the gaps in current legislation, institutional makeup, and practice and seek to pressure the government to make changes, as well as to influence the new legislation.

Civil society advocacy mechanisms representing a mix of academic, humanitarian, development, human rights, and community activist groups were important in the legislation reform processes of El Salvador, the Philippines, and Indonesia. Their initiative was critical in the absence of strong popular demand for disaster

management reform and insufficient government initiative for change. In El Salvador, the network Mesa Permanente de Gestión de Riesgo conducted public and government advocacy and drafted a first version of new legislation.²⁰ In the Philippines, two civil society mechanisms worked for almost a decade to develop government commitment to reform legislation. The first one wrapped up efforts after five years, ultimately unsuccessful at securing government will for reform. The second mechanism, DRRNet, was crucial to securing support for reform and provided a draft of legislation to the government, as well as continued contributions thereafter.²¹ In Indonesia, the Indonesian Society for Disaster Management was a leader in calling attention to the need for legislative reform, organizing public support for this, and making technical contributions to the new legislation.²²

A key contribution that civil society advocacy mechanisms make in this context is technical expertise, based on members' and their institutions' (in the case of a network or consortium) professional expertise and experience in disaster management. This can be particularly valuable in terms of addressing elements of the disaster management cycle that have typically been neglected in the country, such as preparedness considerations or disaster risk reduction (DRR) methodologies.

Civil society actors can also bring to the table critical familiarity with the ground-level effects and realities of disasters' impacts, derived from their work with communities affected by natural disasters or other links to this information. This familiarity is relevant to understanding how government disaster management mechanisms should relate to community mechanisms, for example, or how disaster management mechanisms should consider the differential needs of populations based on age, gender, and other specific needs and/or vulnerabilities.

A third contribution that civil society can make in prompting legislative development in support of humanitarian capacity is their commitment to the cause. Civil society advocacy mechanisms are driven by a purpose, and their commitment allows them to dedicate time and resources to contributing to achieve the changes. Ultimately

this commitment, and the groups' drive, causes them to be persistent over the course of multiple years and to continue to advocate for change even when there is little government interest in making changes to legislation.

The role of civil society in legislative change is notable in El Salvador, where the advocacy group Permanent Table on Risk Management (MPGR by its acronym in Spanish) played a key role in strengthening public and government momentum for legislative reform in 2005. The MPGR started advocating for legislative reform in 2001, in response to the government's continued inadequate disaster response mechanisms and insufficient consideration of prevention, risk reduction, and recovery. The MPGR conducted advocacy with the government and the public, and it drafted legislation that the government ultimately used as the foundation for a new law. Their work clearly did not force the government to make a change, but it contributed to building momentum such that ultimately their work complemented increased political support for reform.²³

As expressed, civil society mechanisms bring their own assets to the table when conducting advocacy for legislative change. In some cases, however, the assets of other actors may complement these. In El Salvador, the Philippines, and Indonesia, the partnerships extended beyond national actors to include international actors. In El Salvador, the MPGR received support during its initial lobbying period, and subsequently following passage of the 2005 legislation, from the regional civil society network "Concertación Regional Para Gestión de Riesgos." This network, which is composed of representatives from civil society organizations in El Salvador, Guatemala, Honduras, and Nicaragua, provided institutional strengthening support to MPGR, as well technical support regarding MPGR's inputs to the legislation.²⁴ Other international actors included international NGOs and multilateral institutions working in the countries. As necessary, these provided technical support to the civil society mechanisms regarding specific elements of disaster management, examples and experiences from other countries, training on how to conduct

advocacy, motivation, and financial support. Informants affirmed that these inputs played a key role in the success of the civil society mechanisms, as international actors contributed to strengthening the skills, knowledge, and commitment of the national actors.²⁵

In contrast to the other three countries in this study, the research did not reveal that civil society actors have been a strong force in encouraging legislative reform in Mozambique. Certainly academic institutions have made important technical contributions to the design of the national Master Plan, and to the legislation that was being crafted at the time of this research.²⁶ Nonetheless, it did not appear that civil society actors, or indeed organized civil society networks, have been actively involved with developing public support and pressure for change as they were in El Salvador, the Philippines, and Indonesia. Although there is insufficient research data from Mozambique to make clear conclusions as to why this has been the case, according to one informant this relatively inactive role is due in part to the fact that civil society actors have historically been weak in the country. This informant explained that national NGOs that have worked in disaster management have been more operational than active in community or political organizing and have not developed advocacy agendas. The NGO with which the informant works is currently focusing on strengthening the skills and resources of national civil society actors.²⁷

Major Disasters

The second push factor that can lead national governments to develop legislation surrounding disaster management is the occurrence of a major, unsettling disaster that draws national and international attention to the inadequacies of the existing disaster management system. Such major disasters can have the effect of bringing government, public, and international attention to inadequacies as well as strengths in the existing disaster management system, and create or strengthen momentum for change. In countries that regularly experience disasters, a typical disaster will not have this effect. Rather, in the Philippines and Indonesia, where this was a major push factor, the disaster was distinguished from others because it had a

tremendous impact on the population, it occurred in a place and a manner that could not be ignored, and it had the effect of sparking government frustration and even shame.^{28 29}

In the case of Indonesia, the 2004 tsunami revealed and broadcast to the country and the world via media that the government and population had been insufficiently prepared. It also highlighted that the government had insufficient national institutional capacity to manage the initial disaster response and to coordinate the subsequent support from international actors.³⁰ The government's disaster management system was overwhelmed by the tsunami, causing the government to request international support. Poor government and United Nations coordination of the subsequent international response allowed such problems as duplication and gaps, and inappropriate use of funds.³¹ This failure to effectively manage the disaster, as well as the tsunami's great impact on the population, stimulated the Indonesian government's decision to take more effective control of disaster management. Even though the tsunami revealed multiple weaknesses, one of the greatest motivations for the Indonesian government to strengthen was the fact that it had to look to international actors for support with the response. This need for support opened it up to losing control of the operation and to losing face. As one Indonesian government official explained:

*Lessons learned come only from big disasters, like 2004 in Aceh... We found that the problem is that once (the government) opens to international distribution of relief, so many come, their assistance is too much; it is more than we can [handle]. So we had to figure out how to do that.*³²

Nonetheless, the tsunami did not lead to immediate legislative reform. Rather, it led to a process of public awareness building, discussion, and legislative preparation in which a civil society body, the Indonesian Society for Disaster Management (MPBI by its acronym in Bahasa Indonesia), was the main protagonist. In addition to drawing popular support, MPBI prepared the first draft of legislation, while a process of parliamentary capacity building was ongoing prior to its making final adjustments.

Ultimately, the tsunami sparked a government understanding of the need to reform disaster management legislation. It also strengthened the resolve of MPBI to help facilitate this process. This comprehension of a need for change served as the basis for a reform process led by MPBI, but with the government's cooperation and commitment.^{33 34}

2. Contributors to the Legislation Crafting Process

Legislative reforms to strengthen the disaster management system that will make significant changes require substantial familiarity with the national context, a vision of what should change, and the technical elements to bring about the desired change. Preparing such legislation takes time and requires a diversity of inputs. In practice, in each of the four countries examined in this study, the reform process included inputs from three main contributors: the government, national civil society actors, and international actors. It is the responsibility of national governments to prepare and approve legislation. However, in practice the latter two actors made complementary contributions that added perspective, technical knowledge, and vision to the final products. This partnership, which took a different form in each of the countries, was key to the substance and results of the process.

Government

The government plays the main role in the legislation crafting process, and does so through technical staff of line ministries, as well as lawmakers themselves. It is the government's responsibility to enact legislation that responds to the country's needs; however, ultimately its inputs may be perceived as both harmful and hurtful insofar as they affect the effectiveness and comprehensiveness of the final legislation. This speaks to the importance of having disaster management experts (indeed, leaders) within national governments who understand the technical and policy needs of the disaster management system, and are closely involved with the legislation crafting process. It also speaks to the extent to which politicization of disaster management may affect legislation projects, by affecting the content of the law and the pace of the reform process.

In the Philippines and Indonesia, the legislation that was ultimately approved was a product of government partnership with civil society mechanisms throughout the entire process, including the final version. As a result of this partnership, the legislation emerged in a form that was essentially agreeable to all.³⁵ In El Salvador, by contrast, the civil society advocacy group MPGR took the drafts of legislation as far as it was allowed to, and then relinquished control to the government. The government had a much more conservative view of which changes were necessary and appropriate. In the opinion of MPGR, the government made adjustments to the legislation that rendered it less powerful in terms of its comprehensive approach to the disaster management cycle, by not including sufficient language on prevention and DRR. The government also removed elements that MPGR considered important to a holistic disaster management strategy, such as citizen participation in the system, and protections against hazards to which mining companies and other private and public industrial actors may contribute.³⁶ The contrast between these two scenarios highlights the importance for effective disaster management reform of involving a variety of experts throughout the process, so as to be sure that legislation appropriately reflects the needs of the population.

In Mozambique, the government itself has led the crafting of disaster management legislation that is currently under development. Nonetheless, the government has received support from civil society and international actors in this process. These non-governmental actors have played a key role in encouraging the government to make changes and providing technical support on how to do so. One informant explained that the government has in effect needed this support because the disaster management agency Instituto Nacional de Gestão de Calamidades (INGC) does not have sufficient technical knowledge or initiative to craft disaster management legislation on its own:

[T]here have been a lot of international hands on [the changes such as the Master Plan and the law]. INGC doesn't have a really huge capacity on that. So most of the time you have UNDP (United Nations Development Programme) staff coming in,

or universities, or international consultants. INGC is institutionally leading the process, but the people who are doing the technical issues etc., who are pushing INGC to do that, are internationals...³⁷

The process of creating legislation is in itself a learning process, as are subsequent stages of rolling out the changes that the legislation requires. Preparation of legislation can thus be thought of as an important part of the capacity strengthening process, as the capacity strengthening that results may not be visible only in the legislative product, but in the institutional strength of the government (and civil society) actors involved in the crafting.

Civil Society Actors

In each of the countries where the drive for legislative reform comes from outside the government, the governments received substantial inputs from non-governmental actors. In the case of El Salvador, the Philippines, and Indonesia, civil society advocacy mechanisms were protagonists in strengthening public demand for reforms, advocating for reform, and writing the new legislation. In fact, they created the first draft(s) of what would eventually become law. Subsequent drafts were prepared by the government, in some cases with continued feedback from and exchange with the civil society mechanisms that crafted the first draft.³⁸

This process appears to happen for a number of reasons. The first is that the civil society advocacy mechanisms were ready to, and prepared for, legislative reform before the government. Therefore civil society groups, which had the relevant expertise as well as localized knowledge based on their community-level work and representation, began to draft legislation even before the government agreed to reform legislation. The second reason is that the civil society mechanisms have (and/or can attain through support from other actors) the technical skills on disaster management and for the drafting of legislation that are required to formulate well-constructed and strong disaster management legislation. Thus, even while the legislation that civil society actors creates initially takes form as they envision it and not necessarily as the government would, their proposals carry a certain degree of credibility that allows them a position of leverage into what ultimately

becomes a government process. The strength of this de facto partnership is clear, as long as the civil society actors wield enough power and credibility to be respected and allowed into the process. The third factor is that, particularly in the case of El Salvador and Indonesia, the civil society groups conducted public advocacy and education with citizens, which increased public demand for effective government disaster management legislation and systems.³⁹

International Actors

International actors, particularly NGOs and UN agencies, support the preparation of disaster management legislation through a variety of avenues and means. As explained, neither the governments nor the civil society actors working on legislation in the Philippines, Indonesia, and El Salvador possessed full expertise in the subject matter that would be encompassed in the legislation. At their request, international actors contributed to building this applied knowledge through trainings or direct technical support for the civil society mechanisms and for government technical staff or members of the legislature. The international actors' avenue for providing support seems to depend on their own resources, the requests that they receive, and their relationships in the country. By means of illustration, in the process of creating legislation in El Salvador it appears that international actors only supported the MPGR civil society mechanism; whereas in Indonesia, international NGOs and UN agencies provided coordination and technical support to the civil society mechanism MPBI and to the Parliament.^{40 41}

3. Ongoing Legislative and Public Policy Work

Once disaster management legislation is approved, the government and other actors may perceive a need for revised legislation that fills gaps in the system and/or its approach to the disaster management cycle. This is the case in El Salvador for example, where the MPGR has been working to have the 2005 legislation revised since it was passed. Their objective is to pass new legislation that incorporates elements that the government removed from the initial draft legislation that MPGR prepared and submitted to the government.

On the other hand, informants referenced disaster management regulations and public policy as being especially important to the continued strengthening of national capacity. These tools can ground the legislation in practice, and address elements not considered in the legislation such as coordination mechanisms between line ministries that share disaster management responsibilities. An example of this continued work can be found in Indonesia, where the government has continued since passing the 2007 law to produce regulations on the disaster management law, disaster management frameworks, and action plans. The regulations address specific issues that need to be clarified and grounded in order to best support implementation of the legal framework. These include the architecture and functioning of national and sub-national disaster management structures, funding and management of relief aid, and the participation of international and non-governmental actors in disaster management.⁴²

Actors that had not been involved in the legislative process may join subsequently. This could occur for example in the context of developing public policy on DRR that requires inter-ministerial coordination, and thus draws a broader array of government actors into the process. In terms of national civil society and international actors, this could happen if the policy being discussed is of a nature specific to an actor's mandate, and it therefore is useful for it to provide technical inputs. In the case of El Salvador, a regional organization, the Coordination Center for the Prevention of Natural Disasters in Central America (CEPREDENAC) has been involved in the preparation of a public policy on DRR. CEPREDENAC belongs to the regional System of Central American Integration and is mandated to "promote activities, projects, and programs that contribute to the reduction of disaster risk..."⁴³ The organization has been helping construct El Salvador's policy by encouraging and consulting with the government on its process, particularly on how it can draft its policy to follow the standards for DRR and management policy set out in the Central American Policy for Comprehensive Disaster Risk Management (CAPCDRM) of June 2010.

There is no enforcement mechanism for ensuring that signatory governments model the CAPCDRM, but its existence serves as a positive model and a standard to which the Salvadoran government can be pressured to meet.⁴⁴

B. Strengthening Government Institutions

National disaster management systems require institutions and institutional architecture that are comprehensively responsible for the different roles and responsibilities of the disaster management cycle. In the four countries studied, this means that there is a structure at the national level that coordinates disaster management operations and policy among all national and international actors, a national agency with operational disaster management responsibilities, and diverse line ministries that have disaster management-related responsibilities. Each of these institutions is replicated at multiple sub-national levels, in varying form depending on the level and nature of its involvement in disaster management. Although the degree of protagonism on disaster management varies among the different actors and at the different levels, this institutional architecture is designed to ensure a comprehensive national disaster management system.

The exact definition and layout of this institutional architecture varies among the countries. The degree of legal/policy and de facto prioritization of addressing each phase of the disaster management cycle also varied between countries. Broadly speaking, the national governments studied focused more heavily on disaster preparedness and response than on DRR. Each of the governments has programs for risk reduction and mitigation within line ministries. These responsibilities appeared to be the least prioritized, however, apparently due to a prioritization of immediate needs (prevention and response), insufficient comprehension of the benefits of such initiatives, and the fact that these programs are still nascent. Nonetheless, each of the countries has made progress on DRR, particularly through the policies and initiatives of the national line ministries.

1. National Disaster Management Systems

The evolution of disaster management capacity strengthening can be traced through an understanding of the creation and strengthening of institutional structures throughout the country. In the four countries that this study examined, the most significant changes in operational disaster management effectiveness accompanied the creation and/or changes to the architecture of the national and sub-national disaster management systems. Broadly speaking, these systems have one or multiple disaster management coordination bodies, which include a disaster management agency, representatives from line ministries or sectors, and either direct participation of international actors or a link to them. These coordination bodies are the backbone of national disaster management. Generally speaking, they are in charge of national disaster management plans, coordinating disaster responses when they reach a certain scale, and to a varying degree overseeing the sub-national systems. They may have responsibility for overseeing all elements of the disaster management cycle, or their mandate may be limited to specific activities. While the creation by law of the disaster management institutions is paramount for delineating order and responsibilities, in practice this is only the beginning of the process of substantive change. In each of the four countries, the capacity strengthening process has been gradual, as the coordination mechanisms and their line ministry members have developed the ability and practice of performing their roles.

In addition to a national mechanism, each of the four countries also includes sub-national disaster management coordination and operational structures at the regional, provincial, municipal, and community level. These are generally a local reflection of the national structure. Thus, they include an inter-actor disaster management coordination body, and have responsibility for overseeing the disaster management cycle in their geographic area of responsibility. This responsibility includes the preparation of hazard maps, early warning systems, and evacuation plans, as well as coordinating disaster response operations. Some of these sub-national bodies also have the responsibility of overseeing the incorporation of DRR into local development plans.

The national and sub-national disaster management systems require similar inputs to strengthen their capacity. The processes by which this occurs, however, are different. In large part, this depends on the resources that each level has at their disposal. It appeared consistently to be the case that national-level coordination mechanisms, and the disaster management-specific and other line ministries that participate in them, have greater access to financial resources, larger and better prepared staff, and easier access to training mechanisms offered by national and international actors. This can be a particularly critical gap, insofar as sub-national systems are not able to generate the full technical expertise and financial resources to be able to establish and maintain a strong disaster management system.

There are a number of reasons that the national-level disaster management systems have greater capacity and garner more of the capacity strengthening resources. The first reason is that national-level actors are prioritized to receive capacity strengthening support, because they are expected to be able to respond to local disasters when these exceed the local actors' capacity.

The second reason is that national-level line ministries may have, but do not fulfill, their responsibilities to ensure that their sub-national representations receive sufficient training. There are many reasons for this inefficacy, including the manner in which staff members are selected to receive trainings, turnover in staff that regularly depletes office capacity, and insufficient institutionalized local training mechanisms.

The third reason is that the formal levels of supervision may in fact inhibit the provision of greater support from national to the sub-national level. This is the case in the Philippines, for example, where the laws of decentralization have made it such that sub-national Disaster Councils and Offices are not overseen by the National Council, but by another department (the Department of Interior and Local Government) that is not a disaster management agency by definition, and does not have sufficient capacity to effectively support sub-national actors' needs. This means that the National Council cannot supervise the local Councils' and Offices'

establishment and function, so in practice there is a systemic lack of accountability that leaves room for local authorities to not fulfill their responsibilities or to not do so in a sufficiently comprehensive and effective manner. Informants shared that although decentralization is a positive aspect of the national administrative framework, it is unfortunate that local disaster management agencies are supervised by an insufficiently expert and under-resourced agency.⁴⁵

Capacity Strengthening Mechanisms for National Disaster Management Systems

Capacity strengthening for national disaster management systems is conducted in multiple forms. These modes of capacity strengthening can be grouped into four main categories.

The first category is the creation of disaster management coordination institutions and their mechanisms. This refers to creating the thematic bodies within the coordination mechanism and defining their responsibilities and membership. It also refers to developing the tools that will regulate the mechanism's function such as the disaster alert system and national contingency plans in case of disasters. In practice, many of these elements, and related matters such as funding mechanisms, are outlined in disaster management legislation. Therefore, the ongoing work is focused on the establishment, mobilization, and ongoing operations of the coordination mechanisms rather than on their conceptualization.

The second category is training for line ministry members of the coordination mechanisms on their responsibilities in disaster management. In addition to training on the distribution of functions in disaster situations between the national line ministries and other national and international entities (as applicable), this may include technical aspects such as how to conduct needs assessments and ensure proper sharing of information and how to work with leadership and coordination structures such as sectoral groups or clusters. This coordination is frequently one of the most important, yet challenging, elements in disaster response. For this reason, disaster simulations are strong learning tools, as are performance assessments following disaster operations.

The third category is the effective strengthening of tools upon which the coordination mechanisms depend for the proper coordination of disaster management operations. This includes many of the disaster management-related elements that various line ministries at the national and local level are responsible for creating, with contributions from the sub-national disaster management systems. Examples of these include the creation of comprehensive risk maps for the country, hazard monitoring mechanisms, early warning and communication systems, and facilities such as accommodation centers and warehouses for hard goods. The strengthening of these tools depends on the line ministries, sub-national disaster systems, and the communities that play a role in their design and operation; and the degree to which these actors have the skills, resources, and initiative to make this contribution. Thus, in practice, the strengthening of the disaster management tools requires a chain of inputs from national officials, civil society actors, community members, and, to the degree that it is applicable, international actors, that contribute to capacity strengthening at these different levels.

The fourth category is training on disaster management principles and technical practice. On the one hand, this occurs through direct training to line ministries on their responsibilities in disaster management. This is broken down by the agencies' specialties and roles. For example, while for the Ministry of Health such training might be about the provision of water, sanitation, and hygiene services, for the line ministry in charge of disaster management this might have to do with search and rescue methods or disaster response coordination. On the other hand, this training occurs through the strengthening of national training mechanisms. In each of the four countries, informants consistently indicated that national and international actors are appropriately making strong contributions to strengthening national training mechanisms. This strengthening occurs through efforts to institutionalize training programs, develop and strengthen curricula, and train government officials to subsequently be able to train others and thus multiply the effects throughout the national system.

2. Sub-National Coordination Mechanisms

The national disaster management system of each of the studied countries requires the establishment of some form of sub-national disaster management coordination mechanism and/or implementation office. The sub-national offices are generally the key actors within their geographical areas of responsibility for ensuring such elements as: a) training on disaster management principles and technicalities for staff of government ministries as well as community groups; b) the creation of disaster management plans, early warning systems, and incorporation of shelters; c) management of disaster response in their territory, at least when the scale of the disaster is below a certain level; and d) facilitating the incorporation of disaster management into local legislation, development, and operation plans and budgets. The role of these offices is thus significant not only for the effective management of local disasters, but also because of their role in supporting the national disaster management mechanisms.

While in each of the countries informants referenced the existence of some local disaster management mechanisms that were well structured and performed their responsibilities effectively, the sub-national disaster management mechanisms and offices were described as being the weakest link in the national disaster management system in each country and remain a challenge to consistent and comprehensive capacity strengthening.⁴⁶

This weakness has two main facets. First, there are problems with the incomprehensive geographic distribution of the sub-national mechanisms and offices. Areas that should by law have them in fact do not, and thus experience significant weakness, if not a void, in terms of government disaster management capacity. Secondly, in each of the countries, existing offices have significant weaknesses. Informants in each of the four countries emphasized that many of the sub-national disaster management mechanisms are under- and poorly staffed, under-equipped, under-trained, and rely on minimal budgets. Likewise, local government inter-agency coordination structures upon which the disaster management mechanisms rely are often weak or insufficiently representative of the

pertinent ministries, civil society, and community actors.⁴⁷ For example, informants referred to the government of Mozambique's sub-national disaster management capacity as inconsistent and sometimes weak to the point of being debilitated. These offices showed a lack of professionalism, a lack of proactivity to assess real needs in disaster situations in somewhat remote areas, and a disabling lack of training.⁴⁸

The reasons local areas fail to establish disaster management mechanisms, and for the weaknesses in some existing mechanisms, are multiple. As explained by informants in each of the countries, they consistently include: 1) an insufficient understanding among local government officials (and potentially the population) of the importance of and indeed responsibility to establish them, particularly in areas not frequently affected by natural disasters; 2) insufficient prioritization by political leaders and/or members of the line ministries and other entities that should participate in the mechanisms; 3) insufficient skills and/or tools to perform the tasks required of them; 4) insufficient human and financial resources—both local as well as national funding—for operational functions. Finally, the field research suggested problems in all four countries of national disaster management mechanisms and other government structures providing insufficient training, administrative support, and financial and material resources to support the strengthening and function of the local mechanisms; this appears to be a gap in effort, but also in capacity to provide the support that these mechanisms require.⁴⁹

Each of the countries has government mechanisms for supporting the sub-national disaster management systems. These training and direct support mechanisms vary in form and formality, and operate through a variety of entities ranging from national coordination mechanisms, to line ministries, to government administrative support ministries. Nonetheless, these capacity strengthening mechanisms do not have the ability to provide the support and initiative that the extensive sub-national systems require.

Two examples illustrate the problem of insufficient national support for sub-national mechanisms. The first is the previously referenced example of the Philippines, where the national mechanism does not have authority to oversee the operations or establishment of sub-national mechanisms. The Department of Interior and Local Government (DILG) provides support, but its expertise is not in disaster management, and it is not proactive enough to meet the significant needs of local Councils and Offices across the country.⁵⁰ Secondly, in Indonesia, even though all of the provinces and a majority of regencies/cities have incorporated disaster management mechanisms, many of these have faulty infrastructures. The sub-national disaster management offices were established hastily following a government ultimatum, in some cases with insufficiently localized (i.e., “cut and pasted”) tools. Thus, although these mechanisms exist, their staffing, resources, and tools such as early warning systems and evacuation plans are not adequate for their responsibility. This gap in actual capacity is a good example of why, to ensure real capacity, governments need to ensure proper and sufficient support to sub-national mechanisms and provide follow-up assistance as necessary.⁵¹

Capacity Strengthening Mechanisms for Sub-National Disaster Management Agencies

The establishment of these coordination mechanisms requires a process of sensitizing the heads of local government and the community about their importance and the fact that national law requires their establishment. It also requires training on the respective roles of the members, and then proceeding to establish the tools, systems, and financial resources that the mechanisms will need in order to operate. If mechanisms exist but are weak, local government leadership and functionaries of the disaster management mechanisms need to be sensitized and motivated to bring the mechanisms up to full capacity. This involves technical training, the provision of equipment, and helping the coordination mechanism determine how to navigate policies and strategies for inter-agency cooperation and funding allocation. In some communities the groundwork for a local disaster management system has already been laid, both in technical as

well as in organizational terms, so the foundation of the task is assessing what exists and how it might be transferred to the official system.

An example of this is in a disaster-prone region of El Salvador, where many well-organized communities have long had their own disaster management committees. They have early warning systems, disaster management plans, and tools and other resources at their disposal for search and rescue. They had developed these systems through the years on their own, and with the support of national civil society and international actors. In fact, the task at hand now is to incorporate the community's existing committee into official structures.⁵²

As explained in the previous section, the sub-national mechanisms appear to consistently receive insufficient attention and support in their own capacity strengthening processes from national government disaster management mechanisms and relevant line ministries. Although this research could not delve sufficiently into understanding the reasons for it, it appears that this challenge is affected by multiple factors, and each country has its own set of dynamics in play. The apparent reasons relate to structural and administrative capacity. They range from the fact that administrative support mechanisms are under-resourced as in the Philippines, to the fact that national training systems are in the process of strengthening but are not yet in full operation as in the Philippines and Indonesia.⁵³ Although the research did not gather enough data to directly support this, it appears that other factors come into play, such as a lack of a real diagnosis of the sub-national systems' needs, insufficient prioritization of responding to them, and the interference of political dynamics in the targeting of capacity strengthening support.

The nature and extent of support that the mechanisms do receive varies between the countries, as does the effectiveness of the support systems. In each of the countries studied, informants identified important government initiatives to strengthen their support systems for sub-national mechanisms and their line ministry components. Efforts to strengthen government staff training systems seem to have strong, albeit

gradual, impact, through curriculum building, the training of trainers, and development of guides for how to create local mechanisms. In practice, addressing the immediate training needs of government officials, as well as the bigger picture task of curriculum and system development of the official training programs, seems to benefit from a distribution of complementary roles and support. In this context, national civil society and international actors play a supplemental role in each of the four countries in strengthening the local systems. They do this through strengthening the national system's ability to support the local mechanisms, and through direct capacity strengthening support to the sub-national mechanisms.

In Indonesia, for example, the national disaster management agency Badan Nasional Penanggulangan Bencana (BNPB) has developed an internal training program for its staff and for the staff of the sub-national disaster management offices. This training program theoretically should comprehensively reach staff at provincial and district level (BPBDs); however, informants indicated that it is still not able to effectively respond to all of the needs throughout the country. In light of this weakness, the government is focusing on strengthening the training system. International actors, particularly the Australian Government Overseas Aid Program (AUSAID) and the United States Agency for International Development (USAID) have provided substantial technical and financial support to help strengthen this training system that is so important to an increasingly consolidated national system.⁵⁴

In El Salvador, local government, line ministries, and international actors have joined together to support the establishment and function of a government-led local disaster management training program. This is situated in the metropolitan area of the capital city of El Salvador, and is designed to train members of municipal disaster management councils. The program, which arose as a response to frustration with the inefficiencies of repeatedly training public officials, is co-operated by the Council of Mayors of the Metropolitan Area of San Salvador, national civil society organizations, and Oxfam of Belgium prominently, among other

international actors. The training combines the expertise of these different entities, as well as Civil Protection and other government agencies, with the formal and official structure of the Metropolitan School for Local Development. This allows the trainings to occur at an official level that increases the authority of the invitation, and allows public officials to receive diplomas and recognition that may go on their official résumés.⁵⁵

It is local government's responsibility to establish disaster management mechanisms, and national governments should have support mechanisms to help local governments' efforts to do so. Nonetheless, in practice in each of the countries studied there are local governments that do not prioritize doing so and/or doing so effectively. National governments in the studied countries do not yet have the institutional or operational capacity to actively assist all of the local structures that imminently need support in strengthening their systems. In this context, supplemental support to strengthen local systems has been a key ingredient of the capacity strengthening processes.

National civil society and international actors have supported local systems where local officials are not proactive about establishing mechanisms and/or equipping them with the human, financial, and technical resources they require. They also have been involved with communities (for example village level in Mozambique) that are not necessarily required by law to have mechanisms, but benefit from having them for their own protection and coordination. In this context, even while some national and international actors are working to strengthen national governments' capacity strengthening systems for local government and communities, many also see the need to become directly involved in this capacity strengthening process. These actors' involvement at the local government and community level, and indeed the government's agreement on the importance of their doing so, on the one hand suggests a pragmatic viewpoint that the local disaster management system needs the support in order to form mechanisms and begin to function effectively. On the other hand, this represents a perilous balance of risking disempowering or not

sufficiently motivating the national government to be closely involved locally. Depending on the methodology of the actors, there is also a strong risk of marginalizing local communities and government structures from the rest of the sub-national and national disaster management system. This may happen, for example through not using the same methodology for disaster planning, or not linking local early warning systems to other government early warning and communication systems.

National civil society and international actors' goal in such work is to strengthen the population and the local government's commitment to establishing and maintaining a functional local disaster management system, and help them attain the skills and tools that they need in order to do this. The capacity strengthening is done largely on a project cycle basis, in which the project incorporates awareness building, training, support to create or strengthen tools such as risk maps and early warning systems, and support for the creation and efficient functioning of the coordination mechanisms and/or offices. The success of these processes seems to depend in great part on the extent to which local commitment (both government and community) to maintaining the mechanism is achieved by the end of the project period. An informant from an international NGO explained their approach to supporting local disaster management coordination mechanisms in the Philippines:

Given limitations of the national government to support LGUs (Local Government Units), we do training. For example, we sponsor a workshop for [local disaster management and risk reduction councils], bring someone in with the relevant knowledge, for example knowledge of funding and planning in the national system. We also share good practices between provinces by cross-sharing. It is not just training but mentoring actions, we stay there with them and accompany throughout planning process for DRR.⁵⁶

This sort of support offers the local coordination mechanisms a strong resource for their operations and strengthening, one that is not available to them comprehensively from any other source. This NGO, as do many others in the Philippines and the other three countries, has

ample credibility in the community and the local government because they have worked there in the past, and they have proven their expertise as well as their commitment to supporting the local disaster management system.

It is important to note that in each of the four countries, informants referenced local disaster management mechanisms failing after government or non-government organizations' projects were completed. This occurred because there was insufficient ownership and commitment, or because they had been inappropriately structured. This is relevant to work that occurs directly with the local coordination mechanisms, and work with the community in parallel to the government mechanisms.⁵⁷ Non-governmental actors involved in this capacity strengthening must therefore leverage an understanding of how to achieve community and government ownership, while ensuring that local mechanisms appropriately include one and the other. To not do so is irresponsible and counterproductive.

3. Line Ministries

Government line ministries play an important role throughout the disaster management cycle. The degree to which line ministries at national and sub-national levels are strengthened to play a role in disaster management can make a large difference in the effectiveness and extent of coordinated national systems.

Among the countries studied, line ministries consistently have achieved much greater progress at strengthening capacity for disaster response than for any other element of the disaster management cycle. This seems to be a function of the reach of coordination capacity and oversight mechanisms that are built into the disaster management systems. This is the situation in Indonesia, for example, where the national disaster management agency Badan Nasional Penanggulangan Bencana (BNPB) is mandated to coordinate all phases of the disaster management cycle. Nonetheless, BNPB is limited in its ability to coordinate the line ministries, as it does not have hierarchical authority over them, and there is no framework that specifically assigns and distributes functions. Thus, progress in ministries' strengthening

DRR efforts in particular depends on line ministries' own initiative to do so. This has resulted in ministries making slower progress in the intensification of DRR efforts than might otherwise be possible.⁵⁸

In each of the four study countries, multiple line ministries have responsibilities to participate in disaster response. The ministries participate in the disaster coordination mechanisms and perform specific functions in disaster response. To a varying degree, they also have a role in disaster preparedness; for example, in terms of establishing and maintaining early warnings and risk communication systems.

Much of the capacity strengthening that these line ministries experience is directly related to performing their responsibilities as members of the national disaster management coordinating mechanism. This strengthening is often an ongoing process, as the ministries develop the tools and skills through training and experience in disaster situations. In practice, it takes governments many years of concerted effort to include proactive roles in disaster management within line ministries' mandates and programs, particularly in terms of DRR.

In some cases, this capacity strengthening is the result of a specific mandate to fill a gap in the national disaster management system. An example of this was the creation by the Salvadoran government in 2001 of a disaster hazard monitoring center (SNET by its acronym in Spanish) in the aftermath of a series of highly damaging natural disasters. In creating SNET, the government merged the natural hazard monitoring systems that had been operating under different ministries, such as Meteorology and the Ministry of Public Works, into one facility that could serve as the central mechanism to identify and monitor risks.⁵⁹ This center has continued to play a central role in the national disaster management system through the years, and the Ministry of Environment and Natural Resources within which the center is situated has evolved to be one of the principal protagonist line ministries in DRR.

In other cases, the deepening of disaster management activities seems to have arisen

through the mandate of the line ministry, in the context of policies that are not necessarily labeled as “disaster risk reduction” but rather as “climate change adaptation.” An example of this is that the Ministry of Environment and Natural Resources in El Salvador has been proactive in addressing risk factors such as deforestation and erosion in the context of an environmental policy that outlines actions required to address current environmental degradation and reduce risk related to the effects of climate change.^{60 61} These actions build resilience to the effects of storms on communities, agriculture, and public infrastructure; their categorization, however, is under a broader framework than the disaster management system.

Another example of this capacity strengthening within line ministries is the Department of Agriculture of the Philippines, which has prioritized mainstreaming Climate Change Adaptation (CCA) throughout its programs. The Department has incorporated a number of CCA initiatives, including developing a weather-based insurance program, developing flood and saline-resistant seed strains, and identifying strategic cultivation zones that are sensitive to the current and future effects of climate change.⁶² According to informants in the Philippines, this is particularly important because livelihoods seem to be consistently under-emphasized in national and international actors’ DRR programming.⁶³

Recognizing the importance of incorporating DRR initiatives into line ministries’ programming, but also the fact that they may not have the expertise to do so, some countries have strengthened mechanisms to support line ministries’ technical incorporation of DRR into their planning processes. In Mozambique, the national disaster management agency Instituto Nacional de Gestão de Calamidades (INGC) has encouraged all ministries to incorporate DRR into their programs, but there is no coordination or oversight mechanism to ensure that ministries do so. In response, the government has integrated a system to encourage this, led by the Ministry of Planning and Development. Among its other functions, the Ministry is charged with ensuring that line ministries incorporate disaster risk management into their annual operating plans and budgets. This oversight and support

mechanism, and the training that it and the Ministry of Environment provide on how to incorporate disaster risk management and CCA considerations into their plans, is supplementary to how each ministry should operate in order to consider disaster risk management. Thus, for example, the Ministry of Agriculture should proactively consider the impacts of climate change on specific regions, and assist farmers with adapting to changes through new cultivation methods.

These processes of incorporating disaster management into line ministries’ work are long term, because they require a lot of technical tools and groundwork, awareness of the importance of methodological change, and oversight mechanisms.⁶⁴ Nonetheless, they appear to be effective because they are designed to not only provide oversight but also capacity strengthening.

Capacity Strengthening Mechanisms for Line Ministries

Capacity strengthening for line ministries takes multiple forms and is conducted by different actors. In the countries in this study, these modes of capacity strengthening can be grouped into two main categories. The first mode is technical assistance in the form of training for elements of the disaster management system that are lacking or need strengthening in quality or reach. This also sometimes includes support to acquire necessary equipment. The range for this training is as wide as the gamut of ministries relevant to the disaster management cycle. Examples include early warning and communication mechanisms, hazard monitoring, risk mapping using information mapping technology, field laboratory testing for cholera and other diseases, and engineering for disaster resilience. The incorporation of these skills and tools can greatly strengthen ministries’ ability to contribute to the disaster management cycle, not just within the realm of responsibilities of each ministry but also in association with other ministries through inter-connected programs.

In the four countries studied, international actors, including UN agencies, NGOs, universities, and technical agencies of foreign governments, initially provided much of this

capacity strengthening support. Progressively, however, national government and private actors increased their contributions to training within and among ministries. Informants in the Philippines, Indonesia, and El Salvador emphasized that this occurred once these skills were incorporated into the national line ministries, and as the national market hosted an increased number of individuals and technical service providers skilled in these areas.⁶⁵

The second mode of capacity strengthening is support for the mainstreaming of disaster management tools, particularly DRR, into the programs of a line ministry. Through technical and strategic training, this mode of support allows line ministries to develop methodologies for consistent consideration of DRR, which can then be applied regularly to their strategic planning as well as to their programs. An example of this can be seen in the Philippines, where the National Economic Development Authority, with technical support from the United Nations Development Programme (UNDP), has developed guidelines on how to incorporate DRR into provincial planning. These guidelines allow the Authority, using hazard maps created through collaboration among other technical line ministries, to support provinces in their land use and development planning in a manner that is sensitive to current hazards, as well as hazards that are predicted to result from climate change over the next decades.⁶⁶ A chain effect of capacity strengthening is thus created that can affect not only the technical work of specific ministries, but also position them to contribute to larger-scale strategies of DRR.

C. Community Level

Government, civil society, and international informants in each of the countries consistently recognized the importance of local community participation in disaster management. This significance applies, *inter alia*, to: an understanding of the importance of disaster management and risk reduction; the applicable national, regional, and international laws and standards, and how the population may demand access to those rights; the risks that the country and that each community faces; and the

community's role in the disaster management cycle. In the Philippines and Indonesia, the importance of this inclusion, and the responsibility to uphold it, is marked by the fact that each country's disaster management legislation formally recognizes communities' role in disaster management. In the former, this is seen in the law's inclusion of community members in local disaster management coordination mechanisms, in its encouragement of community participation in and leadership of disaster management activities and groups, and an adoption of a community-based approach to DRR.⁶⁷ In Indonesia, this is evident in the recognition that disaster management is a shared societal responsibility between the government, the community, and the private sector.⁶⁸

In practice, the understanding of this significance varies greatly within the countries, as does the extent of communities' actual involvement in disaster management. This seemed to hinge on at least three practical factors. The first is that local communities are the first affected in disasters and therefore need to be organized to be protagonists prior to and during disasters, until they are assisted by government mechanisms. The second factor is that sub-national government systems are still limited, and even as they strengthen further will continue to have geographic and operational limitations. The third factor is that local communities' contributions to preparedness activities such as early warning systems, and to DRR activities, affect the strength of the entire national system. Disaster management then becomes a shared responsibility, and the degree to which communities are involved in disaster management can significantly affect the type and degree of the harm that communities, and other levels of the country, suffer.

Many different community structures are involved in disaster management. These range from government-sanctioned and supported community disaster management mechanisms, to community-specific mechanisms, to locally organized groups. Many community groups have formal or informal links to national-level civil society actors and, in some cases, international actors, with which they may coordinate local and national activities, and from which they may receive trainings and resources, among other elements.

The community structures are involved, in cooperation with sub-national disaster management mechanisms or on their own, in a variety of elements of the disaster management cycle in their area. These include creating risk reduction plans and activities, establishing and operating early warning systems, creating risk maps, drafting disaster management plans, and coordinating evacuations and response efforts in disaster situations. The community groups may also assume lobbying functions relative to local or higher-up government structures; for example, to request more effective government support for disaster management. This is the case in Indonesia, where local DRR forums, which incorporate local civil society organizations, academia, authorities, and the community, have been key to the process of local disaster management capacity strengthening by raising awareness about the importance of having local disaster management offices, and lobbying for their establishment and effective operation on an ongoing basis.⁶⁹

Community groups such as those mentioned above develop through a variety of means, and with support from multiple different actors. These include local community networks, national and international affiliates if applicable, national civil society organizations, elements of the national and/or sub-national government, and international actors. In practice, however, in each of the countries the government was the least active entity in supporting community-level disaster management groups. This seems to be a result of a lack of expertise, and a lack of resources. To a certain degree, it may also result from a lack of government prioritization of these interventions.

In Mozambique, the Philippines, and Indonesia, government informants recognized that their systems have a responsibility to work with communities, in order to ensure that disaster management is appropriately and comprehensively considered, and so that the community may be protected as well as trained to participate in disaster management. They pointed out, however, that their ability to support communities is somewhat limited, as is their experience in working with them. In this context, government officials referred to the

importance of partnering with national civil society and international actors that have the capacity to conduct this work.

None of the government officials referenced a clear system of distributing roles between government and non-governmental actors in this regard. Instead, it appeared that there is only loose non-governmental actor coordination with sub-national government authorities, and to some degree with national line ministries, to determine where and how to work at a community level. To be sure, to some degree these actors coordinate more closely with government structures during their work with communities; however, it did not appear that the national governments had a vision for ideal distribution of responsibilities. As explained below, this was a source of frustration for government informants, as it undermined their leadership, and it contributed to a potential lost opportunity for optimal strategic addressing of needs. Neither, however, did the government or the non-governmental actors place an operational emphasis on ensuring coordination and/or strategic distribution of roles and territory.⁷⁰

It appears that relative to other capacity strengthening initiatives, governments are disproportionately slow at developing the skills and practice of working at community level. Informants referenced very few programs to strengthen government skills and tools for working with communities. Generally speaking, it appeared to not be a priority, or something that the governments could easily incorporate into their training systems. Nonetheless, the Philippines and Indonesia offer examples of how governments can develop the technical knowledge of how to work at the community level, and to subsequently put that to use in programming. In the Philippines, the government Disaster Risk Reduction and Management Training Institutes will include a module on community-level disaster management.⁷¹ The national civil society actor Center for Disaster Preparedness is leading the development of this module.⁷² In Indonesia, government officials have received trainings on community-level work, and have taken steps to systematize this into government programs and

into staff training mechanisms. It has developed community disaster management and DRR programs, and it has integrated staff training mechanisms into these. At a higher level, at the time of the research, the government was also developing modules on community-based DRR that will be included in the national BNPB training mechanisms. National civil society and international actors have been closely involved in developing and strengthening these programs.⁷³ These are promising prospects, and it will be important for government actors to assess how to continue to develop government actors' skills and involvement in working with communities.

It is important for governments and partners to assess the level of government capacity for work at community level, and to use that as a foundation upon which to continue strengthening. Informants gave the impression that instead of doing such assessments and acting to fill gaps, in fact government actors are relying on civil society and international actors to work at community level, and are not taking substantial steps to further strengthen national actors' ability to assume this role. In Indonesia and the Philippines, national civil society and international actors have been closely involved in these capacity strengthening processes. Nonetheless, it seemed that these non-governmental actors are not pushing back at the governments as much as they could, to request that the government assume these functions.⁷⁴

A government official in Indonesia commented on the situation in the country, where the government has ample financial resources, but is limited in its reach in terms of human resources capacity even as it strengthens its system throughout the country:

Now with the master plan for tsunamis, we have to complete several activities including an early warning chain, shelters for the community, and educate people in the prone areas...international agencies like Oxfam have the capacity and knowledge [to do that community work]. The problem is the government only has money; we need to know how to complete that [community-level work]. So we ask the NGOs to help with that. Last month we had an area that is potentially affected by a landslide. So we asked [an

international NGO that is also registered as an Indonesian NGO] to educate the community there. I have asked [this NGO] for example to do community work...We will have to decide as the government if there are NGOs that can help with that, and we will ask them. We need to get that done. We only have 500 people [in the national disaster management agency BNPB], but we have regulations and a law and money; we have to figure out how to do that. It takes time, there is so much to do, this country is so big.⁷⁵

This statement illustrates a practical understanding by the Indonesian government of the support that it needs to achieve a goal of community disaster management strengthening. The informant did not clarify whether the government's tactic will be to continue to partner with national and international non-governmental organizations to perform these functions, or if its goal in the long term is to be able to do this community-level work itself. Regardless, this makes it clear that the government understands the importance of community-level work, and is seeking to understand how to achieve that.

In the context of governments not having the full capacity to provide needed support to communities, it is important to consider how non-governmental actors can make contributions to community disaster management structures, without isolating them from the national and sub-national government system. This refers to employing the appropriate tools in the local disaster management system, establishing coordination with sub-national disaster coordination mechanisms, and linking local early warning systems to broader official systems. This is beneficial to the communities, insofar as it links them to the technical, financial, and other resources (including further capacity strengthening) that the government should be able to provide them. With regard to this potential for isolation, one government official in the Philippines explained how international actors' work could ultimately detract from national capacity strengthening if it is not conducted in proper relationship with other elements of the national disaster management system:

Community level work by international actors can be both a plus and minus—plus because you go to the ground where action happens, and the community must be [organized and prepared]. But minus if you avoid working with the government and thereby undermine sustainability. Best is combination of community and government [local government] and in order for the technology/system to be expanded, the national government should be involved. International institutions tend to work on certain projects, then after the project nothing happens so you end up with pilot testing; it is a waste if the testing does not reach other communities. I have seen some examples where the community did not know what to do with the knowledge tools that were produced, where to house them. It turns out they [the international actor] had not coordinated with the government in their project. It is a pity when after the project everything dies. I think that sustainability and replication should be integrated into every project.⁷⁶

It is important to recognize the degree to which government and community strengthening efforts and strategies can and should coincide in order to maximize total capacity strengthening. This is particularly true given the importance of contributing to the strengthening of governments' skills in community-level work. International actors should work closely with government officials, to orient community-level work in a way that falls in line with government plans for local strengthening. ■

III. FINDINGS AND OBSERVATIONS

This section will draw on a cross-section of the main findings of the research. It will first look at examples from the capacity strengthening processes in the four countries. These will illustrate how a combination of actors has contributed to strengthening important legal and institutional elements of the national disaster management systems. The section will then look at what the research noted to be the best and worst practices in capacity strengthening by the different actors and finally at perceived gaps in donor support for disaster management capacity strengthening.

A. Examples of Partnerships for Capacity Strengthening

Partnership has proven essential in the processes of national capacity strengthening in El Salvador, Mozambique, the Philippines, and Indonesia. The following section will illustrate capacity strengthening processes for national legislation building, national disaster management mechanisms, sub-national disaster management mechanisms, and line ministry policies, as well as the de facto or coordinated partnerships that exist to reach the goals. Details of one country's process will be provided for each section. Despite the focus on one country for each section, it is possible to identify trends in the capacity strengthening processes, the gaps that remain, and the roles that different actors play. The examples, which are excerpts from the country profile appendices, illustrate both success and ongoing need for capacity strengthening. The country profiles provide further detailed information on the capacity strengthening processes of each of these countries.

1. Legislation: Civil Society Leadership in El Salvador

In January and February 2001, El Salvador suffered large earthquakes, which took a great toll on the population, the national economy, and the government infrastructure. The local disaster committees and other civil society mechanisms responded, and the government National Emergency Committee (COEN by its acronym in Spanish) initially coordinated the

government response. The COEN could not manage the response, however, and it assigned the military to assume charge of the response; it also requested international financial and humanitarian support.⁷⁷ During the subsequent response operation, the government was formally in charge, but international actors had the authority to determine the location and nature of their interventions.⁷⁸ This massive international support operation in the clear shadow of the government's lack of capacity to respond fully to the earthquakes marked a transition toward national civil society and community groups' focusing attention on improving preparedness and response measures.⁷⁹

In 2001, national civil society organizations began to develop a new disaster management law for El Salvador and to conduct advocacy before the government. Their intention was to have the government adopt a law, and a system, that comprehensively considers the disaster management cycle, with an emphasis on preparedness and risk reduction. This goal was subsequently assumed by a formalized working group of national NGOs and community groups of various specialties, ranging from emergency search and rescue, to environmental, to local development. The group was called the Permanent Table on Risk Management (MPGR by its acronym in Spanish). The members of the MPGR brought a variety of skills to the table, as well as a ground-level familiarity with the situation of disaster preparedness in the country. International actors provided some additional capacity strengthening, on topics including how to craft legislation, how to conduct advocacy, and gender considerations. They also facilitated experience-sharing meetings with groups in other countries that had gone through a similar process, and they provided financial support for operations and the hiring of technical experts when necessary. Informants also explained that international NGOs' involvement with and support of MPGR lent an additional degree of credibility to the group and its efforts in the eyes of the national government. In this way, national civil society actors led a successful public advocacy campaign to reform disaster

management legislation. MPGR's resources were the foundation for their success; however, their partnership with international actors strengthened key elements of their network. This support not only benefited MPGR during the advocacy process, but it also strengthened their institutional capacity as a network in a way that endured following the passage of the law.⁸⁰

The Salvadoran government adopted the Law of Civil Protection and Disaster Prevention and Mitigation in August 2005. After years of advocacy, negotiation, and legislative crafting, the law was passed in the context of continued natural disasters in the country, increased national pressure and interest in an improved disaster management system, and the creation of the Hyogo Framework for Action, which had drawn increased national attention and commitment to the importance of DRR.⁸¹

The MPGR was involved in the crafting of the law through the end of the period of public discussion, and the government then made adjustments as they saw fit. As a result of the government's adjustments, the law places much less emphasis on prevention and risk reduction than the MPGR would have liked. Nonetheless, the MPGR considered the law to be a significant improvement over the previous one and a good foundation upon which to continue advocacy for proactive comprehensive disaster management policy.⁸²

Since even before the law was passed in 2005, discussion has been ongoing in El Salvador on developing a public policy on DRR and management. National civil society actors, including MPGR, have led this process and have been discussing and working together with the government to create the policy. At the time of this research, a policy was partly created, and was in potentially final stages of socialization between the government and civil society actors. Nonetheless, the process continues very slowly, as it is apparently delayed by complicated national political dynamics.⁸³ As one government official explained, "[I]t has not advanced, because of other [policy] priorities, and because there are always [specific] moments in which these initiatives can be pushed."⁸⁴

It is important to note that the civil society advocates, as well as the government, have been able to look to the regional Central American Policy for Comprehensive Disaster Risk Management of June 2010 for guidance in the preparation of the policy and in their search for accountability. This regional policy, which was created under the System of Central American Integration (SICA by its acronym in Spanish), sets standards for DRR and management policy in member states, with the objective of "[p]roviding the Central American Region with an orienting framework for comprehensive disaster risk management, which facilitates the link between political decisions and their corresponding instruments of application..."⁸⁵ The regional Coordination Center for the Prevention of Natural Disasters in Central America (CEPREDENAC), which belongs to SICA and is mandated to "promote activities, projects, and programs that contribute to the reduction of disaster risk," has contributed by encouraging the government to adopt a policy, and by consulting on technical elements.^{86 87}

2. National Disaster Management Coordination: Institution Strengthening in Mozambique

The government of Mozambique does not have a disaster management law; at the time of this research, however, legislation was being prepared. Informants indicated that the legislation will clearly define disaster management responsibilities across the government and society and create new funding mechanisms.⁸⁸

The prominent disaster management document at present is the government's "Master Plan: Director Plan for Prevention and Mitigation of Natural Disasters" of October 2006. The Master Plan represents a turning point for the government in its institution strengthening, and in its consideration of the importance of DRR. The first of its important elements is a strategy for addressing the country's vulnerability to natural disasters, which is to be achieved through such risk reduction actions as reforestation and adaptation of the agricultural system to climatic (drought) realities. It also creates a policy for development in arid and semi-arid zones. Second, the Plan specifies that the reduction of vulnerability in part requires a reliance on

national capacities, and that only once national capacities are exhausted should the government request or accept international assistance.⁸⁹ Third, the Plan places the national disaster management agency Instituto Nacional de Gestão de Calamidades (INGC) under the supervision of the Ministry of State Administration (MSA). Previously, INGC had been situated under the supervision of the Ministry of Foreign Affairs. This had facilitated the agency's coordination with international actors during and between disaster situations. The move therefore had a symbolic purpose in the context of institutional strengthening, as by situating INGC under the MSA it emphasizes that disaster management is a national priority, and is nationally directed.⁹⁰ As one informant said, the message was that "disaster relief comes from within the government, not from abroad."⁹¹ Fourth, the Plan makes changes to the structure of the disaster management system, including the National Centers for Emergency Operations, which assume the role of coordinating all disaster responses.⁹²

This plan has been amended through two decrees in 2007 and 2008, which in part created a new function for INGC of coordinating post-disaster reconstruction. It is clear that this evolution has been a function of a vision for a strengthened disaster management mandate for the government, and strengthened government institutions to achieve INGC's full mandate. As one informant explained, "So more things have been integrated into INGC, trying to cover the whole cycle—first response, then prevention, then mitigation and finally reconstruction. It shows how the country was thinking and rethinking (its strategy), basically based on experience with disasters."⁹³

The government created the institutional framework to be able to assume a leading and proactive role in the whole disaster management cycle. This was based principally on strengthening three disaster-related national organs. The first is the National Board for the Coordination of Disaster Management (CCGC), an oversight body that ensures effective coordination and makes decisions on proposals from the technical bodies. The second organ is the Technical Council for Disaster Management

(CTGC), which incorporates the national directors of all government ministries, as well as representatives of civil society and international humanitarian actor "technical partners." The Council is divided into seven working groups on issues of disaster preparedness, mitigation, and response. Under the coordination of the INGC, it is responsible for technical discussion and policy proposals; for example, on the creation of an early warning system, which are then submitted to the CCGC for approval.⁹⁴⁹⁵ The third body is the INGC itself. The INGC coordinates the Centers for National Emergency Operations (CENOE), whose responsibility it is to coordinate emergency response. CENOE has a main national office and sub-national representation and coordinates the body in charge of running and coordinating relief, as well as four technical groups, which incorporate representatives of line ministries and heads of the Humanitarian Country Team's cluster counterparts.⁹⁶

Although informants identified gaps in INGC's strength, it seems to be well respected as a strong agency.⁹⁷ Its strengthening seems to be the result of four factors in particular. The first is the operational strengths of the disaster framework. The national CENOE and its sub-national mirrors have developed a strong working mechanism that is on call throughout the year, and operative 24 hours a day during disaster situations. These coordinating bodies, whose model is based on a similar system in Guatemala, and the national and international actors that meet with it, have developed a fairly fluid system to manage disaster responses.⁹⁸ Second, INGC has greatly improved its understanding of risks throughout the country and the mechanisms to communicate early warnings. The flood early warning system, for example, receives information from field stations managed by the National Water Authority and from the National Meteorological Office and communities.⁹⁹ Third, contingency plans allow for fairly effective management of evacuation, response, and recovery assistance for disaster-affected communities. INGC leads the composition of contingency plans every year, prior to the January-to-April flood season, based on updated weather forecasts. This has contributed to more effective operations and fewer casualties. These

responses in turn are supported by regular simulation exercises.¹⁰⁰ Fourth, INGC has benefitted from the continual training of its staff, and direct human resources support provided through secondment by international actors.¹⁰¹ This has contributed to the strengthening of the human resources and the agency's operating capacity, which has continually been challenged by problems of staff turnover and a minimal supply of staff with strong educational backgrounds in related matters.

3. Sub-National Disaster Management: Local Action in Indonesia

Indonesia's disaster management Law 24 (2007) calls for the creation of "Regional Disaster Management Local Agenc[ies]," to consist of provincial and district agencies. It is mandatory that provinces create local agencies, but not that districts create them. These offices, BPBDs by their acronym in Bahasa Indonesia, have the responsibility for managing preparedness, prevention, and response in their respective geographic areas, and are thus essential to contributing to comprehensive national disaster management capacity. The offices must manage the local hazard mapping, risk assessments, and disaster management plans, as well as coordinate with disaster management actors from other government line ministries, the community, and other relevant entities. The offices are responsible for responding to disasters in their region, but may be supported by the national disaster management office (BNPB) if the disaster is of a scale beyond the local office's capacity. Given the nature of the BNPB as a national coordinating mechanism, the expansive geography of the 17,000-island archipelago, and strong legal principles of decentralization, the effective functioning of BPBDs prior to, during, and following disasters is essential to ensuring effective disaster management. Thus, the establishment and strengthening of these local disaster management offices has been one of the most important elements to national capacity strengthening.

At the time of this research, each of the 35 provinces had created their BPBD, and 85% of the districts had created BPBDs.¹⁰² The creation and strengthening of these offices has been progressive, apparently in large part because their

establishment relies on local initiative, as BNPB cannot order or supervise the establishment of BPBDs. Local lack of awareness of and prioritization for disaster management are a problem that inhibits the establishment and strengthening of BPBDs, as is a lack of prioritization of funding disaster management activities that is necessary because BPBDs rely heavily on local funding sources.¹⁰³

Informants pointed out that among the BPBDs that have been established, some are effective at fulfilling their mandate while others are not. Significant weaknesses among established BPBDs include insufficient staffing, insufficient training, and minimal budgets, all of which undermine the offices' effectiveness throughout the disaster management cycle. Key determinants of whether BPBDs strengthen to a high level of effectiveness seem to be the extent to which the local area is repeatedly affected by disasters, the degree of local political and societal commitment to disaster management, as well as the extent to which the BPBDs receive capacity strengthening training and financial/equipment resources from BNPB and from international and other non-governmental actors.¹⁰⁴

The strengthening of the BPBDs has been achieved as a result of a combination of national and local (sub-national) initiatives. National support for local capacity strengthening seems to have been most effective in terms of provision of technical support; however, the effectiveness of this technical support hinges strongly on the tools being properly implemented. The first form of technical support from BNPB has been in the form of risk assessments and disaster management plans. A government informant indicated that this exercise has been conducted for each of the provinces, and for a majority of districts.¹⁰⁵ While these are necessary to establishing effective BPBDs, an informant indicated that some of these nationally commissioned plans are seriously flawed in some technical terms, such that they cannot consistently be relied upon to be accurate. This apparently is so because external consultants often prepare them, are not actually fully grounded locally, and have not consistently received contributions from local actors.¹⁰⁶ This appears to be a result of hurried national initiative, and insufficient focus on

important details. The second form is training support to BPBD staff on technical and management aspects of disaster management. This is done through both direct trainings and training of trainers. This seems to hinge on the proactive stance on the part of BNPB to conduct training needs assessments, to offer and encourage the trainings, and to fund the trainings for provinces and districts that do not have such assigned resources.¹⁰⁷

Local initiative seems to have been the most important ingredient to the establishment of effective BPBDs. District BPBDs fall administratively under mayors, and their rural equivalent, Bupatis. Thus the initiative, and the financial and administrative support for the creation of BPBDs, depends a great deal on political awareness and prioritization of the importance of disaster management. This initiative, sometimes natural to the political officials and sometimes encouraged and lobbied for by civil society and international actors implementing projects in the area, seems to have prompted and created the ground for the establishment of an increased number of BPBD offices. Local DRR forums, which incorporate local civil society organizations, academia, authorities, and the community, have been key to this process. DRR forums are not present comprehensively throughout the country and are relatively recent. However, they have contributed by raising local awareness about the importance of having BPBDs and of prioritizing risk reduction, and by lobbying for their establishment and effective operation on an ongoing basis. International actors have contributed to the strengthening of BPBDs by supporting the establishment of DRR forums, through technical and financial support to local actors, by providing training on disaster management, by advising on the means of establishing and making the BPBDs operational, and by supporting the creation of risk assessments and disaster management plans.¹⁰⁸

4. Line Ministries: Disaster Risk Reduction and Climate Change Adaptation Mainstreaming in the Philippines

As specialized ministries with national and sub-national representation, government line ministries play an important role in disaster

management systems. Depending on their responsibility and expertise, they may make important contributions throughout the disaster management cycle. Drawing line ministries' assets into the disaster management system, and establishing a ministerial commitment to apply their technical, material, and financial resources to relevant responsibilities, can serve to deepen national systems' initiatives and impact. In each of the countries, this was not in fact a simple task, as it requires an orienting of ministries' resources to the different stages of the disaster management cycle. It also requires that the ministries develop the toolsets that are required, if they do not already have them. In terms of DRR, line ministries may have to make significant adjustments to their programs to purpose them for risk reduction, and incorporate new modalities that facilitate doing so. As seen in the case of the Philippines, effective coordination between ministries and other actors can have a powerful impact on governments' abilities to understand and holistically address disaster risks.

In the Philippines, a number of ministries have included or mainstreamed DRR and resilience strengthening in their programs. These are formulated both as DRR and as CCA programs. Two of the ministries that have been particularly proactive in incorporating such programming are the National Economic Development Authority (NEDA) and the Department of Agriculture.¹⁰⁹ NEDA, in association with other government ministries such as Weather, Mines and Geology, and Vulcanology and Seismology that conduct mapping, and with support from UNDP in the development of the model and technical skills, has been updating land use and contingency plans to consider DRR relative to existing/traditional hazards as well as the expected effects of climate change. This had previously been conducted in the mid-2000s to consider known risks such as earthquakes and volcanic activity, but the contemporary work also considers the grounding of climate change predictions that are specific to the different regions of the country. The planning has already been completed for the seventeen regions of the Philippines and will subsequently be completed for the provinces and municipalities. This technical information, along with tools such as a

reference guide for national and sub-national planning technicians on how to mainstream DRR (and subsequently CCA as well) into development planning, has provided the government with tools to consider DRR comprehensively throughout its development process. This process has yet to gain full traction across the line ministries and local authorities that could use the information to adjust their policies and proactively mainstream risk reduction. Nonetheless, the fact that the tools are being developed and progressively implemented is indicative of the overall commitment to the purpose.¹¹⁰

Further, the Department of Agriculture has prioritized mainstreaming CCA throughout its programs. This has taken a number of forms, including ensuring that it has a buffer quantity of seed in case of disasters, developing a weather-based insurance program, and developing flood- and saline-resistant seed strains. It has also been working with farmers to improve their understanding of changing weather patterns and to identify strategic cultivation zones that are sensitive to the current and future effects of climate change. The Department has partnered with a number of international actors in this regard, such as the International Rice Research Institute and national and international actors that work at a local level with farmers and their communities. Given the country's high dependence on agriculture and an apparent dearth of other national or international actors' work to address resilience strengthening in the livelihoods area, the Department of Agriculture's work is particularly important to resilience strengthening in the context of DRR.¹¹¹

B. Best Practices for Strengthening National Capacity

What follows is a discussion of the best practices for strengthening national capacity, based on the field research conducted for this study.

- 1. Disaster Risk Reduction**
Mainstreaming: Support for governments' ability to mainstream disaster risk reduction, based on hazards and predicted effects of climate change, into line ministries' policies and national and local planning processes.
- 2. Institutionalized Training:** Support for government training facilities and programs, through co-development of training curricula, training of trainers, training needs assessments, and logistical planning to ensure comprehensive access for staff throughout the government system. It is important that this training be institutionalized in such a way as to ensure the comprehensiveness as well as consistency of its curriculum, and its regularized availability to staff. Mechanisms should be available to provide attention to sub-national needs, and follow-up to support implementation of changes.
- 3. Technical Training for Disaster Management Professionals:** Support through co-facilitation of simulations, training for agencies and line ministries, and training on coordination methodologies in disaster situations. These trainings should be customized to consider the findings of detailed training needs assessments, and should consider the differentiated needs of national actors. All government and non-government actors should participate in the trainings, to ensure common learning and facilitate optimal partnership.
- 4. Institutionalization of Disaster Management Practice:** Support to strengthen and regularize processes such as shelter management by creating guides and manuals. All relevant actors should be trained on these standards, and resources should be available to ensure that the standards and practices are implemented.
- 5. Risk Identification and Monitoring Technology:** Support for the incorporation and mainstreaming of early warning systems, weather and other risk monitoring technology, risk mapping, and analysis tools. Sub-national and national disaster management systems should incorporate community as well as government information gathering and processing tools.
- 6. Risk Reduction Methodologies:** Support for incorporation of risk reduction methodologies, such as public infrastructure engineering, school building plans, and

erosion control. These methodologies should be adopted into government line ministry policies, and their implementation should be ongoing rather than exclusively in the context of recovery. Involving communities in the implementation of projects, such as planting grasses or trees to curb erosion, may increase local ownership of the process and results of the methodology.

7. **Livelihoods Resilience:** Support for design and incorporation of disaster-sensitive livelihoods technologies and methodologies at the national and local level. Training for individuals and communities on making adjustments, and technical and financial support for exhibit projects and access to necessary materials, helps encourage changes.
8. **National Civil Society Actors:** Support to strengthen the skills of local and national civil society actors, and their protagonism in technical work in disaster management and advocacy efforts. National partnerships strengthen technical and policy learning, and elevate local actors to the national stage where they can have facilitated access to training, technical, and financial resources, and an expanded role in the disaster management system.
9. **Best Practices Sharing:** Facilitation of printed and in-person information exchanges for government and civil society actors on national and international best practices in disaster management and national context-specific challenges such as establishing local coordination mechanisms. Information exchanges help motivate national actors to deepen involvement in the comprehensive disaster management cycle, and to understand that shared challenges may be effectively addressed locally.
10. **Local Disaster Management Technical and Coordination Mechanisms:** Training on disaster management principles and practice, inter-agency cooperation, disaster risk reduction mainstreaming and planning, and navigating government financial and regulatory systems. Training mechanisms

should be appropriately staffed and funded to allow them to provide direct local support, for as long as required and as frequently as necessary to respond to staff turnover.

11. **Local Disaster Management Plans:** Support for participatory elaboration of local risk maps, early warning system, and disaster management plans. This should be done in association and/or in coordination with national and sub-national government disaster management authorities, and should apply like methodologies. To the extent possible, communities' existing systems should be incorporated into the official mechanisms, and strengthened as appropriate to ensure maximum effectiveness and coordination.
12. **Promoting Wide Access to Technology:** Training on using technology for risk mapping and disaster planning is especially powerful when offered to all levels of government disaster management staff. For example, training line ministry technical staff as well as sub-national disaster management staff on geographic information mapping allows each level to apply the tools to their own tasks, sync programming, and increase local ownership of disaster management tools such as risk maps and evacuation plans.
13. **Community Strengthening:** Communities should be trained on the disaster management cycle, and their role in each phase. Community-based disaster management work should strengthen communities, thus promoting local ownership and sustainability. This should consider and empower local actors to be protagonists with rights and obligations in the disaster management system.

C. Worst Practices in Strengthening National Capacity

Below are practices that typically serve to undermine national capacity strengthening processes or cause actors' interventions to make less significant contributions than they might if they were approached differently.

1. Insufficient Government Strategizing on Approach to Capacity

Strengthening: Governments should employ capacity strengthening needs assessments and plans to collaborate on and distribute functions between partners. These tools would allow for prioritization of resource allocation, tracking of impact, and strategic coordination between actors that are (and could be) involved in capacity strengthening.

2. Competition and Confusion between Similar Government Initiatives:

Line ministries implementing Climate Change Adaption and Disaster Risk Reduction initiatives do not sufficiently coordinate methodologies or identify and seize opportunities to collaborate when addressing related problems. They also compete for funds and other national and international resources. This results in confusion and animosity, and lost opportunities to combine strengths.

3. Overlooking Government Agencies in Local Capacity Strengthening:

Failure to coordinate with government offices when conducting local disaster management projects whose outputs include disaster committees, early warning systems, and disaster management plans risks marginalizing local disaster management systems from official sub-national and national systems. Creating parallel systems may reduce communities' access to important government resources such as capacity strengthening needs assessments and resource allocations. It may also lead to a dangerous lack of coordination in disaster contexts.

4. Insufficient Coordination by National and International Actors with Government Actors:

Non-governmental actors' not informing or coordinating with government disaster management officials regarding the location and type of disaster risk reduction intervention can undermine government strategic plans, and undermine the possibility of best addressing needs. As a result, actors employ diverse methodologies

to address like problems, duplicate efforts, and do not link local results to the national system.

5. Insufficient Coordination between and among International Actors:

Poor coordination on thematic, counterpart, and geographic distribution of interventions leads to the repetition of efforts and the lessening of potential impact. This can also cause confusion and frustration for communities and government officials.

6. Insufficient Time Allowance for Community-Based Projects:

Community interventions are debilitated when actors fail to allow sufficient time and resources to conduct community disaster management projects that require high local involvement and ownership in the short and long term, such as the establishment of early warning systems. This particularly occurs in the context of quick disaster risk reduction projects in disaster recovery phases, and causes the outputs to be less effective and sustainable.

7. Over-Emphasis on International and Civil Society Actors' Roles:

International and civil society actors who regularly perform disaster response activities risk undermining government capacity strengthening if they do not have and follow a plan to strengthen government capacity and hand over responsibilities. Over-strengthening of these actors to fill gaps can lead to their gaining an unquestioned, regular role in disaster response mechanisms and allow government actors to inappropriately apply resources elsewhere. The strengthening of civil society actors is a positive trend, but this should be done with a vision for how their capacities and responsibilities will be leveraged relative to those of the government.

D. Perceived Gaps in Donor Attention to Disaster Management Interventions

Informants from international agencies working in disaster management capacity strengthening expressed frustration with some elements of

donors' approach to disaster management funding. This varied somewhat between informants, in large part because actors have different funding sources and mechanisms that allow them to use funds for different purposes and on different timescales. Nonetheless, the following were consistently recognized as gaps in attention to disaster management interventions.

- 1. Short Funding Cycles:** Donors are reluctant to allocate funds for periods longer than eighteen months. This practice is inconsistent with the nature of DRR processes, and DRR capacity strengthening in particular, and demonstrates a disconnect between disaster-prone countries' needs and donors' funding practices.
- 2. Disproportionate Funding for Disaster Response:** Donors are generally more apt to fund proposals for disaster response activities than for DRR projects.
- 3. Excessive Linking of DRR Funds to Disaster Response Funding:** Donors provide DRR funding as part of disaster recovery funding, but allow only minimal periods of implementation, such as between two and six months. This creates a counterproductive incentive for agencies to implement DRR funds in a time period that does not facilitate effectiveness and sustainability.
- 4. Lack of Clarity on How to Strengthen Community-Level National Capacity:** Donors do not exhibit a clear understanding of the respective roles of national, civil society, and international actors, and how each can contribute to strengthening national disaster management systems. This leads to missed opportunities to fund initiatives to strengthen national actors, and thereby to encourage appropriate distribution of responsibilities.
- 5. Overlooking of Needs in Middle-Income Countries:** Donors are more hesitant to provide funding to countries classified as "middle income," apparently considering that the government should be able to fund and implement programs on its

own. Donors should not defer blindly to such categorization of countries, but should consider the national capacity relative to remaining needs, throughout the national disaster management system, on a case-by-case basis. ■

IV. CONCLUSIONS AND RECOMMENDATIONS

National capacity strengthening of disaster management systems requires an understanding by the national government of the risks the country faces, a recognition of its responsibility to have systems to address these risks and to respond to disasters when they occur, and the political will and initiative to act to make changes. El Salvador, Mozambique, the Philippines, and Indonesia have each done this and are in the process of strengthening their ability to reduce risk and prepare for, respond to, and recover from disasters. It is important to recognize, however, that these countries endured many years of great losses prior to and indeed during the capacity strengthening processes that are currently underway as a result of not making changes sooner. It is in this context, and given the fact that other similarly disaster-prone countries have not achieved the progress that these four have, that it is so important to draw out lessons from these countries.

In countries that have long coped with natural disasters through a variety of means, progress toward significant capacity strengthening seems to come from pressure to improve, which gains sufficient momentum and resonates strongly enough to cause change to occur. In these four countries, that pressure came principally from their own populace via civil society advocacy mechanisms, and from significantly intense natural disasters that made changing the status quo politically inevitable. This pressure was complemented by international actors, which supported the strengthening of national- and local-level capacity. Indeed, the capacity strengthening processes have required initiative and support from multiple national and international actors. These formal and de facto partnerships were forged with the intention of creating national mechanisms that will allow the country to manage disasters as well as possible, and ultimately as autonomously as possible.

The resources that the respective government, national civil society, and international actors have contributed have allowed greater preparedness in each of the case study countries, improved disaster response mechanisms, and

produced tangible benefits in terms of fewer numbers of lives lost.

Nonetheless, there is a real problem with coordination. This can be seen in varying degrees of parallel capacity strengthening initiatives, duplication of efforts, and failure to combine resources in order to ensure that efforts strategically consider the national system as opposed to single isolated elements. All actors should increase their use of, and reliance on, capacity gaps assessment and planning so as to best take advantage of partnership and respective resources.

It is important to note that international actors and national civil society actors should continually analyze what their role should be in national humanitarian contexts, given progress in national capacity strengthening. International actors need to strategize to ensure that they are complementing the government rather than unnecessarily performing functions that it could perform, albeit with support from partners. This is also true for international actors' relationships with national civil society actors, whose operational and advocacy roles should continue to expand as the national system strengthens. International actors should help national civil society actors receive the technical and financial resources that they need in order to play a strong role in the national disaster management system, and contribute to its overall strengthening.

Finally, it is essential to recognize the gaps that remain in each case study country's disaster management system. Some gaps have been referenced in the body of this report, and others are expressly outlined in the country profiles. Although the government of each country has achieved a great deal, significant gaps remain in their progress toward, and approach to, DRR, preparedness, response, and recovery. These gaps have significant effects on the strength of the national system and implications for the degree to which the countries can consider their capacity strengthening to be comprehensive. They range from neglecting the training and equipment needs of local disaster management

coordination mechanisms and offices, to incomplete consideration of protection needs in disaster situations, to allowing politics to gravely interfere with humanitarian response to disasters. As overall capacity strengthens, all partners will have to ensure that these gaps are filled, but they will also have to be mindful to maintain dialogue and advocacy spaces in which to discuss these problems and how to address them with national authorities. The risk looms, and is being felt for example in Mozambique, that governments will increasingly dismiss advocacy efforts regarding significant protection gaps and prefer to plow their own paths.

A. Recommendations

1. National Governments

- Develop and follow a capacity strengthening plan for disaster management, and update it progressively while ensuring follow-up and continued support.
- Identify national and international actors who are able to contribute to capacity strengthening, and coordinate their working within the framework of a capacity strengthening plan, so as to best distribute functions between partners and ensure strategic use of resources.
- Improve monitoring and evaluation methodologies such that the inputs, results, and remaining needs of capacity strengthening activities may be better gauged.
- Ensure that legislation properly delineates the disaster management system, and is appropriate to the current context. Adopt public policies that push the government toward effective disaster management and a proactive role in DRR.
- Establish funding structures to fund all levels of the national disaster management system. Ensure that funding will be available to sub-national structures.
- Train sub-national authorities on their obligations in the disaster management system and how to access national resources to strengthen their local systems.
- Assess and strengthen the degree to which disaster management is considered in line ministries' mandates and plans, to ensure that responsibilities are mainstreamed throughout the government structure.
- Educate on and encourage inter-ministerial coordination on disaster management efforts, particularly DRR. Eliminate barriers to coordination such as competition for funding, and emphasize overlaps in policies such as CCA, DRR, and development planning.
- Intensify efforts to mainstream DRR into national and sub-national development plans, and allocate the necessary support to do so at each level.
- Ensure that systems comprehensively address the needs of sub-national disaster coordination mechanisms and offices. Ensure that mechanisms are able to proactively reach local-level offices and provide follow-up support as necessary.
- Assess the type and extent of sub-national disaster coordination mechanisms and offices' capacity strengthening needs and, together with partners, adopt a plan for addressing them. Regularly update this assessment, and adjust allocation of resources according to needs.
- Approach the capacity strengthening of sub-national disaster coordination mechanisms and offices at a pace, and with attention to detail, that allows for sufficient training and ownership of responsibilities.
- Identify and develop training facilities and curricula for members of sub-national disaster coordination mechanisms. These should consider disaster management principles and techniques and the processes of establishing the mechanisms and fulfilling their responsibilities.
- Identify means to institutionalize sub-national disaster coordination mechanisms and offices by including local career administrative staff and requiring that

disaster management plans be made official and permanent insofar as conditions remain. This will minimize changes made unnecessarily by new leaders, and the time and effort spent thereon.

- Identify needs for resilience strengthening in the context of DRR, particularly with regards to livelihoods adaptation.
- Strengthen government actors' skills to work with communities on disaster management capacity strengthening and on community-based DRR.

2. National Civil Society Actors

- Strengthen advocacy efforts before all levels of government. Encourage the government to fulfill its disaster management responsibilities and to strengthen legislative and public policy tools to orient the system to respond to the needs of the national context.
- Encourage the government to strengthen sub-national disaster management systems, by strengthening coordination mechanisms that address the full disaster management cycle. Insist on localized and participatory approaches, such that all local actors may be protagonists.
- Employ constructive resources to pressure the government to be the principal protagonist in the disaster management system, and to encourage other national actors to be involved as appropriate and necessary.
- Request institution strengthening support from national and international actors, such that national civil society actors may operate with strong political, operational, financial, and administrative assets.
- When partnering with international actors, be clear about your institutional development aspirations and how partners may and should help you take steps to strengthen.
- Create and foster alliances with other civil society actors throughout the country, in

order to strengthen skills and resources and optimize partnership and representation. To the extent possible and appropriate, partner with other civil society actors to strengthen your own capacity.

3. International Actors that Implement Disaster Management Programming

- Strategize interventions so as to work within governments' national capacity strengthening frameworks and plans. If these do not exist, encourage and as possible contribute to their elaboration and application.
- Assess and address governments' needs for support to strengthen their institutional capacity strengthening and human resources training systems. Look at the national system comprehensively, including line ministries and sub-national institutions.
- Coordinate with the government when determining the type and location of capacity strengthening efforts, and ensure to not create parallel mechanisms but to work in line with national mechanisms.
- Develop a strategy for collaboration with relevant national government and civil society actors. Prioritize capacity strengthening of these actors, and allocate resources appropriately.
- Expand initiatives to strengthen national civil society actors' technical involvement in the disaster management system, their ability to contribute to national capacity strengthening, and their presence and strength as advocates before national and sub-national government actors. Support these actors in line with an organizational sustainability plan.
- Participate in national DRR and disaster management policy fora, and actively encourage and support government capacity strengthening and leadership.
- Be sure that donors understand the strengths and weaknesses of the national disaster management system, and the government's

plan for addressing capacity strengthening. Craft requests for funding in alignment with the government's expressed priorities for international actors' support, and ensure that these contribute to national capacity strengthening.

- Promote the incorporation of regularized tools for the mainstreaming of DRR and preparedness into government programs, such that the national government will be able to apply them across ministries.
- Ensure that interventions to strengthen local disaster preparedness, such as early warning systems and community and municipal disaster coordination mechanisms, are conducted in coordination with government authorities and other important actors.
- Expand DRR activities and increase partnerships with environmental and development actors in order to combine and complement strategies. Treat DRR as a consistently cross-cutting element of humanitarian work.
- Support programs that strengthen livelihoods resilience in the context of disaster preparedness and risk reduction activities. Make sure to consider the immediate impact of natural disasters as well as longer-term implications for livelihoods that result from climate change and variable weather patterns.

4. Donors

- Encourage international actors and national governments to conduct joint capacity strengthening activities for the national system, particularly in areas of required skills and resource strengthening for the government implementation and training mechanisms. This should include such areas as community disaster management system strengthening and community-based DRR.
- Encourage international actors to partner with national civil society actors (and networks) that lobby for increased effectiveness in and responsibility for disaster

management, and that are involved with implementation of disaster management activities.

- Encourage international actors to contribute to strengthening the technical and institutional capacity of national civil society actors, and delineate funding for this purpose.
- Pursue modalities for directly funding national civil society actors for disaster management activities.
- Encourage international actors to orient their disaster management activities toward partnership with and capacity strengthening of government and civil society actors. This relationship should go beyond an implementation partnership, to one of institutional strengthening for the local actor.
- Adjust funding structures so as to increase the amount of resources available to international actors that are able to make contributions to DRR and preparedness activities.
- Adjust funding cycles in such a way as to allow local-level capacity strengthening activities to last sufficiently long to best ensure quality results, including local ownership, and thus sustainability.
- Ensure that projects that include DRR and preparedness activities in post-disaster recovery situations have a sufficiently long time period to achieve an impact.
- When considering requests for funding for DRR and preparedness projects in middle-income countries, ensure that an assessment of national financial and operational capacity to indeed fulfill those needs is provided. This will help avoid missing opportunities to fund projects that could make valuable contributions to national capacity strengthening. ■

V. APPENDIX 1: CAPACITY STRENGTHENING OF THE NATURAL DISASTER MANAGEMENT SYSTEM OF EL SALVADOR

Section Contents

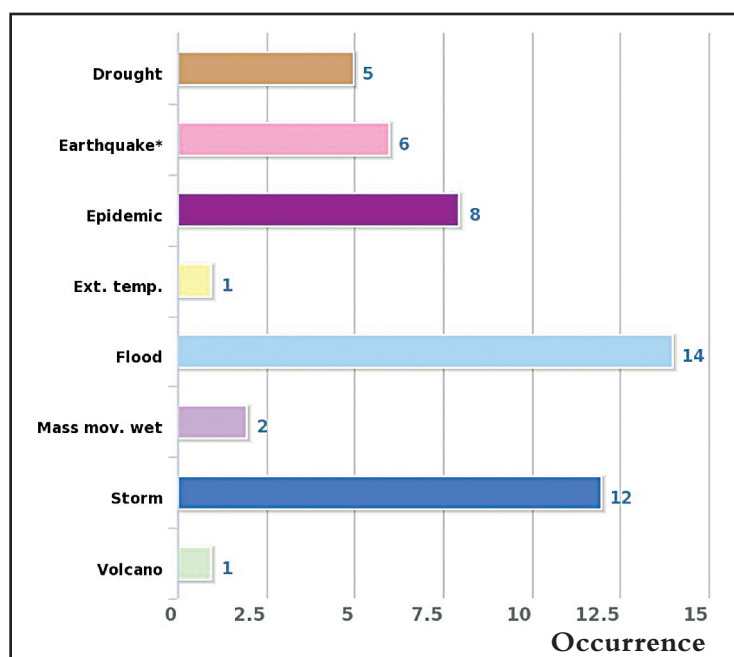
A. Natural Disaster Risk Profile	45
B. Foundations of the National Capacity Strengthening Process	46
C. Progress in Legislation and Policy	48
D. The National Disaster Management System	49
1. <i>How Has the National System Been Strengthened?</i>	49
E. Sub-National Disaster Management System	50
1. <i>How Has the Sub-National System Been Strengthened?</i>	52
F. Line Ministries Involved with Disaster Management	52
G. Gaps in the National Disaster Management System	54
H. National Ownership of Disaster Management System and Acceptance of Support from International Actors	54

A. Natural Disaster Risk Profile

El Salvador is historically prone to multiple sorts of natural disasters, including storms (predominantly hydrometeorological), floods, earthquakes, drought, and volcanic eruptions. The World Risk Index ranks El Salvador as the tenth-most risk prone in the world, and the ninth-most exposed to natural hazards.¹¹² Climate change is expected to increase the intensity of rainfall, heat waves, and drought.¹¹³

Flooding and storms have been the most frequent natural disasters in recent years, particularly typhoons. The effects of these storms are aggravated by high rates of deforestation, which increases exposure of agricultural plots and residences, and facilitates landslides.¹¹⁵ Poor and marginalized communities bear the brunt of the effects of these storms. The chart below gives a sense of the effects of natural disasters on the population and on the country's economy.

The following chart illustrates the frequency of natural disaster occurrence between 1980 and 2010:



*: Including tsunami
Source: Preventionweb¹¹⁴

Natural Disasters from 1980–2010

Overview

No. of events:	49
No. of people killed:	4,324
Average killed per year:	139
No. of people affected:	3,279,323
Average affected per year:	105,785
Economic damage (US\$ X 1,000):	5,533,210
Economic damage per year (US\$ X 1,000):	178,491

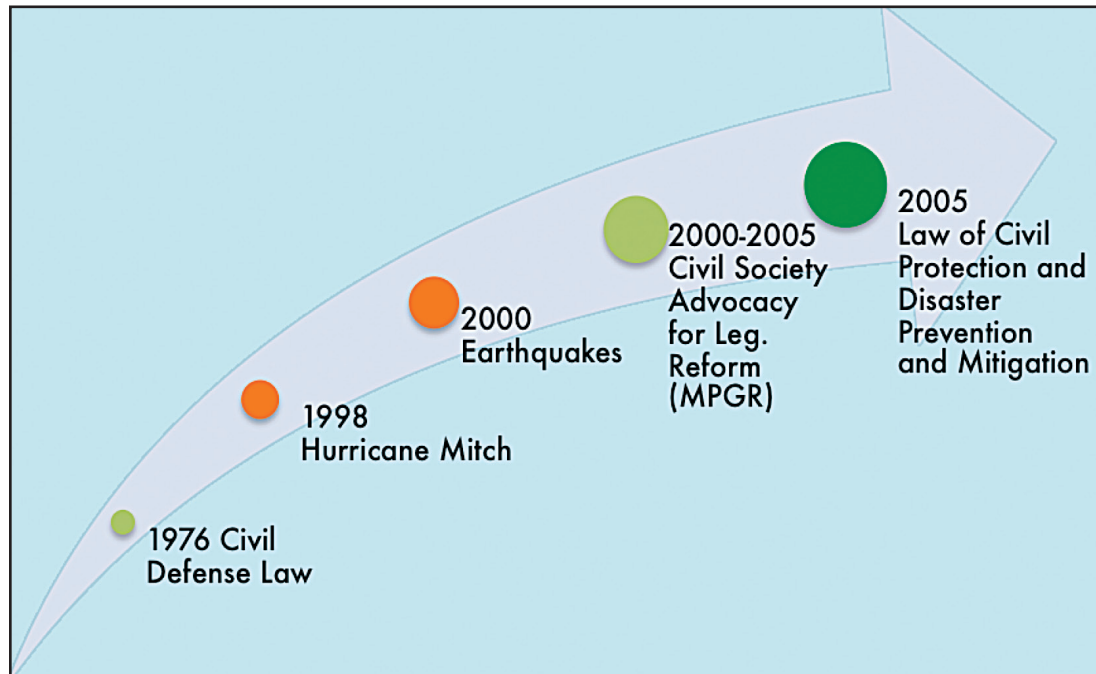
Source: Preventionweb¹¹⁶

B. Foundations of the National Capacity Strengthening Process

El Salvador has a long history of being intensely affected by human-made and natural disasters. El Salvador was involved in a civil war from 1980 to 1992. The war caused significant civilian casualties, as well as internal and international displacement. The country was affected by natural disasters even during the armed conflict, most notably by an earthquake in 1986 that affected the capital and its surroundings.¹¹⁷ Throughout the war and until 2005, El

Salvador’s disaster-related legislation was the Civil Defense Law of 1976. The Law was created in the context of recent earthquakes in neighboring Nicaragua and Guatemala, and a hurricane that affected multiple Central American countries. It created a National Emergency Committee (COEN by its acronym in Spanish) to coordinate responses to disasters, as well as Committees at the regional, departmental, and municipal levels to support the national system.¹¹⁸ The COEN was assigned the responsibility to prevent disasters and mitigate their effects, but the emphasis in its

Key Events in National Capacity Strengthening History



mandate was on disaster response and recovery.¹¹⁹ National community assistance groups such as the Salvadoran Red Cross, Comandos de Salvamento or “Salvation Comandos,” as well as international humanitarian groups that operated in the country, supplemented this government system.¹²⁰

In October 1998, Hurricane Mitch struck Central America, including El Salvador. Hurricane Mitch, which is considered to have been the deadliest hurricane to affect the Western Hemisphere since 1780, affected more than three million people in the region.¹²¹ Although the effects in El Salvador were more moderate than in other countries, it did take lives and force displacement, as well as cause great damage to the country’s agricultural crops. By means of illustration, it is noteworthy that 80% of the country’s corn crop was destroyed as a result of the hurricane.¹²²

In El Salvador, Hurricane Mitch marked a turning point in the disaster management system, as it made clear the need to intensify investment in DRR. This was marked initially by increased attention among civil society actors to understanding and addressing the sociological reasons behind the effects of natural disaster on El Salvador’s population; and to creating and strengthening local disaster plans and community disaster committees. International actors also strengthened their work in community-based disaster prevention and risk reduction, which had been minimal prior to Hurricane Mitch.¹²³ International actors also provided training to the Salvadoran military, which, as a key part of the National Civil Defense System, received training on disaster response.¹²⁴ The country thus began a marked process to strengthen government and local capacity to prevent as well as respond to disasters.

In January and February 2001, El Salvador suffered large earthquakes that took a great toll on the population, the national economy, and government infrastructure. The local disaster committees and other civil society mechanisms responded, and the COEN initially coordinated the government response. The COEN could not manage the response however, and it assigned the military to assume charge of the response

and requested international financial and humanitarian support.¹²⁵ The international community provided significant support, from international donors as well as humanitarian and other actors. This assistance was channeled through the national government, as well as through local governments and community institutions. The government was formally in charge of the response operation, but international actors had the authority to autonomously determine the location and nature of their interventions.¹²⁶ This massive international support operation, in the clear shadow of the government’s lack of full capacity to respond to the earthquakes, marked a transition toward national civil society and community groups’ focusing attention on improving preparedness and response measures. It also led to greater efforts to improve the national law, such that the law would strengthen the national disaster management system to consider not only response and recovery, but also risk reduction.¹²⁷

In 2001, national civil society organizations began to develop a new disaster management law for El Salvador and to conduct advocacy before the government. Their intention was to have the government adopt a law, and a system, that comprehensively considered the disaster management cycle, with an emphasis on preparedness and risk reduction. This goal was subsequently assumed by a formalized working group of national NGOs and community groups of various specialties, ranging from emergency search and rescue, to environmental, to local development. The group was called the Permanent Table on Risk Management (MPGR by its acronym in Spanish). The members of the MPGR brought a variety of skills to the table, so to speak, as well as a ground-level familiarity with the situation of disaster preparedness in the country. International actors including Oxfam America provided some additional capacity strengthening, on topics including how to craft legislation, how to conduct advocacy, and gender considerations; they also facilitated meetings with groups in other countries that had gone through a similar process and provided financial support for operations and the hiring of technical experts when necessary. Informants also explained that international NGOs’ involvement

EL SALVADOR

with and support of the MPGR lent an additional degree of credibility to the group and its efforts in the eyes of the national government.¹²⁸

At the same time that the MPGR was working on the drafting and passage of a new law, the government was making important changes in its disaster management system. One major change was to create in 2001 the National Service for Territorial Studies (SNET by its acronym in Spanish). SNET merged the natural hazard monitoring systems that had been operating under different ministries, such as Meteorology and the Ministry of Public Works, into one facility that could serve as the central mechanism to identify and monitor risks. It also ultimately incorporated a seismic monitoring system, which the country did not have at that time.¹²⁹ SNET became an integral element of the disaster management system, and through the years significantly contributed to the country's effectiveness at disaster management. Simultaneously, national NGOs and community groups along with international actors were dedicating significant resources to community trainings on disaster preparedness and response, and on creating local disaster management plans. The emphasis was especially on preparedness, including early warning systems, local communications, and evacuation plans.¹³⁰

The Salvadoran government adopted the Law of Civil Protection and Disaster Prevention and Mitigation in August 2005. After years of advocacy, negotiation, and legislation crafting, the law was passed in the context of continued natural disasters in the country and increased national pressure and interest in an improved disaster management system. The MPGR was involved in the crafting of the law through the end of the period of public discussion, and the government then made adjustments as it saw fit. As a result of the government's adjustments, the law places much less emphasis on prevention and risk reduction than the MPGR and other national and international actors would have liked. Nonetheless, the MPGR considered the law to be a significant improvement over the previous one and a good foundation upon which to continue advocacy for proactive comprehensive disaster management policy.¹³¹

The 2005 Law creates the System for Civil Protection, Prevention and Mitigation of Disasters. The System is defined as “an interrelated grouping, decentralized in its operation, of public and private organisms...” intended, *inter alia*, to incorporate disaster risk management into development plans, create and manage public education on risk prevention, and create risk maps and disaster management plans.¹³² This system is headed by the National Commission, which is led by the Ministry of the Interior, and is composed of representatives of national ministries, the private sector, and civil society associations from the three main regions of the country. The National Commission is responsible for developing a “National Policy on Civil Protection, Prevention and Mitigation of Disasters,” managing the national emergency system, which is to be informed by the risk monitoring mechanisms of the (aforementioned) National Service for Territorial Studies, supervising the implementation of disaster management plans in the most risk-prone areas of the country, and overseeing the work of the Departmental, Municipal, and Community Disaster Commissions. The Law outlines the responsibilities of the sub-national disaster management commissions, which are each assigned responsibility for disaster prevention, mitigation, and response.¹³³ In sum, the law outlines clear responsibilities for policy and operational management at the national level, complemented by clear localized planning and operational responsibilities at the sub-national level. The law also calls for the creation of a national disaster management fund, which was created on the same day under the Law of Creation of the Fund for Civil Protection, Prevention and Mitigation of Disasters.

C. Progress in Legislation and Policy

The 2005 Law seems to stand as a middle ground between the “before” and “after” of national disaster management capacity strengthening in El Salvador. In practice, the law did not have immediate effects on the country's disaster management system. The reality of this is seen in the government's strengthened but still lacking response to a volcanic eruption and tropical storm that hit the country within two days of each other, less than two months after the Law

was passed. Although the changes that the Law called for did not significantly commence until 2006, momentum that complemented previous processes of institutional and community-level strengthening did subsequently build among the government, civil society, and international actors.¹³⁴

In practice, the Law provided the government and Salvadoran society a structure under which to strengthen the national system, by responding to many of the gaps in the national and sub-national disaster prevention, mitigation, and response system. With the support of the ministries included in the National Commission, the government started to implement changes. For its part, the MPGR began to organize efforts to advocate for a new law that would address gaps that it had been identified in the law, particularly regarding DRR.¹³⁵

Since even before the Law was passed in 2005, discussion has been ongoing in El Salvador on developing a public policy on DRR. National civil society actors have led this process, and have been discussing and working together with the government to create the policy. At the time of this research, a policy was partly created, and was in potentially final stages of socialization between the government and civil society actors. Nonetheless, the process continues very slowly, as it is apparently delayed by complicated national political dynamics.¹³⁶ As one government official explained, “it has not advanced, because of other (policy) priorities, and because there are always (specific) moments in which these initiatives can be pushed.”¹³⁷

It is important to note that the civil society advocates, as well as the government, have been able to look to the regional Central American Policy for Comprehensive Disaster Risk Management of June 2010 for guidance in the preparation of the policy and in their search for accountability. This regional policy, which was created under the System of Central American Integration (SICA by its acronym in Spanish), sets standards for DRR and management policy in member states, with the objective of “providing the Central American Region with an orienting framework for comprehensive disaster risk management, which facilitates the

link between political decisions and their corresponding instruments of application.”¹³⁸ The regional Coordination Center for the Prevention of Natural Disasters in Central America (CEPREDENAC), which belongs to SICA and is mandated to “promote activities, projects, and programs that contribute to the reduction of disaster risk,” has contributed by encouraging the government to adopt a policy, and consulting on technical elements.^{139 140}

Other government policies have recognized the importance of DRR, particularly in the context of climate change. One example of this lies in the government’s Development Plan for 2010–2014, which includes disaster risk management as a key pillar. Another example is the fact that the Ministry of Environment and Natural Resources has included risk management as one of its priority axes, to be included in its environmental management strategies.¹⁴¹

D. The National Disaster Management System

The National Commission on Civil Protection and Disaster Prevention and Mitigation has progressed in strengthening its coordinating capacity, and has shown improved management of prevention efforts and disaster responses. Informants indicated that the Commission’s leadership on and coordination of DRR efforts has been minimal thus far. Nonetheless, as some of the line ministries within the Commission have increasingly incorporated risk reduction into their programs, risk mitigation efforts have expanded. Although gaps remain in the effectiveness of the Commission in terms of its supervisory and leadership role, and in the sub-national system upon which the Commission depends for informational and operational support, informants agreed that it has achieved significant progress in recent years.

1. How Has The National System Been Strengthened?

The first apparent factor contributing to the strengthening of the Commission seems to be the improved capacity of the General Directorate of Civil Protection, which is the principal government disaster management agency. On the one hand, this seems to depend on

EL SALVADOR

strengthened institutional capacity within the Directorate. This has come in part as a result of trainings as well as equipment provision from international actors. On the other hand, this seems to depend on the fact that Civil Protection has succeeded, albeit partially relative to the national geography and need for institutional support, to expand its involvement in the local disaster management system via the Municipal Commissions. This facilitates national to sub-national coordination in prevention activities, as well as in disaster response contexts. Having said this, it is important to indicate that informants shared their dismay at the institutional strength of the General Directorate. The Directorate is positioned within the government structure in such a way as to not be able to operationally or politically lead other line ministries, or even the Departmental Commissions, as the Law states it should.¹⁴²

The second apparent factor contributing to the strengthening of the Commission is the fact that it has built a strong coordination mechanism for the identification of and response to disasters. This depends largely on early warning and communication systems, which are fed by locally situated human and technological monitoring mechanisms. Warning signals are channeled through the Civil Protection system and directly to the early warning monitoring center within the Ministry of Environment and Natural Resources, the former SNET. This system monitors seismic and volcanic activity, weather patterns, water level changes, landslides, and other risks, and in conjunction with a system of increasingly accurate maps allows the Commission to best coordinate disaster responses. It is thus clear that the effectiveness of the National Commission has a great deal to do with the local prevention-based activities that began in earnest in the early 2000s with the support of community, civil society, and international actors.¹⁴³

The third apparent factor behind the strengthening of the Commission is an effective system of coordination within and among the Sectoral Technical Commissions that operate within the National Commission. These thematic groups are led by government line

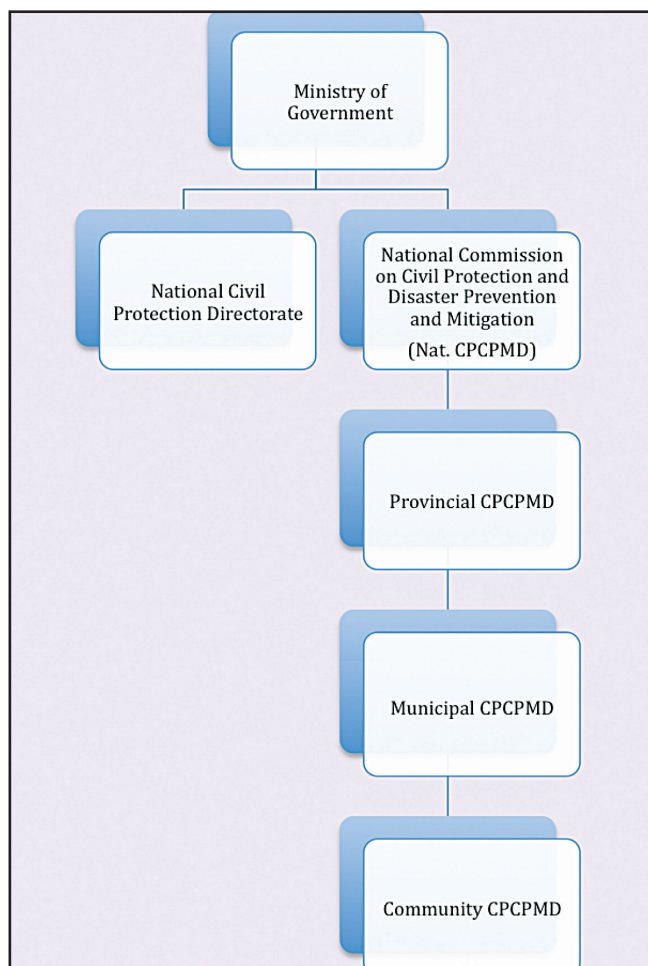
ministries and have international cluster counterparts. Some of the Technical Commissions operate during as well as outside of disaster situations, and thus assume disaster management functions related to disaster prevention and risk reduction as well as response and recovery.¹⁴⁴

Informants explained that the strengthened effectiveness of the government disaster management system is generally visible in emergency response situations. While gaps remain in the consistency of response and recovery mechanisms, the speed with which the government employs its early warning, alert, and response systems has greatly improved. In addition to its mandate, informants explained that this seems to be attributable to an understanding at all levels of government that natural disasters will likely only increase in frequency and severity, and so to minimize the harm they must be able to respond appropriately prior to onset. DRR is less of a priority for the government; however, informants explained that they see this strengthening as well.¹⁴⁵

E. Sub-National Disaster Management System

The 2005 Law creates Commissions on Civil Protection and Disaster Prevention and Mitigation (CPCPMD by their acronym in Spanish) at the departmental (akin to provincial), municipal, and community levels. Each of these commissions is responsible for creating disaster prevention and mitigation plans, and (except at the community level) keeping track of and managing the local completion of the national disaster plan at the local level. The commissions operate under the leadership of the governor, mayor, and a community delegate respectively. Except at the community level, commissions include representatives of the same bodies that participate at the national level, as well as other relevant local actors. Given their responsibilities and representation, the commissions are the most responsible disaster management entities at the sub-national level throughout the country.

Sub-National Disaster Management System (as referenced below)



In practice, the sub-national commissions are still very much in the process of strengthening in order to fulfill their responsibilities. Informants explained that the commissions exist comprehensively throughout the country, but there are significant problems with their structure and the consistency of their work. The first element that contributes to this is the fact that not all commissions have disaster plans and other prescribed tools such as risk maps and evacuation plans. Commissions seem to lack knowledge of how to complete them, and the commissions and local leaders do not consistently prioritize creating them. Among the commissions that do have the plans, not all of them have been made official, and therefore cannot be of assured quality and authority. The second element that contributes to this is that in many cases the staff assigned to the commissions, and the substance of the disaster management plans, are continually changed as political

leadership changes. Informants explained that newly elected departmental and municipal officials frequently change a significant portion of the composition of their municipality's commission, and revise elements of the disaster plan. As a result, the commissions regularly have to undergo new training on disaster management principles and practice, and create new disaster management plans. This does not have to happen, but neither does law prevent it from happening. This can ultimately be debilitating, as neither institutional nor community capacity is consistently maintained. The third element that contributes to problems in strengthening commissions is a lack of sufficient funding for the work of the commissions. This includes funding for everything from trainings, to the technical work of creating the disaster management plans, to the communication and emergency response equipment. This appears to be a function of insufficient local and national earmarked

EL SALVADOR

funding, and insufficient understanding on the part of the commissions of how to access other funding for disaster management.¹⁴⁶

1. How Has the Sub-National System Been Strengthened?

In spite of the significant weaknesses and setbacks in capacity strengthening for the commissions and local community disaster management mechanisms, commissions have made significant steps in their strengthening, and local civil society and communities have deepened their commitment to and understanding of disaster management. A number of factors have contributed to this gradual process. Community and local government proactivity in establishing the commission and having it fulfill its responsibilities is a factor. This proactivity in practice may come naturally; for example, if government leadership is committed to disaster management, or if a community has strong coordination mechanisms that can be applied to disaster-related functions. Or, this proactivity may develop following training and sensitization on disaster management issues. National and international NGOs, in particular, have conducted trainings on and supported communities in the process of advocating before their municipality for improved disaster management-related mechanisms, as outlined in the Law.

The second factor is the degree to which the commissions and communities have access to training. These trainings, which in practice seem to be conducted in majority by Salvadoran civil society and international actors, cover many issues related to disaster management and the functions of the commissions. They range from how to create plans and early warning systems, to how to conduct DRR projects. This is particularly important given staff rotation within commissions, as well as in- and out-migration of community members. The trainings that Civil Protection provides appear in practice to be insufficient, so the inputs of these expert actors are particularly valuable.¹⁴⁷

One exception to the weakness of government training programs is a formal disaster management training program in the metropolitan area of the capital city, which is co-operated by the Council of Mayors of the Metropolitan Area of San Salvador, national civil

society organizations, and Oxfam of Belgium prominently, among other international actors. The program combines the expertise of these different entities, as well as government agencies including Civil Protection, with the formal and official structure of the Metropolitan School for Local Development. The program harnesses the formality of the Metropolitan School as way as to increase the authority of invitations to participants, and allows public officials to receive diplomas and recognition that may go on their official *résumés*.¹⁴⁸ The third factor appears to be the extent to which the National Commission and its member agencies are active in supporting the sub-national commissions. Informants explained that recently, national authorities are increasingly seeking to strengthen local capacity. This includes, for example, creating positions for Municipal Risk Management Officials that can take a leadership role in such tasks as mainstreaming DRR into local development plans; and installing live risk monitoring video equipment in provincial and municipal offices. In this way, the National Commission is supporting local capacity to consider elements of disaster management that were previously insufficiently incorporated, and to elevate consciousness and consideration of disaster risks. This positive development indicates national government's recognition of the importance of strong and comprehensive local disaster management systems.¹⁴⁹

F. Line Ministries Involved with Disaster Management

In addition to Civil Protection, the majority of line ministries in the Salvadoran government have disaster management-related responsibilities. These include response and recovery activities, preparedness, and, increasingly, DRR. The ministries' disaster-related activities fall under the coordinating responsibility of the National Commission.

The Ministry of the Environment and Natural Resources has been particularly involved with strengthening national preparedness through its risk monitoring center. This process began in intensity with the creation of SNET following Hurricane Stan in 2001, after which the government, with the support of numerous

international academic and technical actors, expanded the system of monitoring and forecasts. This was complemented by improvements in technological and community-based early warning systems, which empowered local communities to communicate on risks within and between each other, and through a Civil Protection communication chain, up to national authorities. In 2007, SNET ceased to be a separate entity and passed to be under the Ministry of the Environment and Natural Resources, where it has been further strengthened. At present, the monitoring center works full time to monitor all relevant risks, and has communication links with Civil Protection at national and sub-national levels, as well as with the public through social media. The center plays a key role in the country's official emergency alert system. The development of this strong capacity has clearly been gradual, and multi-faceted. It is noteworthy that it represents strong ongoing collaboration on a practical level between national and sub-national authorities, official community commissions and other mechanisms, as well as national civil society and international actors that work at the community level.¹⁵⁰

Line ministries have strengthened their role in disaster preparedness and response, and have integrated this into their programs for many years now. As Patricia Weiss Fagen explained in her 2008 paper on the role of the Salvadoran government in humanitarian action:

There is disaster expertise in all these entities. They conduct training of Ministry personnel and citizens throughout the country, and receive direct assistance from donors for their programmes. These programmes, which long predate the new legislation and system, are focused primarily on aspects of prevention, risk management, recovery and reconstruction as these affect their respective domains. University curricula, especially in the field of engineering and health, encompass disaster training, and university personnel have been brought into the process of disaster response and reconstruction.¹⁵¹

Informants verified that this trend continues at present. The Ministry of Health, for example, has developed standards for disaster-resilient water and hygiene facilities. Although

programmatic weaknesses remain, this is representative of the results of the process of strengthening sectoral standards, and consistency in practice during and outside of disaster situations.¹⁵² Informants emphasized, however, that it remains a challenge for line ministries to secure national funding for improving preparedness and DRR in line ministries' programs. In this context, international actors organized within the humanitarian country team provide significant financial and technical support to these ministries, in terms of training as well as equipment and operations support.¹⁵³

DRR has been the slowest element of the disaster management cycle to take hold in the practice of line ministries. However, this has slowly begun to change in recent years, evolving through an apparent combination of leadership by the President and vision and pragmatism on the part of line ministries regarding the need for DRR, particularly in the context of climate change. The Ministry of Environment and Natural Resources has been a strong leader in this regard, and in 2012 approved an Environmental Policy that recognizes the need to address current environmental degradation and reduce exposure to the effects of climate change, and outlines actions required to achieve these goals. This has led to work by the Ministry of Environment, for example on reforestation along waterways and coastal areas to absorb the effects of storms and floods, and minimize their impact on agriculture, human settlements, and public infrastructure.¹⁵⁴

This proactivity has been reflected, albeit to a lesser degree, in the work of other line ministries. These include Public Works, which has begun to adjust infrastructure engineering to be more disaster resilient; and Agriculture, which has helped farmers adjust to climate change through, inter alia, incorporating weather-resilient crops and drought-resistant irrigation techniques. As one informant commented, "Disaster risk management is now seen by various (State) institutions as important...but they do not all have their own plans...Their talk is pretty, but it's neither complete nor funded."¹⁵⁵

EL SALVADOR

G. Gaps in the National Disaster Management System

It is clear that the government of El Salvador has come a long way, particularly since the early 2000s, in strengthening its capacity for disaster management. At the same time, weaknesses in its technical and operational capacity inhibit its realizing full potential. Even while informants explained many of the country's strengths, they also shared their perspective on a number of gaps that remain.

The first gap that informants consistently referenced is the weakness of many of the sub-national disaster commissions and their corresponding inter-ministerial mechanisms. This weakness is based on factors such as leadership and staff rotation, the continual updating and changing of disaster management plans, low proactivity regarding disaster management, and insufficient access to funding. One local Civil Protection official in a highly disaster-prone municipality explained to me that in practice, his funding is so limited that he relies on local civil society and international actors for transportation, and for many of the technical resources that he needs in order to strengthen the local system.¹⁵⁶ This contributes to what appeared to be an unfortunate imbalance of leadership in the local disaster management system, as the government ultimately assumes a primarily support role to the work of other actors. It is important to not minimize the valuable contributions of local community and civil society actors, but to recognize the government's insufficient leadership and operational role in such contexts.¹⁵⁷

The second weakness is that the government's approach to disaster risk reduction appears to be both lacking and inconsistent. Although there is increasing attention to DRR, particularly in the framework of CCA, initiative to mainstream disaster risk reduction into local development plans appears to still be lagging. DRR work among civil society and international actors is lagging as well; for example, in the sense of considering livelihoods protection in the course of disaster preparedness activities. Informants consistently pointed out that populations are generally able to evacuate safely in disaster situations, but their crops and animals suffer.¹⁵⁸

The third weakness is a lack of consistency in disaster response mechanisms. On the one hand, this relates to the fact that the government lags in some considerations; for example, sufficient geographic coverage of evacuation centers and supply warehouses. Another important example is insufficient consideration of differential protection needs within the displaced population, such as considering needs by gender and age, but also certain specific needs such as nutrition. Although this is improving, and the generally strong involvement of international actors in strengthening government mechanisms and infrastructure, as well as supplementing them during disaster situations contributes significantly, this appears to remain a problem within the government's capacity per se. The government is less experienced with and less proactive in addressing drought and food security emergencies. Its capacity to diagnose and respond to these disasters has improved in recent years, as drought has become more of a problem than it had been historically. This has been achieved in large part with support from civil society and international actors. Nonetheless, it remains a gap that should be addressed in order to ensure that the government has comprehensive disaster management capacity.

H. National Ownership of Disaster Management System and Acceptance of Support from International Actors

The Salvadoran government appears to have fully assumed a sense of responsibility for its disaster management system, and is working to strengthen its system and its comprehensiveness accordingly. At the same time, the government in practice relies extensively on the support of international actors for funding and for cooperation in disaster management.

International actors are closely involved with the disaster response system via the humanitarian country team and its counterparts within the National Commission. This applies to both rapid- and slow-onset disaster contexts, although particularly in the context of slow-onset disasters such as drought and food security crises, the government relies heavily on the support of national civil society and international actors because it has more limited human and financial

resources. When I asked an informant who works with a national NGO that does food security assessment and response work why they do not ask the government to cover the whole affected region instead of sharing the responsibility with them, his response was, “Because they say they want to do it, but that they do not have the capacity to. For example, of seventy-five food distribution sites, they went to fifteen. What’s more, they don’t have the same charisma (as we do), determination to work long hours.”¹⁵⁹ This example cannot be considered reflective of the entire national disaster management system, yet it does nonetheless allow reflection on the balance between civil society and international actors’ ability to supplement and support the government, and the degree to which they should advocate for even greater government management.

The Salvadoran government appears at present and historically to welcome support from international actors to strengthen the disaster management system outside of disaster contexts. International actors played a key technical and financial support role in the strengthening of the risk monitoring and early warning system, which is regarded as one of the government’s strongest achievements. It appears that, in some cases, as the government strengthens its institutional capacity in preparedness and response in particular, its needs are increasingly less technical and more financial. Although this is a reflection of capacity strengthening, it brings with it complications in terms of international actors’ confidence in the government’s transparency regarding use of funds. This will be a challenge to reckon with as the cooperation relationship continues to evolve. ■

VI. APPENDIX 2: CAPACITY STRENGTHENING OF THE NATURAL DISASTER MANAGEMENT SYSTEM OF MOZAMBIQUE

Section Contents

- A. Natural Disaster Risk Profile** 56
- B. Foundations of the National Capacity Strengthening Process** 57
- C. Progress in Legislation and Policy** 60
- D. The National Disaster Management System** 61
 - 1. How Has the National System Been Strengthened?* 61
- E. Sub-National Disaster Management System** 61
 - 1. How Has the Sub-National System Been Strengthened?* 62
- F. Line Ministries Involved with Disaster Management** 63
- G. Gaps in the National Disaster Management System** 63
- H. National Ownership of Disaster Management System and Acceptance of Support from International Actors** 65

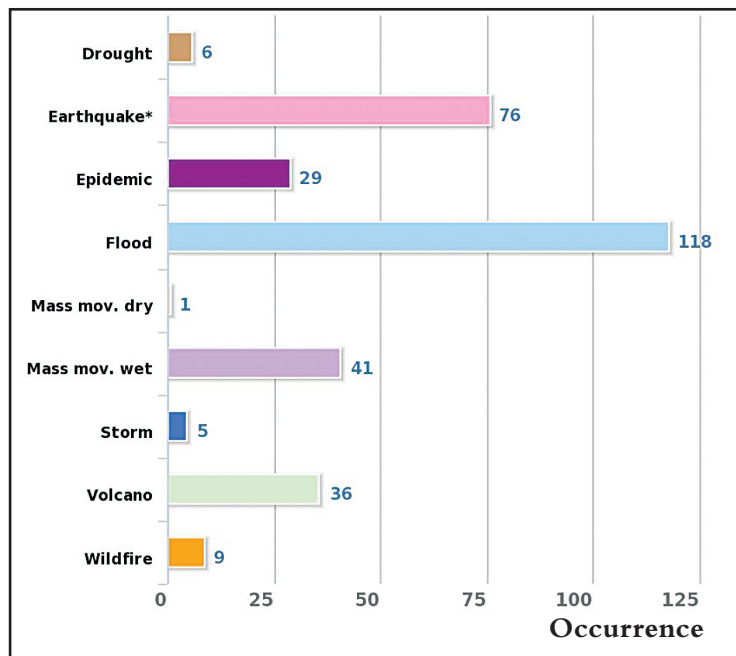
A. Natural Disaster Risk Profile

Mozambique is historically prone to multiple natural disasters, including floods, earthquakes, drought, and volcanic eruptions. Floods have been the most frequently occurring natural disaster in recent years, caused by multiple factors including cyclones, the country’s tropical climate, and heavy annual rainy season, and its location at the bottom of the Zambeze River basin, which is fed by waters from seven countries upstream.^{160 161} The worst floods since

1900 in terms of number of people affected occurred in January 2000, in which 4,500,000 people were affected, and 800 killed.¹⁶²

The country is also prone to drought, both during the dry season and year-round in areas that are arid or semi-arid, which is approximately one fifth of the country.¹⁶³ The worst droughts in terms of the number of people affected occurred in 1979 and 1981, and affected 6,000,000 and 4,750,000 people respectively.¹⁶⁴

The following chart illustrates the frequency of natural disaster occurrence between 1980 and 2010:



*: Including tsunami
Source: Preventionweb¹⁶⁵

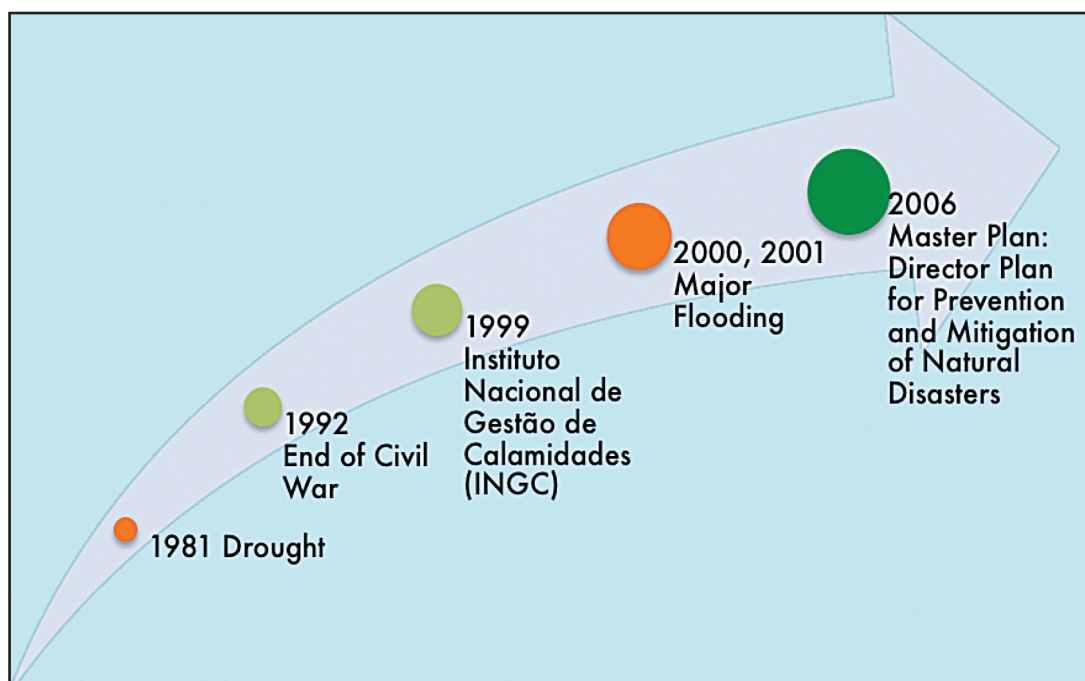
The country’s high rate of poverty, its high reliance on agriculture, insufficiently disaster-resilient housing, and weak public infrastructure make it particularly vulnerable to the effects of disasters.¹⁶⁶ The World Risk Index ranks Mozambique as the first-most susceptible to the

effects of natural hazards, and the eighth-most vulnerable to the impacts of natural hazards and climate change.¹⁶⁷ The chart below gives a sense of the effects of natural disasters on the population and on the country’s economy.

Natural Disasters from 1980–2010	
Overview	
No. of events:	75
No. of people killed:	104,840
Average killed per year:	3,382
No. of people affected:	23,317,164
Average affected per year:	752,167
Economic damage (US\$ X 1,000):	802,650
Economic damage per year (US\$ X 1,000):	25,892
Source: Preventionweb ¹⁶⁸	

B. Foundations of the National Capacity Strengthening Process

Key Events in National Capacity Strengthening History



MOZAMBIQUE

Mozambique's national history is key to understanding its vulnerability to natural disasters, as well as its process of capacity strengthening. Mozambique was a colony of Portugal until 1975, when the guerrilla group Front for the Liberation of Mozambique (FRELIMO) assumed power. FRELIMO established a one-party Socialist government, and allied itself with the Soviet bloc. A civil war ensued, led by the opposing Mozambican National Resistance (RENAMO). The war took a great toll on the population, as millions were killed and displaced, and the economy collapsed.¹⁶⁹ The war aggravated the debilitating effects of Portugal's colonial rule on the population's human development, as displacement disrupted residents' social networks and livelihoods, and thus their ability to cope with disasters.¹⁷⁰

Mozambique experienced many natural disasters throughout the post-colonial period and during its civil war, which aggravated the effects of armed conflict, displacement, and disruption to development. Of course, the country had experienced natural disasters prior to independence, including floods in 1971 that rank in the country's top ten for greatest number of population affected and people killed.¹⁷¹ It was primarily after independence, however, as the country faced significant disasters in the form of floods and drought, that the country developed a policy on disaster management.

Soon after independence, major floods in 1976 and 1977 caused the government to realize that it had to improve its ability to respond to annually recurrent floods with mechanisms and policies that would reduce the population's risk. Encouraged by the Socialist principles of the government, these took the shape initially of neighborhood assistance mechanisms, and a solidarity sharing fund by which each government worker had to make a regular contribution to the fund from their wages. Subsequently, the government formed a high-level commission to examine how to manage the effects of flooding, which led to the resettlement of population from flood-prone areas. The government was already resettling population at that time into

communal villages, and a government Commission for Resettlement and Communal Villages was created in this context. This resettlement policy was to be continued through the years.¹⁷²

The government created the Natural Calamities Prevention and Combat Department (DPCCN), a primarily reactive body that coordinated the distribution of relief materials from its own resources and those provided by international actors to victims of floods and droughts, and to the internally displaced.¹⁷³ It has been referred to as "mainly a logistics structure consisting of 'some trucks and a building, but with virtually no office equipment'...(which) basically functioned as a national implementing partner for UN agencies."¹⁷⁴ DPCCN performed through the 1980s and early 1990s. This included a response to the 1981 drought, which was the worst natural disaster in the country's history, as 4,750,000 were affected and 100,000 were killed.¹⁷⁵ Around 1984, the international community became more willing to work with the Mozambican government when negotiations for structural adjustment were underway. Thereafter, international actors partnered with DPCCN to respond to disasters through the end of the civil war in 1992 and the period of refugee return thereafter. The UN had an agreement with the government to have a coordinated disaster management strategy, encompassing prevention, preparedness, and response.¹⁷⁶ Nonetheless, while the DPCCN's logistical capacity had improved during this time, it was considered by international actors to be corrupt and inefficient, and almost exclusively reactive to the country's repeated disasters.¹⁷⁷

Following the war, the DPCCN went through a process of downsizing and reorganization of its assets, and became the Natural Calamities Management National Institute. The agency took on forward-thinking disaster management tasks such as formulating a contingency plan and including it in the national budget.¹⁷⁸ Nonetheless, this structure was mired in problems of corruption and theft, particularly in the context of post-war transition of responsibilities and staff

discontent. International actors and donors in particular recognized a need for a fresh institutional start and essentially made institutional change a requirement for their continued cooperation.¹⁷⁹

Out of this recent context, the Instituto Nacional de Gestão de Calamidades (INGC) disaster management agency was born in late 1999. Government and international actors supported the transition, as they were eager for the government to take effective coordination control of disaster management. Coordination is the key word here; the vision was still that the government's role in disaster management would be the operational function of managing international assistance.¹⁸⁰ The fact that the INGC was housed in the Ministry of Foreign Affairs is illustrative of this concept, as this facilitated direct coordination with the international community. The INGC was created in the final months of 1999, but it did not have time to get on its feet before the floods of January 2000. As one informant explained, by the time of the floods "the decision was made, but no capacity was created. The handover of control to the government couldn't happen at that point, because change requires more than a name."¹⁸¹

The cyclone and flooding of early 2000 affected 4,500,000 people and had devastating effects on the country.¹⁸² International humanitarian agencies managed the response, because they deemed the government incapable of doing so. Indeed, the government's insufficient preparation was revealed, as were weaknesses in managing communications and distributing roles. International actors managed their own disaster responses, and largely ignored the government's authority.¹⁸³ In addition to being a reflection of the government's lack of significant progress at taking leadership in disaster management, the floods were a significant setback to the country's postwar recovery and strengthening process. As explained by one key actor, "In 2000 we faced the biggest floods in our history, considered to be the worst over the last 150 years... everything was washed away. Economically, we lost 600 million in damages, around 20%

of annual GDP...the floods washed away everything that we had built in recovery."¹⁸⁴

This experience in poor management of the floods led the government, recently elected in 1999, to reflect on how to ramp up its capacity strengthening in the aftermath of the 2000 floods. There was already recognition at that time within the government and society that the government was failing to fulfill its role, and that it needed to change so that it could in fact manage the response on its own.¹⁸⁵ The INGC met with international actors to compile plans for the expected floods of 2001, and conducted simulations. When floods hit in 2001, however, the national reaction was again weak and coordination of the response was instead led by primarily by international actors.¹⁸⁶ The impact of the 2001 floods was not as great as in 2000, but it was still significant. They affected just under 550,000 people, and killed around 100. A cholera outbreak in an evacuation center also killed 150 people.^{187 188}

It was in the aftermath of the 2000 and 2001 floods that significant changes occurred within the Mozambican government to ensure its protagonism in disaster response. This led in ensuing years to a composition and strengthening of institutions charged with disaster management, which has been essential to improving the government's ability to effectively lead in this regard.

It seems to be commonly agreed that the floods of 2000 and 2001 mark the "before and after" of the current process of capacity strengthening in Mozambique. The floods caused such great damage to the country, and the response was so markedly out of the control of the government due to its weak capacity and to the independent action of international actors, that the government emerged determined to assume control of the disaster management system. This determination was complemented by international support for this process, and international contributions to capacity strengthening, which have been substantial.

MOZAMBIQUE

C. Progress in Legislation and Policy

Disaster management has prominently been the subject of and included in various national policies. The process has been gradual, as the government develops a stronger sense for what is necessary to ensure proper, and comprehensive, disaster management. Nonetheless, the results are evident in the inclusion of disaster management and DRR in national policies and (subsequently) law. The government of Mozambique does not have a disaster management law; however, at the time of this research, legislation was being prepared. Informants indicated that importantly, it will clearly define disaster management responsibilities across the government and society, and create new funding mechanisms.¹⁸⁹

At the time of this research, the prominent disaster management document was the government's "Master Plan: Director Plan for Prevention and Mitigation of Natural Disasters" of October 2006. The Master Plan represents a turning point for the government in its institution strengthening, and in its consideration of the importance of DRR. The first of its important elements is a strategy for addressing the country's vulnerability to natural disasters, which is to be achieved through such risk reduction actions as reforestation and adaptation of the agricultural system to climatic (drought) realities. It also creates a policy for development in arid and semi-arid zones. Second, the Plan specifies that the reduction of vulnerability in part requires a reliance on national capacities, and that only once national capacities are exhausted should the government request or accept international assistance.¹⁹⁰ Third, the Plan places the national disaster management agency Instituto Nacional de Gestão de Calamidades (INGC) under the Ministry of State Administration, as opposed to under the Ministry of Foreign Affairs as had previously been the case. This had facilitated the agency's coordination with international actors during and between disaster situations. The move therefore had a symbolic purpose in the context of institutional strengthening, as situating INGC under the MSA emphasizes that disaster management is a national priority, and is

nationally directed.¹⁹¹ Fourth, the Plan makes changes to the structure of the disaster management system, including the National Centers for Emergency Operations, which assume the role of coordinating all disaster responses.¹⁹²

The Master Plan has been amended through two decrees in 2007 and 2008, which in part created a new function for INGC of coordinating post-disaster reconstruction. It is clear that this evolution has been a function of a vision for a strengthened disaster management mandate for the government, and strengthened government institutions to achieve INGC's full mandate. As one informant explained, "So more things have been integrated into INGC, trying to cover the whole cycle— first response, then prevention, then mitigation and finally reconstruction. It shows how the country was thinking and rethinking (its strategy), basically based on experience with disasters."¹⁹³

Beyond disaster management in general, the government has paid direct attention to DRR. This has been manifested for example in the government's naming DRR as its first priority in the national development plan, and the creation of a national strategy for Climate Change Adaptation and mitigation. The next Master Plan for disaster management will likely consider CCA.¹⁹⁴ This shows a clear understanding of the links between risk reduction and the ability to mitigate the effects of disaster.

Although much of the leadership to strengthen national strategies and institutions comes from the government's motivation, international actors have been encouraging, and have been invited to make strong contributions to the concept and substance of these policy definitions and changes. This is the result of, among other factors, strong inter-institutional relationships, and the incorporation of international actors into such bodies as the Technical Council for Disaster Management, which have operational as well as political/regulatory functions.¹⁹⁵

D. The National Disaster Management System

The government created an institutional framework in its 2006 Master Plan to be able to assume a leading and proactive role in the whole disaster management cycle. This was based principally on strengthening three disaster-related national organs. The first is the National Board for the Coordination of Disaster Management (CCGC), an oversight body that ensures effective coordination and makes decisions on proposals from the technical bodies. The second organ is the Technical Council for Disaster Management (CTGC), which incorporates the national directors of all government ministries, as well as representatives of civil society and international humanitarian actor “technical partners.” The Council is divided into seven working groups on issues of disaster preparedness, mitigation, and response. Under the coordination of the INGC, it is responsible for technical discussion and policy proposals, for example on the creation of an early warning system, which are then submitted to the CCGC for approval.¹⁹⁶ The third body is the INGC itself. INGC coordinates the Centers for National Emergency Operations (CENOE), whose responsibility it is to coordinate emergency response. It has a main national office and sub-national representation and coordinates the body in charge of running and coordinating disaster relief, as well as four technical groups, which incorporate representatives of line ministries and heads of the Humanitarian Country Team’s cluster counterparts.¹⁹⁷

1. How Has the National System Been Strengthened?

Although informants identified gaps in the institution’s strength, the INGC seems to be well respected as a strong institution.¹⁹⁸ Its strengthening seems to be the result of four factors in particular. The first is the operational strengths of the disaster framework. The national CENOE and its sub-national mirrors have developed a strong working mechanism that is on call throughout the year, and operative 24 hours a day during disaster situations. These coordinating bodies,

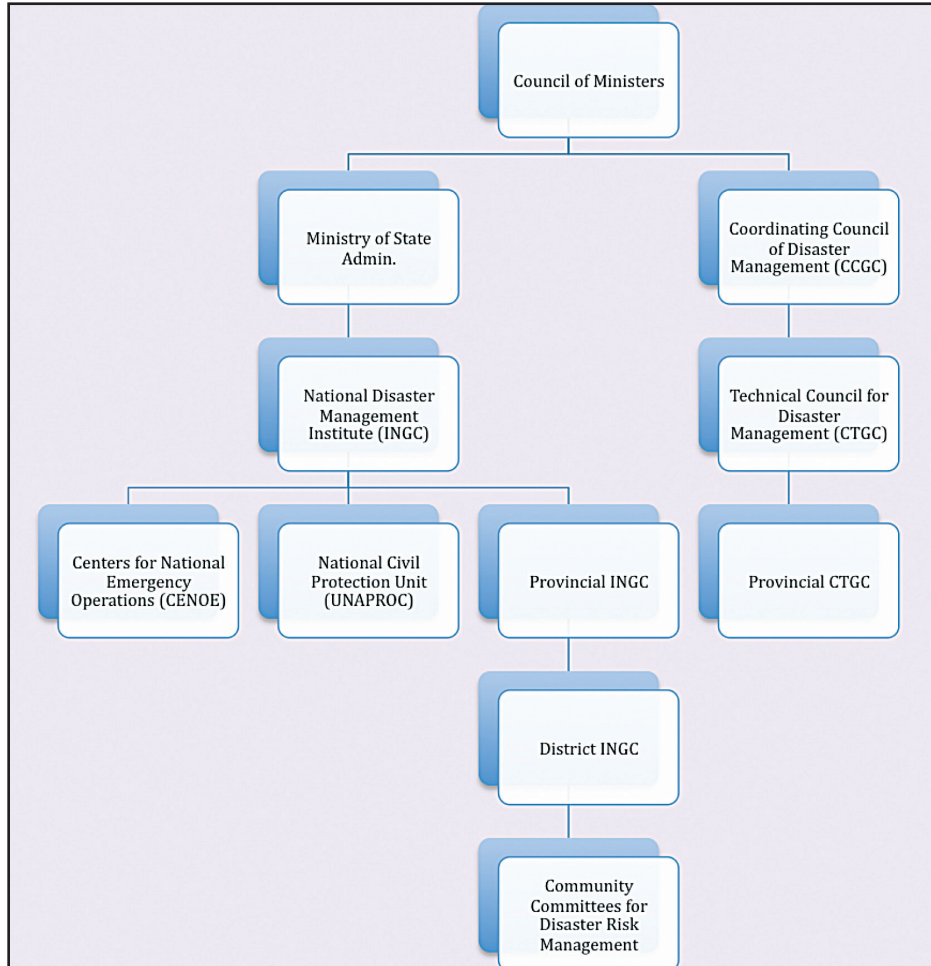
whose model is based on a similar system in Guatemala, and the national and international actors that meet with it, have developed a fairly fluid system to manage disaster responses.¹⁹⁹ Second, INGC has greatly improved its understanding of risks throughout the country and the mechanisms to communicate early warnings. The flood early warning system, for example, receives information from field stations managed by the National Water Authority and from the National Meteorological Office and communities.²⁰⁰

Third, contingency plans allow for fairly effective management of evacuation, response, and recovery assistance for disaster-affected communities. INGC leads the composition of contingency plans every year, prior to the January to April flood season, based on updated weather forecasts. This has contributed to more effective operations and fewer casualties. These responses in turn are supported by regular simulation exercises.²⁰¹ Fourth, INGC has benefitted from the continual training of its staff, and direct human resources support provided through secondment by international actors.²⁰² This has contributed to the strengthening of the human resources and the institution’s operating capacity, which has continually been challenged by problems of staff turnover and a minimal supply of staff with strong educational backgrounds in related matters.

E. Sub-National Disaster Management System

The Master Plan establishes that in each province INGC should have an office and a Technical Council for Disaster Management such as exists at the national level. Each district in turn should have either an INGC office and/or an emergency committee that incorporates government officials from different line ministries, as well as members of the community. These bodies are responsible for creating and ensuring the operationalization of disaster management plans, including prevention, mitigation, and response and recovery elements.²⁰³

Sub-National Disaster Management System (as referenced in this section)



In practice, provincial and district INGC offices, as well as disaster management committees, have very low operating capacity. This seems attributable to low funding, insufficient human resources strengthening, and poor coordination between local representations of line ministries on disaster management issues. This reality affects not just the extent and quality of their prevention and mitigation work, but also their effectiveness during disasters when they are the responsible government agencies for disaster management.²⁰⁴

At the community level, Committees for Disaster Risk Management exist to manage local operations. Committees consist of community leaders and members, and other community groups that are present. They assume the responsibility of ensuring that their local population has disaster management plans and

equipment, managing local early warning systems, and being the first to mobilize their community in case of disaster.

1. How Has the Sub-National System Been Strengthened?

It appears that the quality of the provincial and district INGC offices’ human and operational capacity depends largely on three elements. The first element is the extent to which the offices receive training from the national INGC. Informants shared that while INGC does conduct training for the staff of these offices, the training is insufficient in extent and frequency. This problem is further exacerbated by repeated turnover in office staff, which causes national INGC to apparently not be able to keep its sub-national staff trained. The second element is the extent to which local members of the Technical Council are willing to complete

disaster management plans, and are able to secure funding from line ministries for disaster management activities. A lack of awareness of the importance of implementing and budgeting for these projects, and insufficient earmarked funding, contribute to this being a problem. It appears that the better-prepared districts are those that are more regularly affected by natural disasters. Third, and particularly for the community disaster management committees, a greater degree of local community interest in and ownership of the process may contribute to the success of local organizing efforts. Sometimes this local initiative is encouraged or complemented by international actors, and INGC training of the committees also contributes, although the latter appears to be irregular.²⁰⁵ In sum, it is clear that the creation and effective functioning of the provincial, district, and community structures depends highly on both the availability and easy access to national support, local initiative, and complementary contributions by other actors such as national civil society groups and international humanitarian actors.

F. Line Ministries Involved with Disaster Management

The line ministries of the government of Mozambique are directly integrated into the disaster management system through the Technical Council for Disaster Management. This ensures their participation in simulations, contingency plans, and disaster response and recovery, and to a varying degree the ministries have built systems in this regard. The National Water Authority and the National Meteorological Office are two examples of agencies that have developed strengths in their ability to contribute to an effective and proactive system.^{206 207} It is important to note that this is a process however, and that it has experienced advances as well as setbacks. The Ministry of Health was also referenced in this regard; for example, in the sense that it has recently strengthened its laboratory system to test for and identify cholera, with support from international actors. Nonetheless, just as strengths like these are steps toward full capacity strengthening, weaknesses also exist in the national system that counteract some strengths. In the case of the

Ministry of Health, the impact of its ability to test for cholera is undermined by the politicization of cholera outbreaks. This prevents the government from acknowledging them and responding to them efficiently and effectively.²⁰⁸

There have been strong advances in the area of DRR and mitigation, although informants seemed to consistently think that line ministries have not sufficiently incorporated this into their mandates. The INGC has encouraged all ministries to incorporate DRR into their programs; however, there is no coordination or oversight mechanism. The government has integrated a system to encourage this, which is led by the Ministry of Planning and Development. Among its other functions, the Ministry is charged with ensuring that the different line ministries incorporate disaster risk management into their annual operating plans and budgets. This oversight and support mechanism, and the training that it and the Ministry of Environment provide on how to incorporate disaster risk management and CCA considerations into their plans, is supplementary to how each ministry should operate in order to consider disaster risk management. Thus, for example, the Ministry of Agriculture should proactively consider the impacts of climate change on specific regions, and assist farmers with adapting to changes through new cultivation methods. These processes of incorporating disaster management into line ministries' work will occur over a longer term, because they require significant technical tools and groundwork, awareness of the importance of change, and oversight mechanisms.²⁰⁹

G. Gaps in the National Disaster Management System

Mozambique has made significant progress in strengthening its institutional and operational disaster management system. While informants emphasized the country's achievements, particularly in light of its relatively recent history of armed conflict, they identified four main gaps that remain a hindrance to the system's full effectiveness.

The first gap is the fact that it allows politics to be considered in its disaster management

MOZAMBIQUE

operations. This seems to take shape in three principal ways. The first is that the INGC has apparently on different occasions decreased or increased the official tally of people affected by a disaster, and therefore requiring humanitarian assistance, according to its political agenda in the affected region. The INGC has in fact refused to conduct needs assessments in disaster-affected areas at times, or to respect the assessments conducted by provincial INGCs and international actors.²¹⁰ The second is that the government cannot be relied upon to use donated funds and assistance materials appropriately, as on occasion it has appeared to instead channel them to political supporters or otherwise not be able to account for them. The third is that the government is resistant to identifying certain humanitarian crises, such as cholera outbreaks or food security crises. Cholera outbreaks are particularly sensitive, as the government is resistant to diagnosing them because it apparently perceives them to be harmful to the country's domestic and international reputation. Informants explained to me that although the government responds effectively once it recognizes an outbreak, it can take a long process of sensitive diplomacy by international actors to attain government agreement to recognize the crisis.²¹¹ This creates a clear gap in the disaster management system, as it suggests that the government does not consistently operate on the basis of humanitarian principles, but instead allows political interests to interfere.

The second gap is that, as referenced previously, the government's sub-national disaster management capacity is inconsistent, and sometimes weak to the point of being debilitating. This was explained for example in terms of a lack of professionalism, a lack of proactivity to assess real needs in disaster situations, and a lack of training that sometimes leads to national INGC scrambling to train sub-national staff *during* disasters. Given the substantial responsibility that the national system assigns to local actors, this weakness creates a large gap in the comprehensiveness of the government's ability to effectively manage disasters.

The third gap is that the government's disaster response mechanism is inconsistent in its promptness and comprehensiveness. In spite of having a strong contingency plan, informants explained to me that the government consistently has problems with the fluidity of its actions. For example, evacuations might go well, but the accommodation center might not have the materials it needs, and the government is delayed in requesting specific support from other actors; which in turn impacts the satisfaction of the affected population's needs. Another example of this is that the government does not use all of the resources at its disposal; it has on occasion refused to use equipment and materials in regional CENOE warehouses that international actors had donated to them. It is apparently unclear why these gaps occur, but they nonetheless continue to impact the government's overall effectiveness.²¹²

The fourth gap is the government's failure to consider risk mitigation efforts in a comprehensive manner. In addition to an identified dearth of DRR efforts, this came up primarily in discussion of the government's program to resettle population from flood-prone areas into safely habitable areas. While this resettlement concept is strong, and in some ways it is a successful government practice, the government does not consistently carry it out in a participatory fashion. In fact, it may use coercion to stimulate resettlement. This occurs when the INGC cuts off humanitarian assistance and only offers to support the disaster-affected population in another location. The areas to which communities are resettled also pose protection challenges. They do not consistently have health and education facilities, and they may be far from the residents' crop fields and thus cause complications in the securing of livelihoods.²¹³ Informants were of the opinion that these and other problems could be addressed if resettlement was, as it increasingly is, addressed in a comprehensive fashion with inter-ministerial coordination, community consultation and participation, and the support of international actors.

H. National Ownership of Disaster Management System and Acceptance of Support from International Actors

The Mozambican government stands firmly behind its responsibility to coordinate disaster management in the country. Having learned from its past failures to implement and to coordinate, the country has prioritized national capacity strengthening and control of the disaster management system. The INGC understands the risks the country faces annually and ramps up its system for preparedness and response before each rainy season in order to be best prepared operationally. The government remains sensitive to maintaining an image of control over disasters, which it manages in part through its declarations of disaster, and in part through coordination mechanisms. While it has an official three-level disaster alert system, with a red alert signifying a national disaster and allowing for an international appeal, it also has an unofficial “institutional red alert” status, which puts the government into action without putting it into emergency.²¹⁴ In the context of disasters, whether at red or institutional red alert, or at lower levels of alert specific to certain regions, the INGC generally allows—and indeed in many cases needs—the support of international actors to supplement everything from assessments, to logistics, equipment, and financing. These needs are even greater at local levels, where INGC offices are under-resourced and under-trained. At times, the INGC wants and allows international actors to act directly, whereas other times it just requests humanitarian assistance materials with the intention of distributing them through national mechanisms. The latter can be problematic, as international actors are still not fully confident in the INGC’s appropriate use of in-kind donations.²¹⁵

Outside of disaster situations, the government appears to generally welcome international actors’ contributions to the disaster management system through trainings, technical capacity strengthening, strengthening of sub-national INGC offices and disaster committees, and community work, among others. This seems to be a function of its real need and desire for support, and its somewhat limited human and

financial resources to do this by itself. Government informants consistently recognized the importance of international actors’ contribution to the strengthening of the disaster management system, and understand this current and historical contribution.²¹⁶ ■

VII. APPENDIX 3: CAPACITY STRENGTHENING OF THE NATURAL DISASTER MANAGEMENT SYSTEM OF THE PHILIPPINES

Section Contents

A. Natural Disaster Risk Profile	66
B. Foundations of the National Capacity Strengthening Process	67
C. Progress in Legislation and Policy	69
D. The National Disaster Management System	69
1. How Has the National System Been Strengthened?	70
E. Sub-National Disaster Management System	70
1. How Has the Sub-National System Been Strengthened?	71
F. Line Ministries Involved with Disaster Management	73
G. Gaps in the National Disaster Management System	73
H. National Ownership of Disaster Management System and Acceptance of Support from International Actors	75

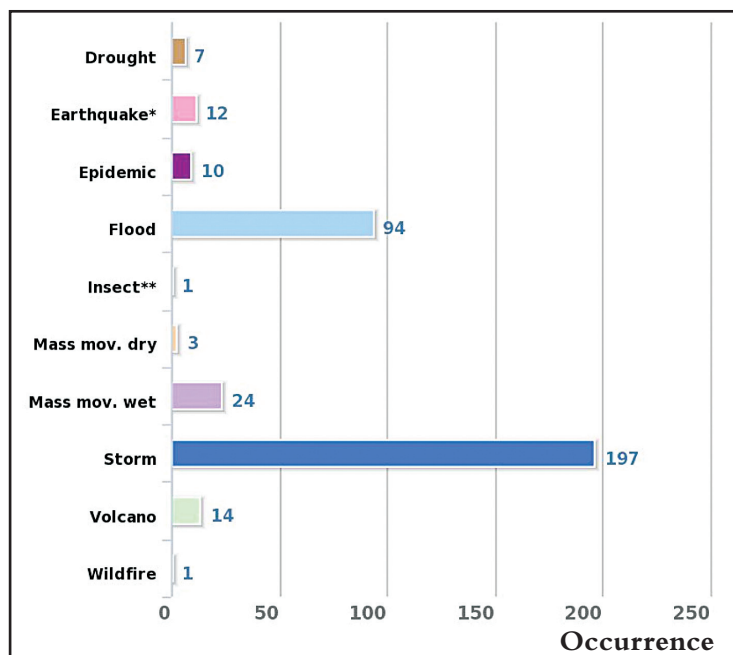
A. Natural Disaster Risk Profile

The Philippines is historically prone to multiple natural disasters, including storms (particularly typhoons), floods, earthquakes, drought, and volcanic eruptions. The country consists of 7,000 islands, and is situated in the Pacific Ring of Fire and the Pacific typhoon belt.²¹⁷ The World Risk Index ranks the Philippines as the third-most risk prone in the world, and the third-most exposed to natural hazards.²¹⁸ Climate change

has caused an increased rate and intensity of disasters, and has led to portions of the country that had not been as prone as others in the past to be affected and largely caught by surprise.²¹⁹

Storms have been the most frequent natural disasters in recent years, particularly typhoons. These storms cause flooding, landslides, crop damage, and other destruction. It is telling that nine of ten worst disasters between 1900 and 2013, in terms of population affected, were

The following chart illustrates the frequency of natural disaster occurrence between 1980 and 2010:



Source: Preventionweb²²⁰
 Author's note: Preventionweb does not explain this footnote

*: Including tsunami

storms.²²¹ Poor and marginalized communities bear the brunt of the effects of these storms. The chart below gives a sense of the effects of natural

disasters on the population and on the country's economy.

Natural Disasters from 1980–2010

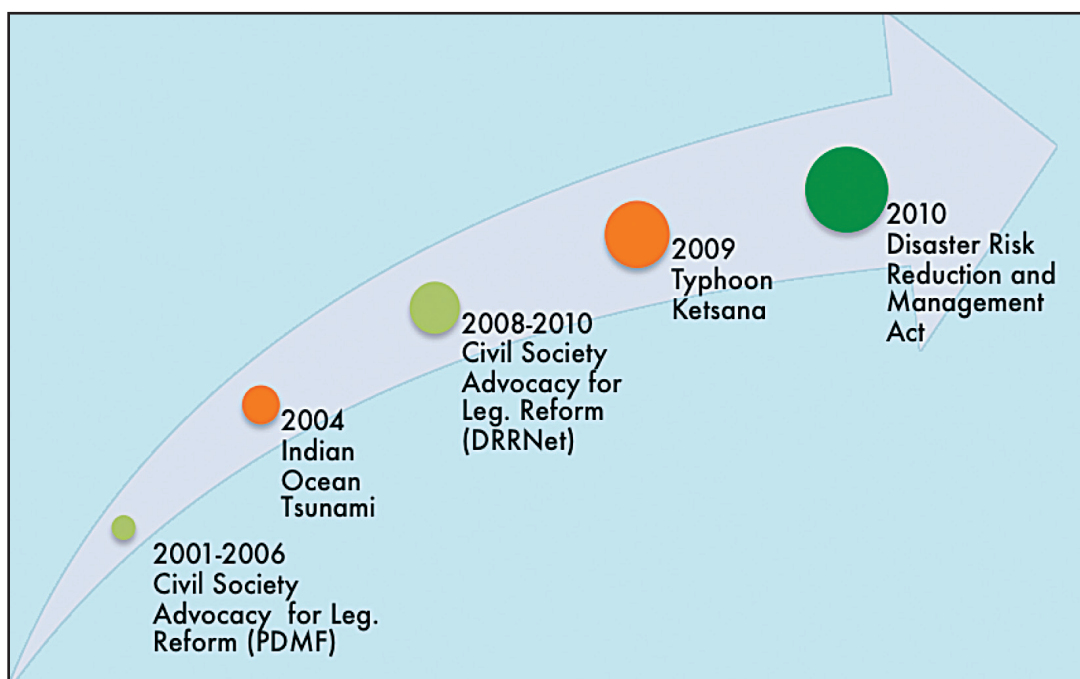
Overview

No. of events:	363
No. of people killed:	32,956
Average killed per year:	1,063
No. of people affected:	116,212,416
Average affected per year:	3,748,788
Economic damage (US\$ X 1,000):	7,417,145
Economic damage per year (US\$ X 1,000):	239,263

Source: Preventionweb²²²

B. Foundations of the National Capacity Strengthening Process

Key Events in National Capacity Strengthening History



For many years, the Philippines had a disaster management legal framework that emphasized disaster preparedness and response rather than the whole disaster management cycle. Prior to the passage of the current DRR and Management (DRRM) Act of 2010, the

existing disaster management legal tool had been in effect since 1978. Presidential Decree 1566, signed by President Ferdinand Marcos, had created a multi-sectoral Natural Disaster Coordinating Council, and regional, provincial, and municipal councils below

PHILIPPINES

that. These councils had the responsibility of coordinating disaster preparation, response, and recovery.²²³ The Office of Civil Defense (OCD) was the government agency that worked most closely in disaster situations. Structured within the Office of National Defense, the OCD was established prior to World War II.²²⁴

Until the late 2000s, disaster response was the primary disaster management practice of the government. Frustrated by this limited vision of what was necessary to help the country and its population be able to live with natural disasters, from 2001 to 2006 a network of 18 national NGOs called the Philippines Disaster Management Forum advocated for the passage of a national law that would consider the full disaster management cycle, with an emphasis on community-based disaster management. The Forum, whose activities were funded by the international NGO Oxfam, held public awareness and discussion events, and advocated before legislature, but bills did not progress. As former members of the Forum explained to me, the issue failed to gain traction because there was simply not enough support from the legislature or the president. The Forum ceased to function in 2006, after deciding that they would have to wait for a time when their case would fall on more receptive ears.²²⁵

The Philippines continued throughout this time to be affected by natural disasters of great intensity. In 2004, the country was hit by a series of typhoons, and by the Indian Ocean tsunami. International support for disaster response and recovery increased in the wake of these disasters, and national NGOs and international actors intensified their efforts to strengthen community-level preparedness and resilience. In spite of this increased local momentum, national government interest did not change regarding the strengthening of disaster management efforts and policy. Some local government-level changes did occur, particularly when NGOs were able to identify and work with interested local authority figures, but this was by far the exception.²²⁶

Even in the context of the Hyogo Framework for Action, and regional discussion in preparation of the ASEAN Agreement on Disaster Management and Emergency Response, it was not until 2008, when another civil society advocacy group formed to push for reform in the national disaster management system, that significant momentum picked up toward reforming national policy. That year, the advocacy network DRRNet was formed. DRRNet, which consisted of national NGOs and academic institutions, and was supported by international actors on a technical basis, commenced a well-organized push to prepare and advocate for the passage of a disaster management bill. Members of the network prepared a draft of the law, met with legislators, and participated in committees to prepare the legislation. Ultimately DRRNet was able to identify legislators who were interested in supporting the bill, which contributed to building political support for the process.²²⁷

In September 2009, a typhoon that hit the Philippines interacted with a monsoon and dropped a record amount of rain on Manila. Typhoon Ketsana dropped 13.43 inches of rain, the equivalent of one normal month's worth of rain, in just six hours.²²⁸ The city was caught unprepared, and was overwhelmed by flooding. Having a disaster of such a scale hit the capital city brought disaster management to the national political forefront. Lawmakers were doubly hit by the disaster; the rains affected them directly in the capital city, and more significantly it caused the population to blame the government for poor disaster management. Disaster management quickly became a political rallying point as it never had been before, and was a premier issue prior to the early 2010 presidential elections. Ultimately, informants explained, it was this storm that complemented civil society actors' efforts to provide the final momentum for passage of the disaster management law in 2010.²²⁹

The Disaster Risk Reduction and Management Act of 2010 incorporates the priorities of the Hyogo Framework for Action

and strengthens the government's commitment to comprehensive disaster management. The Act promotes strengthened government DRR and management institutions, a coordinated multi-sectoral and community-based approach, and empowers sub-national government and civil society actors as partners in DRR. The National Disaster Risk Reduction and Management Council has the responsibility of overseeing the national system, and the Act revises its composition to newly include other government actors as well as representatives of civil society and the private sector. These Councils and their responsibilities for disaster management are replicated down to regional, provincial, city, municipal, and community levels. The Act establishes national and local funding mechanisms, to be applied to disaster response as well as preparedness activities.

The DRRM Act gave a mandate for a deepened and increasingly proactive disaster management policy in the Philippines. Although this was not the beginning of DRR work in the country, as government and non-government actors had already been working on CCA and DRR, the Act formalized a policy that must be implemented at all levels. It gave a way for the creation of policies and tools to ensure comprehensive efforts for disaster management, which the country had long needed but was slow to develop.

C. Progress in Legislation and Policy

Although no further disaster management-specific legislation has been passed since the DRRM Act of 2010, important policies have been adopted regarding Climate Change Adaptation that have interlinking elements with DRR. Climate change has already had tangible effects on storms, weather patterns, and agricultural practices in the Philippines. Given this, the government, with support of international actors, has been proactive about CCA policies and practice.²³⁰

The Climate Change Act of 2009 mainstreamed CCA into government policies, and created a Climate Change Commission

chaired by the President. It mandates the creation of: 1) a National Framework Strategy for Climate Change; 2) a National Climate Change Adaptation Plan; and 3) Local Climate Change Adaptation Plans. Thus, all levels of the country are required to consider and plan for CCA, and ensure that it is considered in development plans and ministerial activities. Another important policy is reflected in the National Climate Action Plan for 2011–2028. This establishes seven strategic priorities, which include food security, water sufficiency, and environmental and ecological stability; and recommends vulnerability assessments as one of the priority actions for 2011–2016.²³¹

While these policies are formally CCA policies, in effect they contribute to disaster preparedness, risk mitigation, and resilience strengthening. These plans and other climate change initiatives have received priority status from the president, which allows them special funding. This has been matched by significant government, civil society, and international actor commitment; and has led to a great deal of progress toward understanding, planning for, and mitigating risks.²³²

D. The National Disaster Management System

The government of the Philippines has fully assumed the responsibility for disaster response, under coordination of the National Disaster Risk Reduction and Management Council (NDRRMC). An Operations Center, managed by the Office of Civil Defense, monitors hazards full time and swings into full operational mode in disaster situations.²³³ The government leads the clusters along with international counterparts, and the Office of Civil Defense has strengthened its cluster and Incident Command System coordination.²³⁴ Although informants pointed to gaps in government disaster management functions, particularly in the consistency and comprehensiveness of disaster response, they generally indicated that the national disaster response mechanisms are strong and function well.²³⁵

PHILIPPINES

1. *How Has the National System Been Strengthened?*

Improvements in the national system appear to be a product of trainings and simulations, a strong Operations Center that monitors risks and ensures that responses flow smoothly, and regular disaster-context “practice.” Government officials referenced the helpfulness of assessment reports by the United Nations Disaster Assessment and Coordination (UNDAC) system, in helping it understand gaps in specific response operations and how these might reflect larger gaps.²³⁶ The point was made that there are so many disasters in the Philippines that the national actors tend to move from disaster to disaster, and do not consistently have an opportunity to improve and strengthen between disasters. Thus, changes take a long time to institutionalize, and are challenged by debilitating setbacks such as turnover in staffing. The government is in the process of setting up national and regional training institutes on disaster risk reduction and management, with the support particularly of national civil society actors. These institutes, which are called for in the DRRM Act, will serve to provide standardized training to government officials and others involved in the disaster management system. They will also contribute to ensuring that the training is more comprehensive than it has been historically, as it will include modules such as community-based DRR methodology.²³⁷

The NDRRMC has oversight responsibility for DRR, which is conducted largely by the line ministries that sit on the Council. NDRRMC leadership understands that progress in disaster management and risk reduction systems will come from the top through strategic and programmatic elements, as line ministries incorporate DRR and management into their programs and the national and local development processes; as well as from the local level where the community and government must understand and address risks, and develop strong disaster preparedness mechanisms.²³⁸

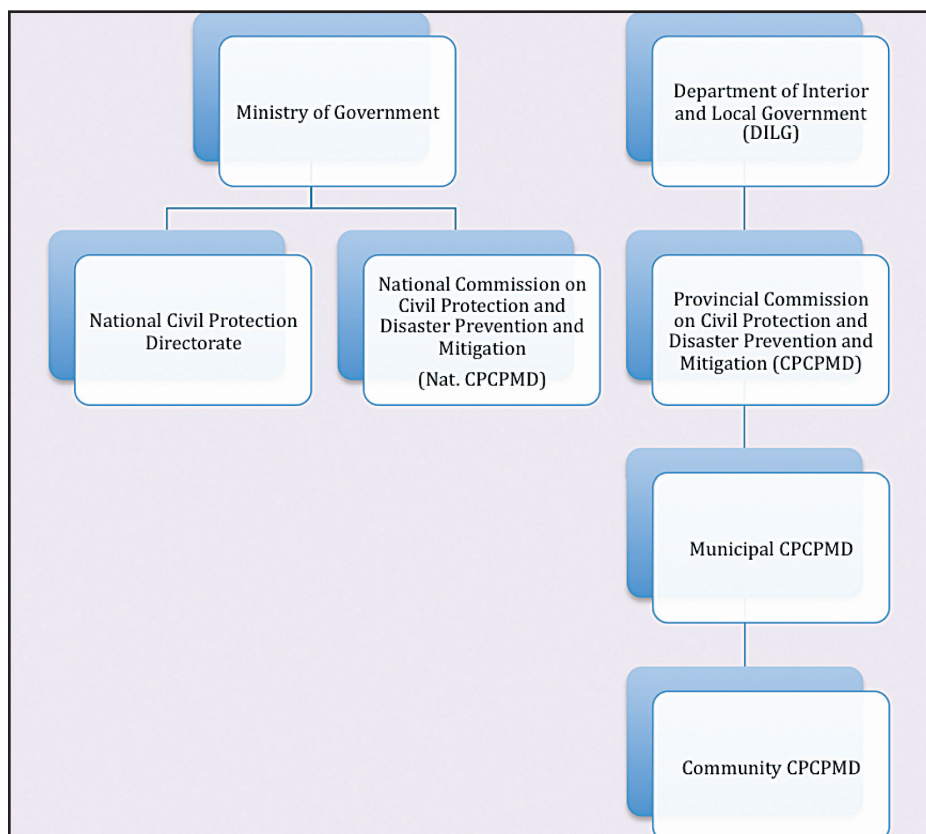
E. **Sub-National Disaster Management System**

The DRRM Act establishes Local Councils at the regional, provincial, city, municipal, and community levels that replicate the National Council’s composition and responsibilities. The Local Councils are responsible for disaster management coordination. The Act also establishes Local Disaster Risk Reduction and Management Offices (LDRRMO), which are charged with performing the technical functions of DRR and management. The Offices’ responsibilities include conducting risk assessments and mapping, disaster management trainings, establishing and maintaining early warning and communication systems, and formulating a disaster management plan. The Offices are also responsible for managing disaster responses at their relevant level, in coordination with the Councils.

These Councils and Offices play a very important role, as they are the frontline actors for disaster management policy and practice throughout the country. Although they are mandated by the national law, the system of decentralization places them under the supervision of the Department of Interior and Local Government. This means that the National Disaster Risk Reduction and Management Council cannot supervise their establishment and function. In practice, there seems to be a lack of accountability within the national disaster management architecture that leaves room for local authorities to not fulfill their responsibilities, or to not do so in a sufficiently comprehensive and effective manner.²³⁹

As explained by a local government official, approximately 90% of the country has established these Councils and Offices.²⁴⁰ Nonetheless, many informants explained that in addition to the gap that exists in the extent of Council and Office creation, there are significant gaps in the strength and continuity of their operations. These gaps include the extent to which the Councils function in practice, and the minimal extent to which they implement disaster management

Sub-National Disaster Management System (as referenced in this section)



activities. Weaknesses also persist in the accuracy and effectiveness of their technical mechanisms such as risk assessments, hazard maps, early warning systems, and disaster management plans; and their operational effectiveness during and following disaster situations.²⁴¹

1. How Has the Sub-National System Been Strengthened?

The extent to which the Councils and Offices have been established and are functioning as effectively as the Law intends them to seems to depend on at least four principal factors. The first factor seems to be local political leaders' degree of initiative in establishing and maintaining an effective disaster management system. The commitment and initiative of the leaders can make the difference between having the Council and Office or not, and the extent to which it is maintained as functional and effective. The second factor is the local understanding of the

importance of disaster management. Areas that have not historically been affected by disasters are less likely to proactively address disaster management preventively, a fact that can be particularly dangerous in the context of climate change. Informants explained that an example of this occurred in December 2012, when Typhoon Bopha battered an area of the Mindanao region that had historically only been hit by typhoons on sparse cycles. The region had not taken significant preparedness and risk reduction measures, and the government and population were caught insufficiently prepared for the typhoon.²⁴²

The third factor is funding. Local governments are often not able to sufficiently finance LDRRMO staff, so they either have too few staff or the staff members share functions with other local government offices. The DRRM Act requires the establishment of Local Disaster Risk

PHILIPPINES

Reduction and Management Funds, which should consist of at least 5% of the local government's revenue. The Funds are the principal source for mitigation and response mechanisms. For local areas that have high revenue, are practiced at managing DRRM resources, and/or have supplemental financial support from national or international actors, this funding mechanism seems to suffice. However, there is no differential funding mechanism for areas that have lower revenue. These are typically the poorest and most marginalized areas, and often the most vulnerable in terms of exposure to natural disasters. In the absence of other funding support, this system thus sets them up to be under-resourced for the functions of the Council and the Office.²⁴³

The fourth factor is training and support for the establishment and function of the Councils and Offices, and the tasks that they are mandated to perform. Although some communities, for example, have had their own disaster management mechanisms for a long time, generally the community and local government actors need at least some support in establishing and performing the functions of the Councils and Offices. The Department of Interior and Local Government has training programs for local authorities at a central and local base, including on how to establish funding mechanisms for the Councils and Offices.²⁴⁴ In practice, however, it seems that this system is insufficiently proactive, and not well enough resourced to respond to all of the local support needs. Other support mechanisms that have contributed to a strengthening of local capacity include fora and other means of experience and best-practice sharing between local Councils and Offices, organized by government as well as by international actors. International actors have made strong contributions to supporting the establishment and technical functions of these offices. These include training on DRRM theory and practice, as well as technical functions such as hazard mapping and early warning systems, and financial support for risk reduction and response mechanisms.²⁴⁵

The incorporation of DRR into local development plans is an important function of

the DRRM Councils and Offices. The National Economic Development Authority (NEDA), with the support of UNDP, has created guidelines for the incorporation of DRR into development plans. NEDA and other national and international actors have been supporting this process through trainings and technical support such as assistance in creating risk maps and land use plans according to hazards and climate change predictions. In practice, this has progressed slowly, and primarily at the provincial level and at the local level, where authorities are particularly committed and proactive in this regard. The extent to which the government is proactive, and the degree of national and international actors' support, are primary determining factors of the pace at which this is conducted. Nonetheless, positive results are being achieved.²⁴⁶

Disaster response capacity at the local level is inconsistent in its extent and quality. Key actors indicated that although there are some local areas in which response mechanisms led by the Office of Civil Defense or other local disaster units are strong, in the majority these are hindered by insufficient preparedness and poor coordination. The National Council, sub-national Civil Defense offices, and other national and international actors have addressed this lagging capacity through technical and material capacity strengthening efforts. Local capacity seems to depend on the extent of this technical assistance, the interest of the local authorities and community in incorporating disaster management mechanisms, and the degree to which the local population and authorities are conscious of the risks that their area faces.²⁴⁷

It is important to note that in the context of inconsistent government support for local disaster management systems strengthening throughout the country, community proactivity has been important to ensuring that populations are prepared to manage disasters. Independently, and in some cases with the support of other national civil society and international actors, many communities have organized to fill gaps in government structures and services. Community-based organizations address issues such as conducting community vulnerability assessments, crafting disaster management plans,

ensuring that populations have the appropriate equipment to respond to emergency situations, and contributing to evacuation and search and rescue efforts. In some communities, these actors are better equipped and organized than are local authorities. To this end, many of the organizations conduct trainings for government actors. These organizations, part of a rich civil society network, play an important role in the strengthening of the national disaster management system as the government continues to strengthen its sub-national capacity.²⁴⁸

F. Line Ministries Involved with Disaster Management

The National Disaster Risk Reduction and Management Council incorporates a number of line ministries that have responsibilities for disaster management. These responsibilities relate to preparedness, response, and recovery, as well as DRR and CCA. This approach is replicated at the sub-national Council level through representatives of government agencies and officials assigned to represent specific sectors. The ministries appear to have generally strengthened their capacity to participate in disaster response, although this is an ongoing task. Training and technical support are delivered through national training mechanisms, and with the support of international actors through the cluster system.²⁴⁹

A number of ministries have included or mainstreamed DRR and resilience strengthening in their programs. These are formulated both as DRR and as CCA programs. Two of the ministries that have been particularly proactive in incorporating such programming are the National Economic Development Authority (NEDA) and the Department of Agriculture.²⁵⁰ NEDA, in association with other government ministries, such as Weather, Mines and Geology, and Vulcanology and Seismology that conduct mapping, and with support from UNDP in the development of the model and technical skills, has been updating land use and contingency plans to consider DRR relative to existing/traditional hazards as well as the expected effects of climate change. This had previously been conducted in the mid-2000s to consider known risks such as earthquakes and volcanic activity,

but the contemporary work also considers the grounding of climate change predictions that are specific to the different regions of the country. The planning has already been completed for the seventeen regions of the Philippines and will subsequently be completed for the provinces and municipalities. This technical information, along with tools such as a reference guide for national and sub-national planning technicians on how to mainstream DRR (and subsequently CCA as well) into development planning, has provided the government with tools to consider DRR comprehensively throughout its development process. This process has yet to gain full traction across the line ministries and local authorities that could use the information to adjust their policies and proactively mainstream risk reduction, but the fact that the tools are being developed and progressively implemented is indicative of the overall commitment to the purpose.²⁵¹

Further, the Department of Agriculture has prioritized mainstreaming CCA throughout its programs. This has taken a number of forms, including ensuring that it has a buffer quantity of seed in case of disasters, developing a weather-based insurance program, and developing flood- and saline-resistant seed strains. It has also been working with farmers to improve their understanding of changing weather patterns and to identify strategic cultivation zones that are sensitive to the current and future effects of climate change. The Department has partnered with a number of international actors in this regard, such as the International Rice Research Institute and national and international actors that work at a local level with farmers and their communities. Given the country's high dependence on agriculture and an apparent dearth of other national or international actors' work to address resilience strengthening in the livelihoods area, the Department of Agriculture's work is particularly important to resilience strengthening in the context of DRR.²⁵²

G. Gaps in the National Disaster Management System

While indeed informants shared their overall impression that the Philippines has achieved a great deal in strengthening its disaster

PHILIPPINES

management system, they were also able to identify areas that need to be further strengthened. The first main gap that informants consistently identified is the weakness of the local DRRM Councils and Offices. As explained, this comes about for a number of reasons that may be separated into problems of initiative on behalf of local officials, and of structure, such as financial limitations and insufficient training and technical resources. As explained, the Department of Interior and Local Government (hereafter DILG) has the responsibility of providing training and support to local government in their processes of establishing and operating Councils and Offices. Informants expressed frustration that DILG does not deploy sufficient resources to the local areas and is not as involved in strengthening systems as it could and should be. This is largely a problem of funding, as DILG lacks funds to provide comprehensive training and technical support to local officials; and, particularly in lower income areas, local governments frequently lack sufficient resources to complement DILG efforts. Although it does not comprehensively represent the operational practice of the DILG, an informant shared his frustration with the limitation:

(DILG is) not bad, and the technical training is not bad, but there are problems of budgeting. You can do the training, but if they do not have budget for it, then it is hard to establish evacuation plans, evacuation centers, etc. So we talk to the councilmen and say that they need to budget funds for this. DILG is serious about it, and we work with them, but their hands are tied because they have budget limitations.²⁵³

This problem is further aggravated by the structure of funding mechanisms that depend on local revenue for financing. Because low-income areas are among the most disaster prone in the country, they frequently have minimal resources relative to needs. Given the significant responsibility assigned to these government structures in the full cycle of disaster management, their weakness is ultimately quite dangerous and can have significant impact on the effectiveness of the humanitarian system.

The second main gap is inconsistency in the government's response and recovery

mechanisms. Just as there are geographic areas of the country that are well practiced in disaster response because they have experienced repeated natural disasters historically, in others the community and the government agencies are not as experienced and therefore are not as practiced or well prepared. One element of this gap is the sub-national agencies' limited capacity to coordinate responses, particularly in the context of cluster co-leadership. Another element is the limited extent to which shelters are available and appropriately located, and sufficient humanitarian assistance stores are available to service the facilities. Finally, there is a lack of comprehensive consideration of protection needs, particularly in terms of differential needs of women and children. Key actors indicated that sexual and gender-based violence has been a problem in many disaster situations, and that authorities are generally unprepared and are insufficiently willing to address them.²⁵⁴

The third main gap is insufficient consideration of DRR in the country. One example of this lies in national and local government agencies' approach to disaster management planning. Rather than comprehensively considering local risk reduction needs, planning appears to focus largely on disaster response. As one informant explained, even where local disaster management councils have crafted disaster management plans, they are more reactive than preventive and protective in light of vulnerabilities:

(The) problem with plans is that they are so hazard focused, rather than vulnerability focused—so they focus on buying boats, search and rescue tools, etc. Don't really look at coping capacity, and household level preparedness. If you incorporate more vulnerability assessment in there, people would be able to cope better. So funds don't go toward that—housing, livelihoods, etc.—or even to community strengthening.²⁵⁵

A second example of this regards the resettlement of population that historically lives in disaster-prone areas, such as next to lakes that flood during typhoons. The government has attempted to relocate vulnerable populations, but the relocation destinations are not consistently appropriate for the livelihoods and other needs of the population. Furthermore, the affected

population does not receive sufficient livelihoods and other assistance in the destination. This shows shortsightedness, not just in the integrity of the relocation program, but also in the degree to which the program is participatory in considering alternatives to relocation such as the building of flood-resilient lakeside housing. A third example of this gap is the delineation of “no build” zones in disaster-prone areas. This approach both insufficiently considers enforcement of the policy, and insufficiently considers policies that could support alternatives that respond to the needs of the population. The fact that these areas are often choice locations for informal housing settlements indicates the need for DRR mainstreaming in the policies of other government agencies.²⁵⁶

H. National Ownership of Disaster Management System and Acceptance of Support from International Actors

The government of the Philippines understands the importance of effective and comprehensive disaster management, and its need to continue to deepen DRR as well as to improve disaster response and recovery. It is conscious of its ownership of and responsibility for the system, but is not so proud that it does not welcome support from international or national actors in its operations and in its capacity strengthening. Informants explained that the NDRRMC is willing to accept international support in disaster situations, and has built a relationship of trust with international humanitarian actors operating in the country that facilitates effective coordination in disaster situations. The government is hesitant to declare a state of disaster, apparently out of concern for its image of being able to manage the disaster, and does not generally ask for assistance from international actors. Nonetheless, it accepts assistance when it is offered.

Outside of disaster situations, the government is also willing to accept international assistance, as well as the support of national civil society actors, with its capacity strengthening efforts on DRR and disaster management. It seems that the government is fully conscious of its need to proactively approach capacity strengthening and program implementation, and that it welcomes technical assistance in this regard.²⁵⁷ ■

VIII. APPENDIX 4: CAPACITY STRENGTHENING OF THE NATURAL DISASTER MANAGEMENT SYSTEM OF INDONESIA

Section Contents	
A. Natural Disaster Risk Profile	76
B. Foundations of the National Capacity Strengthening Process	77
C. Progress in Legislation and Policy	79
D. The National Disaster Management System	79
1. How Has the National System Been Strengthened?	79
E. Sub-National Disaster Management System	80
1. How Has the Sub-National System Been Strengthened?	81
F. Line Ministries Involved with Disaster Management	82
G. Gaps in the National Disaster Management System	82
H. National Ownership of Disaster Management System and Acceptance of Support from International Actors	83

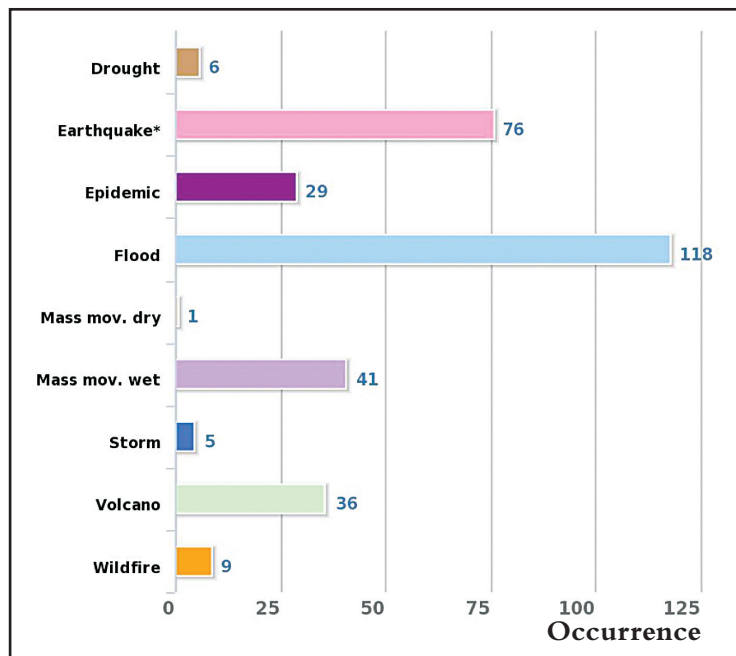
A. Natural Disaster Risk Profile

Indonesia is highly prone to a wide variety of natural disasters. Its location in the Pacific Ring of Fire, and its composition of more than 17,000 islands, make it particularly vulnerable to earthquakes and tsunamis. It also ranks highly on risk for drought, flood, landslides, and cyclones.²⁵⁸

Indonesia is the fourth-most populous country in the world, with over 251 million inhabitants.²⁶⁰ Population characteristics such as its high rate of

urbanization, dense living sectors, poverty, and income inequality, as well as environmental factors such as deforestation, contribute to a high portion of the population being exposed to disasters, and to its top worldwide rankings for both population and GDP exposure to risk.²⁶¹ Natural disasters are an important part of the country’s governance responsibility, as its population and GDP are continually vulnerable. The chart below gives a sense of the effects of natural disasters on the population and on the country’s economy.

The following chart illustrates the frequency of natural disaster occurrence between 1980 and 2010:



*: Including tsunami
Source: Preventionweb ²⁵⁹

Natural Disasters from 1980–2010

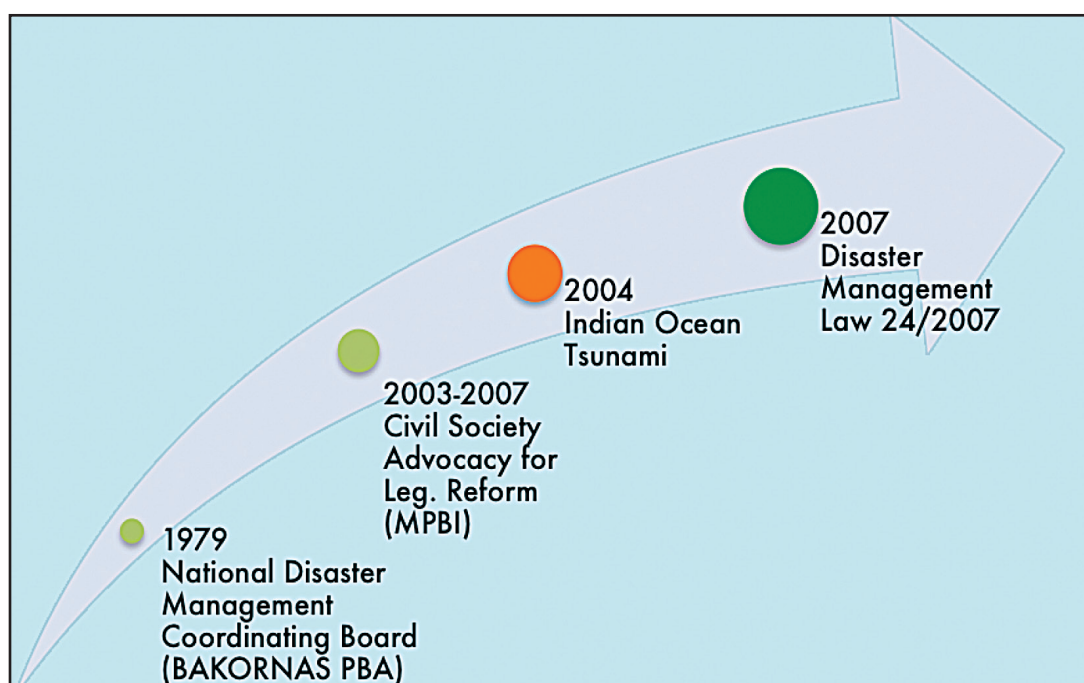
Overview

No. of events:	321
No. of people killed:	192,474
Average killed per year:	6,209
No. of people affected:	21,663,204
Average affected per year:	698,813
Economic damage (US\$ X 1,000):	23,601,677
Economic damage per year (US\$ X 1,000):	761,344

Source: Preventionweb²⁶²

B. Foundations of the National Capacity Strengthening Process

Key Events in National Capacity Strengthening History



Indonesia's government has had disaster management agencies since 1966; however, it was not until 2007 that the country enacted a disaster management law that comprehensively considered elements of disaster prevention, preparedness, and response, and a strengthened proactive mandate.²⁶³

In 1966, the Indonesian government created the Advisory Board of Natural Disaster Management, whose primary responsibility was national-level coordination and the provision of emergency relief. Subsequent changes created the National Disaster Management Coordinating Board (BAKORNAS PBA) in 1979, which, under the coordination of the Vice President, extended

INDONESIA

government disaster coordination to the provincial and district level, and included a new mandate for prevention, risk mitigation, and rehabilitation. In 1990, BAKORNAS PBA incorporated a mandate for man-made disasters, and provided for district-level disaster management units, and in 2001, the agency assumed a mandate for managing internally displaced populations and changed its name to BAKORNAS PBP.²⁶⁴

These changes in institutional structure and scope deepened the Indonesian disaster management system; however, in practice, BAKORNAS PBP focused primarily on response to disasters. This was a result of its structure, as beyond a weak permanent Secretariat, BAKORNAS PBP was composed of national and sub-national structures that emerged as ad hoc coordination mechanisms only in the context of disasters. In practice, BAKORNAS PBP was laden with problems. These included the fact that it did not have sufficient emergency response capacity, it had limited authority over ministries participating in the response, the distribution of emergency response roles was not clear, and coordination among national and international actors was poor.²⁶⁵

The December 2004 tsunami that hit Aceh caused 167,700 deaths, displaced more than half a million people, and had a great impact on residents' livelihoods.²⁶⁶ The tsunami caught BAKORNAS PBP unprepared to manage a disaster response of this magnitude. The government opened up to international agencies' participation in the response and recovery soon after the disaster, which allowed a large operational and resource response from the international community. However, this brought problems of its own.²⁶⁷ Not only was BAKORNAS PBP overwhelmed in its own response capacity, but also it could not manage coordination of the national and international actors that sought to contribute to the response, even though the UN was jointly coordinating. Poor coordination led to, among other problems, duplication and gaps in thematic and geographic coverage, and non-strategic use of funds.²⁶⁸ This was remedied somewhat with the creation in March 2005 of the Rehabilitation and Reconstruction Agency (BRR), which assumed management and coordination responsibility for

the response, and thus helped improve effectiveness of the relief and subsequent reconstruction.²⁶⁹

The Indonesian government was marked by its lack of preparedness for the tsunami, and in particular by its insufficient ability to manage the disaster response. This became an inspiration to improve government effectiveness at and control over disaster management, as well as to improve the system of disaster preparedness. As one Indonesian government official explained, "Lessons learned come only from big disasters, like 2004 in Aceh... We found that the problem is that once (the government) opens to international distribution of relief, so many come, their assistance is too much; it is more than we can (handle). So we had to figure out how to do that."²⁷⁰ These lessons were clearly learned not only by the government, but by Indonesian civil society actors, the population, and the international community. Previous efforts by these actors to encourage a new law, and to increase awareness of disaster management, had been complemented by the negative effects of a massive natural disaster that ultimately marked a turning point in the country's strengthening of disaster management capacity.

As a result of civil society activism and public awareness building led by the Indonesian Society for Disaster Management (MPBI) and unprecedented parliamentary support for disaster management reform, Indonesia enacted disaster management Law 24 in April 2007, just short of two and a half years after the Aceh tsunami.²⁷¹ This process began with MPBI's drafting the first version of the law, and submitting it to Parliament for discussion, revisions, and other technical steps.²⁷² Both MPBI and the Parliament received support from international NGOs and UN agencies in this process. Key inputs included training for MPBI on drafting legislation and academic papers, the hiring of consultants to draft specific portions of the legislation such as on community-based participatory disaster management, mitigation measures, and DRR and to finalize the legislation, as well as training for members of Parliament who would review the bill.²⁷³ These inputs were complementary to the strong national initiative to improve the country's ability to manage natural disasters, and what some

see as a “never again” attitude that drove an interest to be independent of international disaster response assistance.

Law 24/2007 provided a strong foundation on which to improve disaster management in Indonesia. This improvement has three important features. First, the law incorporates the priorities of the Hyogo Framework for Action, and approaches disaster management as a full cycle of planning, response, and recovery. Second, it approaches disaster management as a citizen’s right, by establishing that the government has an obligation to protect citizens; failure to do so is punishable with criminal sanctions.^{274 275} Third, it establishes that disaster management is a shared societal responsibility between the government, the community, and the private sector. These three elements have been essential to the way in which the Indonesian government and the country has continued since Law 24/2007 to strengthen its disaster management capacity.

The law provides for the creation of a National Disaster Management Agency (BNPB), which has the mandate of coordinating these three phases of disaster management; and the creation of provincial- and district-level disaster management offices.²⁷⁶ These are the main government protagonists in disaster management; however, their role is complemented in practice and by law by community groups.

C. Progress in Legislation and Policy

The government has continued to ground the disaster management law through further regulations to the law, and action plans. Regulations have been added on specific issues, including national and sub-national disaster management structures, funding and management of relief aid, and the participation in disaster management of international and non-governmental actors.²⁷⁷ Others are currently being prepared, such as on how to mainstream gender considerations into disaster management. Important national public planning mechanisms include the National Action Plan on DRR and the national contingency plan. These have been important to organize and plan government efforts, and ensure a common interpretation of the

Law and the importance of disaster management in the country.²⁷⁸

It is important to note that as in the period of drafting its law, the government continues to receive input for its policy adjustments from civil society and international actors. This happens in various formats, including in direct consultation and through the national platform for DRR.

D. The National Disaster Management System

As a relatively young agency that was established in 2008, BNPB seems conscious of the fact that it will take time for it to be a fully effective agency, and for the country to have effective sub-national disaster management mechanisms. Nonetheless, it was consistently the opinion of informants that BNPB has improved a great deal in the strengthening of its structure and its ability to coordinate disaster management. The BNPB is structured to have four principal departments: prevention and preparedness, emergency response, logistics and equipment, and recovery. BNPB strength hinges on its internal structure, but also its understanding of risks and capacities at the sub-national level, and its ability to support and coordinate with disaster management agencies at the provincial and district level.²⁷⁹

1. How Has the National System Been Strengthened?

The means to this strengthening may be delineated into three areas. First, it has been achieved by internally and externally provided training programs for BNPB staff on the principles and practice of disaster management, done with the support of seconded or externally financed staff, and through direct training. With the support of international actors such as the Australian Agency for International Development (AUSAID) and the United States Agency for International Development USAID, BNPB has developed a comprehensive internal training program for its staff and for the staff of the sub-national disaster management offices. This training program theoretically should exist comprehensively at provincial and district level for staff of BPBDs. According to informants, this training is still not able to effectively respond to

INDONESIA

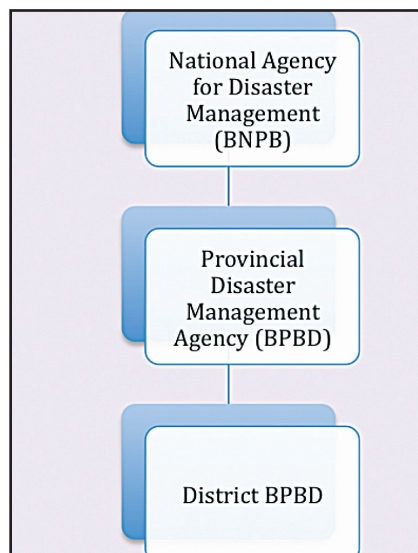
all of the needs throughout the country; however, a great deal of attention is being placed on improving the system and its technical resources.²⁸⁰ Second, strengthening has been achieved through progress in creating early detection and warning systems, conducting risk assessments and mapping throughout the country, and the setting up of provincial and district disaster management offices. Third, preparedness and practice have contributed to the strengthening of the national system. BNPB and the BPBDs have coordinated responses to hundreds of disasters annually that are of a scale that supersedes BPBDs' capacity to respond on their own. By most reports, in spite of BPBDs' local weaknesses, in coordination these actors have managed to effectively respond to the disasters. One important ingredient is disaster planning that occurs on a central level before the annual flood season, by which BNPB and the national meteorology center identify risks and disaster timing for the season, and send funds to the flood-prone areas so that the local officials may manage the (at least initial) response. The effectiveness of the response then relies not only on BNPB's coordination, but on the provincial and district disaster management offices and nationally coordinated rapid emergency response teams. Indeed, BPBDs have been slower to strengthen technical and coordinating capacity than the national system.²⁸¹

E. Sub-National Disaster Management System

Law 24/2007 calls for the creation of "Regional Disaster Management Local Agenc(ies)," to consist of provincial and district agencies. These agencies, BPBDs, have the responsibility for managing preparedness, prevention, and response in their areas, and are thus essential to contributing to comprehensive national disaster management capacity.

The offices must manage the hazard mapping, risk assessments, and disaster management plans, as well as coordinate with disaster management actors from other government line ministries, the community, and other relevant entities. The offices are responsible for responding to disasters in their region, but may be supported by BNPB if the disaster is of a scale beyond their capacity, which is determined by a BNPB assessment following the incident. Given the nature of the BNPB as a national coordinating mechanism, the expansive geography of the 17,000-island archipelago, and strong legal principles of decentralization, the effective functioning of BPBDs prior to, during, and following disasters is essential to ensuring effective disaster management. Thus, the establishment and strengthening of these local disaster management offices has been one of the most important elements to national capacity strengthening.

Sub-National Disaster Management System (as referenced below)



Just as informants recognized the strength of BNPB, they also recognized the relative weakness at present of the BPBDs. At the time of this research, each of the 33 provinces had created their BPBD, and 85% of the districts had created BPBDs.²⁸² The creation and strengthening of these offices has been progressive, apparently in large part because their establishment relies on local initiative, as BNPB cannot order or supervise the establishment of BPBDs. Local lack of awareness of and prioritization for disaster management is a problem that inhibits the establishment and strengthening of BPBDs and their resulting effectiveness in disaster situations, as is the lack of local prioritization for funding disaster management activities.²⁸³

Ministry of Home Affairs Decree 46/2008 mandated the creation of all provincial offices by the end of 2009, a process which was completed in 2012; however, with apparent problems of quality within the offices and their tools.²⁸⁴

Among the BPBDs that have been established, some are effective at fulfilling their mandate while others are not. BPBD weaknesses seem to consistently include insufficient staffing, insufficient training, and minimal budgets, all of which undermine the offices' effectiveness throughout the disaster management cycle. Key determinants of success at establishing and maintaining effective offices seem to be the extent to which the local area is repeatedly affected by disasters and the degree of local political and societal commitment to disaster management. Another determinant is the extent to which they receive training and technical support from BNPB and from international and other non-governmental actors.

1. How Has the Sub-National System Been Strengthened?

The strengthening of the BPBDs has been achieved as a result of a combination of national and local (sub-national) initiative. National support for local capacity strengthening seems to have been most effective in terms of provision of technical support; however, this hinges strongly on its being properly implemented. The first form of technical support from BNPB has been the creation of risk assessments and disaster management plans. A government informant

indicated that this exercise has been conducted for each of the provinces, and 85% of districts.²⁸⁵ While these are necessary to establishing effective BPBDs, informants indicated that some of these nationally commissioned plans are seriously flawed in some technical terms, such that they cannot consistently be relied upon to be accurate. Because external consultants often prepare them, they are not actually fully grounded locally and they have not consistently received contributions from local actors.²⁸⁶ This appears to be a result of hurried national initiative, and insufficient focus on important details. The second form is training support to BPBD staff on technical and management aspects of disaster management, both direct training and a training of trainers. This seems to hinge on the proactive stance on the part of BNPB to conduct training needs assessments, to offer and encourage the trainings, and to fund the trainings for provinces and districts that do not have such assigned resources.²⁸⁷

Local initiative seems to have been the most important ingredient to the establishment of effective BPBDs. District BPBDs fall administratively under mayors, and their rural equivalent, Bupatis. Thus the initiative, and the financial and administrative support for the creation of BPBDs, depends a great deal on political awareness and prioritization of the importance of disaster management. This initiative, sometimes natural to the political officials and sometimes encouraged and lobbied for by civil society and international actors implementing projects in the area, seems to have prompted and created the ground for the establishment of an increased number of BPBD offices. Local DRR forums, which incorporate local civil society organizations, academia, authorities, and the community, have been key to this process. DRR forums are not present comprehensively throughout the country and are relatively recent. However, they have contributed by raising local awareness about the importance of having BPBDs and of prioritizing risk reduction, and by lobbying for their establishment and effective operation on an ongoing basis. International actors have contributed to the strengthening of BPBDs by supporting the establishment of DRR forums, through technical and financial support to local

INDONESIA

actors, by providing training on disaster management, advising on the means of establishing and making the BPBDs operational, and supporting the creation of risk assessments and disaster management plans.²⁸⁸

Finally, it is important to note that communities have played an important role in the strengthening and functioning of the sub-national disaster management system. Under Law 24/2007, members of communities have an obligation to carry out disaster management activities.²⁸⁹ Although far from being geographically comprehensive, one manifestation of the fulfillment of this responsibility is in village disaster management bodies, which have operational as well as lobbying functions before local government officials through DRR forums and other means. These bodies, which are created with the help of civil society, the government, and international NGOs, play an important role in ensuring community involvement in all phases of the disaster management cycle.²⁹⁰

F. Line Ministries Involved with Disaster Management

Aside from BNPB, other national ministries, such as Health, Social Welfare, Environment, Agriculture, Public Works, and Planning have disaster management-related mandates. The ministries of Health and Social Welfare in particular have strengthened their capacity to respond to disasters; the ministries of Environment, Agriculture, and Public Works have incorporated risk mitigation projects; and the National Planning Agency has focused on recovery work. Given these agencies' specializations, and BNPB's still-developing strength as disaster management coordinator, it is important that they have strengthened their approach to disaster management and DRR work, and their contributions have effectively improved disaster preparedness and response. The strengthening has occurred through their own initiative, and with the technical support of international actors to strengthen their skills and mechanisms. Much of this technical support is provided through UN agency counterparts.

Informants indicated that the disaster

management emphasis within these agencies has been on response, and much less on mitigation. The National Planning Agency has been assigned the mandate to coordinate risk reduction and mitigation initiatives while BNPB strengthens its response capacity, but it does not appear to consistently be a priority for the agency. BNPB is limited in its ability to coordinate these agencies, as it does not have hierarchical control, and there is no framework that specifically assigns and distributes functions. Progress toward taking full advantage of these ministries' capacities and potential capacities has therefore been slower than otherwise possible. This is true also at the local level, where the ministries have similar responsibilities for disaster management activities, and are relied upon by the BPBDs to provide funding for preparedness, yet their awareness of and commitment to disaster management is less consistent.²⁹¹

G. Gaps in the National Disaster Management System

Indonesia has made significant progress in strengthening its institutional and operational disaster management system, particularly considering the fact that its national disaster management law and institutions are relatively young. While informants emphasized the country's achievements, in the course of the interviews they identified three main gaps that remain a hindrance to the system's full effectiveness.

The first gap in the Indonesian government's disaster response capacity is the incompleteness of its response mechanisms. Whereas search, rescue, and evacuation are strong, the government's ability to respond comprehensively and differentially to victims' needs is lacking. For example, vulnerability assessments do not regularly break down age and gender of the affected population, and thus it is difficult for national and international actors to consider specific needs in their response. Another example is that the humanitarian assistance does not consistently consider nutritional needs, and access to other protective elements like education, water, sanitation and hygiene (WASH), and livelihoods, is lacking, and thus the effectiveness of the response in the longer

term is limited. The impression emerges that the disaster response system has been strengthened in principal areas, but that it has yet to be able to comprehensively consider the details.²⁹²

The second gap is that the local-level disaster management system has not yet been comprehensively established throughout the country, in both disaster-prone and less disaster-prone areas. Among the BPBDs that have been created, there are problems of insufficient training, staffing, funding, and proactivity that inhibit the agencies' ability to perform as effectively and comprehensively as it should before, during, and after natural disasters. The local awareness of disaster management and political motivation to establish and fund the offices and the mechanisms that accompany them is lacking, as is the awareness and motivation for disaster management policy and spending in other line ministries with disaster management responsibilities.²⁹³

The third gap has to do with operational challenges within the national disaster management system. Some informants considered staff to not be sufficiently trained for their responsibilities, especially in terms of their limited understanding of the principles of disaster management. This insufficient training could have consequences for the effectiveness of the whole disaster management cycle. The second challenge concerns the high turnover of staff in BNPB and BPBDs, who often cycle out to other government offices, which only perpetuates gaps in the fledgling system.²⁹⁴

H. National Ownership of Disaster Management System and Acceptance of Support from International Actors

The momentum has remained strong in Indonesia for disaster management to be a priority for the country. The government pays close attention to its image internally and internationally regarding its effectiveness at disaster management, and while officials admit that gaps remain, they consider their progress to be strong. Aside from their monitoring of their own effectiveness, the government sees this success manifested in President Susilo Bambang Yudhoyono's receiving the United Nations

Office for Disaster Risk Reduction (UNISDR) Global Champion of Disaster Risk Reduction award, and in their being able to contribute to responses to other natural disasters in the region.²⁹⁵ Disaster management has received strong support from political leadership since the passage of Law 24/2007; however, it is less of a real priority for political parties, which leads to challenges for increased funding and for the pace of capacity strengthening.²⁹⁶

The Indonesian government approaches disaster management as clearly being its own responsibility, and something that it can handle, particularly in terms of response. The government is hesitant to open up widely to international support in disaster response, and last did so in 2009 for the West Sumatra earthquake.²⁹⁷ For smaller-scale disasters, the government accepts support that it specifically requests or otherwise approves, or allows international actors that are present in the affected areas to respond because they have existing mechanisms and links to authorities. The government has sufficient funding to respond to disasters, so this is not a motivation for them to request international support. One government official explained that accepting international support for disaster response is more of a gesture of diplomacy, an act in support of international relations, than because they actually need the assistance.²⁹⁸ In many ways, this understanding of national responsibility is representative of the government's progress in capacity strengthening since its "low point" of the 2004 tsunami. On the other hand, given the gaps that remain in the consistency of the national system, this can also be understood as a potential obstacle to further and fully comprehensive strengthening of the national system.

The Indonesian government seems to draw a distinction between receiving support from international actors in disaster contexts and support for disaster prevention and preparedness. While self-managing disaster responses and becoming increasingly reluctant to call for international assistance, the government welcomes technical cooperation for institution building, and for disaster management capacity strengthening, at the ministerial level and at the

INDONESIA

community level, and has done so since before the passage of the 2007 law. Indeed, this cooperation has been fundamental to the government's progress. This separation of "appealing" international support became clear to me during an interview in which a BNPB official first explained to me that the agency does not need support for disaster response, and gave an example of how he had recently told a foreign embassy that BNPB did not need its financial support to respond to floods. He then proceeded to detail the cooperation that the government does openly and gladly receive, and other cooperation it would like to continue to receive to strengthen disaster management capacity, particularly at the community level. He explained that the government has sufficient funding, and that this work by international actors could be done with international or Indonesian funding, but that it would be important for international actors to contribute because the government does not have the skills or experience to work closely with communities, for example to improve early warning systems or ensure comprehensive shelter distribution. This perspective reveals a lot about the government's understanding of its strengths and weaknesses, and gaps with which it would like support.²⁹⁹ ■

ENDNOTES

- 1 Peter Walker, Colin Rasmussen, Sebastián Molano, “International Dialogue On Strengthening Partnership in Disaster Response: Bridging National and International Support. Background Paper 3: Best Practices at the National Level” (Feinstein International Center, Tufts University, Medford, Massachusetts, 2011).
- 2 Information on this project is available at <http://www.odi.org.uk/projects/341-role-affected-states-humanitarian-action>.
- 3 Barnaby Willitts-King, “The Role of the Affected State in Humanitarian Action: A Case Study on Indonesia” (Humanitarian Policy Group, Overseas Development Institute, London, 2009), 21–22.
- 4 Conor Foley, “Mozambique: A Case Study in the Role of the Affected State in Humanitarian Action” (Humanitarian Policy Group, Overseas Development Institute, London, 2007).
- 5 Patricia Weiss Fagen, “El Salvador: A Case Study in the Role of the Affected State in Humanitarian Action” (Humanitarian Policy Group, Overseas Development Institute, London, 2008).
- 6 Raymond C. Offenheiser and Susan H. Holcombe, *Challenges and Opportunities in Implementing a Rights-Based Approach to Development: An Oxfam America Perspective* (Sage, Feb. 2003), 271.
- 7 Oxfam America, “Capacity: Help Countries Lead,” Ownership in Practice series (2010).
- 8 Note on citation style: Insofar as multiple interviewees fit the same categorical profile, they will be cited sequentially. For example, the second “Program Manager, Government of Indonesia” will be cited as “Program Manager, Government of Indonesia (2).”
- 9 “ISDR Terminology: Basic Terms of Disaster Risk Reduction,” accessed 9/18/13, <http://www.unisdr.org/eng/library/lib-terminology-eng%20home.htm>.
- 10 S. Miththapala, “Incorporating Environmental Safeguards into Disaster Risk Management. Volume 2: The Disaster Management Cycle” (Ecosystems and Livelihoods Group, Asia, IUCN, Colombo, 2008), 2.
- 11 ISDR Terminology.
- 12 Ibid.
- 13 Ibid.
- 14 Ibid.
- 15 Ibid.
- 16 Note: See the Mozambique Country Profile for an example of this, given the country’s development following recent decolonization and subsequent civil war.
- 17 The current disaster management legislation of El Salvador is the Law of Civil Protection and Disaster Prevention and Mitigation (2005); in the Philippines, it is The Disaster Risk Reduction and Management Act of 2010; in Indonesia, the Law of the Republic of Indonesia Number 24 of 2007, Concerning Disaster Management.
- 18 Foley, 6.
- 19 Note: The country profiles that follow this discussion delve into the historical paths of each of the four countries and highlight how legislation building and reform figured into the processes.
- 20 Program Coordinator, Salvadoran Civil Society Group.
- 21 Academic Expert on Disaster Management, the Philippines.
- 22 Program Coordinator, Indonesian Civil Society Group.

- 23 Program Coordinator, Salvadoran Civil Society Group; Academic Expert on Disaster Management, the Philippines; Program Coordinator, Indonesian Civil Society Group.
- 24 Program Coordinator, Salvadoran Civil Society Group; Independent Expert, El Salvador; Program Manager, International NGO, El Salvador.
- 25 Program Coordinator, Salvadoran Civil Society Group; Academic Expert on Disaster Management, the Philippines; Program Coordinator, Indonesian Civil Society Group.
- 26 Academic Expert on Disaster Management, Mozambique.
- 27 Program Manager, International NGO in Mozambique.
- 28 Academic Expert on Disaster Management, the Philippines; Program Coordinator, Civil Society Group in the Philippines.
- 29 Note: In Mozambique and El Salvador, major disasters (2000–2001 floods in the former, 1998 hurricane and 2001 earthquakes in the latter) contributed to a strong national understanding of the need to strengthen the disaster management system; however, these did not contribute as immediately to legislative reform.
- 30 Willitts-King, 7.
- 31 Ibid.; Project Manager, Multilateral Organization (2) in Indonesia.
- 32 Area Program Coordinator, Government of Indonesia.
- 33 Badan Nasional Penanggulangan Bencana and United Nations Development Programme, Indonesia, “Lessons Learned: Disaster Management Legal Reform: The Indonesia Experience,” accessed 6/4/13, <http://www.undp.or.id/pubs/docs/Lessons%20Learned%20Disaster%20Management%20Legal%20Reform.pdf>, 7, 12.
- 34 Program Coordinator, Indonesian Civil Society Group.
- 35 Academic Expert on Disaster Management, the Philippines; Program Coordinator, Indonesian Civil Society Group.
- 36 Program Coordinator, Salvadoran Civil Society Group.
- 37 Academic Expert on Disaster Management, Mozambique.
- 38 Academic Expert on Disaster Management, the Philippines; Program Coordinator, Civil Society Group in the Philippines; Program Coordinator, Indonesian Civil Society Group; Program Coordinator, Salvadoran Civil Society Group.
- 39 Program Coordinator, Indonesian Civil Society Group; Program Coordinator, Salvadoran Civil Society Group; Academic Expert on Disaster Management, the Philippines.
- 40 Badan Nasional Penanggulangan Bencana and United Nations Development Programme, Indonesia, 7, 12.
- 41 Program Coordinator, Salvadoran Civil Society Group.
- 42 Badan Nasional Penanggulangan Bencana and United Nations Development Programme, Indonesia, 11.
- 43 Information gathered from http://www.sica.int/cepredenac/conozca_sobre.aspx, accessed 5/6/13.
- 44 Program Manager, Government of El Salvador.
- 45 Program Coordinator, Government of the Philippines; Regional Program Coordinator, Government of the Philippines.
- 46 Program Coordinator, Indonesian Civil Society Group; Program Coordinator, International NGO in Mozambique; Program Coordinator, International NGO in the Philippines; Program Manager, International NGO, El Salvador.
- 47 Program Coordinator, Indonesian Civil Society Group; Program Coordinator, International NGO in Mozambique; Program Coordinator, International NGO in the Philippines; Program Manager, International NGO, El Salvador.

- 48 Program Coordinator, International NGO in Mozambique; Program Manager, International NGO in Mozambique.
- 48 Program Coordinator, International NGO, El Salvador (2); Independent Expert, El Salvador; Program Coordinator, Indonesian Civil Society Group; International Donor, Indonesia; Program Coordinator, International NGO in Mozambique; Program Manager, Government of Mozambique; Program Coordinator, International NGO in the Philippines (2); Program Coordinator, International NGO in the Philippines.
- 50 Program Coordinator, International NGO in the Philippines (2).
- 51 Program Coordinator, Indonesian Civil Society Group.
- 52 Regional Program Manager, Government of El Salvador.
- 53 Area Program Coordinator, Government of Indonesia (2); International Donor, Indonesia; Program Coordinator, International NGO in the Philippines; Program Coordinator, International NGO in the Philippines (2).
- 54 International Donor, Indonesia; Area Program Coordinator, Government of Indonesia (2).
- 55 Program Manager, International NGO, El Salvador; Program Manager, National NGO, El Salvador.
- 56 Program Coordinator, International NGO in the Philippines.
- 57 Program Manager, National NGO, El Salvador (5); Program Manager, Multilateral Organization (3) in Indonesia; Program Manager, International NGO in Mozambique (2); Program Coordinator, Government of the Philippines (2).
- 58 International Donor, Indonesia.
- 59 Weiss Fagen, 13.
- 60 Project Manager, Government of El Salvador.
- 61 Government of El Salvador, “Política Nacional del Medio Ambiente 2012,” accessed 5/31/13, http://www.marn.gob.sv/especiales/pnma2012/Politica_Nacional_MedioAmbiente_2012.pdf.
- 62 Program Manager, Government of the Philippines.
- 63 Program Manager, Government of the Philippines; Program Coordinator, International NGO in the Philippines.
- 64 Program Manager, Government of Mozambique.
- 65 Program Coordinator, Government of El Salvador (2); Program Coordinator, Government of the Philippines (2); Area Program Coordinator, Government of Indonesia.
- 66 Project Manager, Multilateral Organization in the Philippines (2); Program Coordinator, Government of the Philippines (2).
- 67 Philippines DRR Act of 2010, Sections 2, 6, and 14.
- 68 Law of the Republic of Indonesia Number 24 of 2007, Concerning Disaster Management, Chapter 5, Article 27.
- 69 Project Manager, Multilateral Organization (2) in Indonesia.
- 70 Senior Program Coordinator, Government of Indonesia; Area Program Coordinator, Government of Indonesia; Program Coordinator, Government of Mozambique; Program Coordinator, Government of the Philippines (2); Program Coordinator, Government of the Philippines.
- 71 Note: The first such institute, which the Disaster Risk Reduction and Management Act of 2010 calls for, was under development at the time of this research.
- 72 Program Coordinator, Civil Society Group in the Philippines.

- 73 International Donor, Indonesia.
- 74 Senior Program Coordinator, Government of Indonesia; Area Program Coordinator, Government of Indonesia; Program Coordinator, Government of Mozambique; Program Coordinator, Government of the Philippines (2); Program Coordinator, Government of the Philippines.
- 75 Area Program Coordinator, Government of Indonesia.
- 76 Program Coordinator, Government of the Philippines (2).
- 77 Weiss Fagen, 4.
- 78 Ibid., 5.
- 79 Independent Expert, El Salvador; Program Coordinator, International NGO, El Salvador.
- 80 Independent Expert, El Salvador; Program Coordinator, International NGO, El Salvador (2); Program Coordinator, Salvadoran Civil Society Group.
- 81 As explained by the United Nations Office for Disaster Risk Reduction, “The Hyogo Framework for Action (HFA) is the first plan to explain, describe and detail the work that is required from all different sectors and actors to reduce disaster losses. It was developed and agreed on with the many partners needed to reduce disaster risk— governments, international agencies, disaster experts and many others—bringing them into a common system of coordination...” This citation is from <http://www.unisdr.org/we/coordinate/hfa>, accessed 9/21/13.
- 82 Program Coordinator, Salvadoran Civil Society Group.
- 83 Program Coordinator, Salvadoran Civil Society Group; Program Coordinator, International NGO (3).
- 84 Program Manager, Government of El Salvador.
- 85 Centro de Coordinación para la Prevención de los Desastres Naturales en América Central, “Central American Policy for Comprehensive Disaster Risk Management” (Guatemala City, Gualamala, 2011), accessed 5/31/13, <http://www.sica.int/busqueda/Centro%20de%20Documentaci%C3%B3n.aspx?IDItem=44921&IdCat=32&IdEnt=2&Idm=1&IdmStyle=1>, Section 4(B).
- 86 http://www.sica.int/cepredenac/conozca_sobre.aspx, accessed 5/28/13.
- 87 Program Manager, Government of El Salvador.
- 88 Program Manager, Government of Mozambique.
- 89 Foley, 6.
- 90 Peter Walker, Colin Rasmussen, Sebastián Molano, 7.
- 91 Academic Expert on Disaster Management, Mozambique.
- 92 Ibid.
- 93 Ibid.
- 94 Zefanias Matsimbe, “Assessing the Role of Local Institutions in Reducing the Vulnerability of At-Risk Communities in Búzi, Central Mozambique Part 4, Lessons Learnt and Recommendations” (DiMP, University of Cape Town, 2003), 39.
- 95 Program Manager, Government of Mozambique.
- 96 Peter Walker, Colin Rasmussen, Sebastián Molano, 9.
- 97 Project Coordinator, Multilateral Organization in Mozambique (2); Program Manager, International NGO in Mozambique (2); Program Coordinator, International NGO in Mozambique; Project Coordinator, Multilateral Organization in Mozambique.
- 98 Foley, 15.

- 99 Peter Walker, Colin Rasmussen, Sebastián Molano, 11.
- 100 Program Coordinator, Government of Mozambique.
- 101 Foley, 15.
- 102 Area Program Coordinator, Government of Indonesia.
- 103 Program Manager, International NGO in Indonesia.
- 104 Program Coordinator, Indonesian Civil Society Group; Program Manager, International NGO in Indonesia.
- 105 Area Program Coordinator, Government of Indonesia.
- 106 Program Coordinator, Indonesian Civil Society Group.
- 107 Area Program Coordinator, Government of Indonesia (2).
- 108 Project Manager, Multilateral Organization (2) in Indonesia; Program Manager, International NGO in Indonesia (2).
- 109 Program Manager, Multilateral Organization in the Philippines; Program Coordinator, Government of the Philippines (2); Program Manager, Government of the Philippines.
- 110 Program Manager, Multilateral Organization in Philippines; Program Coordinator, Government of the Philippines (2).
- 111 Program Manager, Government of the Philippines.
- 112 World Risk Index data, <http://www.worldriskreport.com/Tables.364.0.html?&L=3>, accessed 5/18/13.
- 113 Global Facility for Disaster Reduction and Recovery, World Bank, “Disaster Risk Management in Latin America and the Caribbean Region: GFDRR Country Notes” (2010), http://www.gfdr.org/sites/gfdr.org/files/DRM_LAC_CountryPrograms.pdf, 21.
- 114 <http://www.preventionweb.net/english/countries/statistics/?cid=135>, accessed 5/21/13.
- 115 Global Facility for Disaster Reduction and Recovery, 19.
- 116 <http://www.preventionweb.net/english/countries/statistics/?cid=55>, accessed 5/21/13.
- 117 Weiss Fagen, 2.
- 118 L. Romano, “La Protección Civil en El Salvador: Propuesta de Redefinición” (CEPRODE, San Salvador, 1999), 8, 11.
- 119 Romano, 10.
- 120 Program Coordinator, National NGO (2).
- 121 NOAA, “Mitch: The Deadliest Atlantic Hurricane Since 1780,” <http://www.ncdc.noaa.gov/oa/reports/mitch/mitch.html#INTRO>.
- 122 Weiss Fagen, 2.
- 123 Romano, 10.
- 124 Weiss Fagen, 4.
- 125 Ibid.
- 126 Ibid.
- 127 Independent Expert, El Salvador; Program Coordinator, International NGO, El Salvador (2).
- 128 Independent Expert, El Salvador; Program Coordinator, International NGO, El Salvador (2); Program Coordinator, Salvadoran Civil Society Group.
- 129 Weiss Fagen, 13.

- 130 Program Manager, Government of El Salvador; Program Coordinator, Government of El Salvador (2); Program Coordinator, International NGO, El Salvador (2).
- 131 Program Coordinator, Salvadoran Civil Society Group.
- 132 Ley y Reglamentos de Protección Civil, Prevención y Mitigación de Desastres, 2005, Government of El Salvador, Articles 5 and 6.
- 133 Ibid., Articles 7–11.
- 134 Weiss Fagen, 7–8.
- 135 Program Coordinator, Salvadoran Civil Society Group.
- 136 Program Coordinator, International NGO (3).
- 137 Program Manager, Government of El Salvador.
- 138 Centro de Coordinación para la Prevención de los Desastres Naturales en América Central.
- 139 http://www.sica.int/cepredeac/conozca_sobre.aspx, accessed 5/28/13.
- 140 Program Manager, Government of El Salvador.
- 141 Global Facility for Disaster Reduction and Recovery, World Bank, Ministry of Environment and Natural Resources Statement on Risk Management, accessed 5/28/13, http://www.marn.gob.sv/index.php?option=com_content&view=article&id=526:gestion-de-riesgos&catid=133:gestion-riesgos&Itemid=119, 26.
- 142 Project Coordinator, Multilateral Organization in El Salvador.
- 143 Program Manager, Government of El Salvador; Program Coordinator, Government of El Salvador (2).
- 144 Project Coordinator, Multilateral Organization in El Salvador.
- 145 Project Coordinator, Multilateral Organization in El Salvador; Program Manager, International NGO, El Salvador.
- 146 Program Manager, International NGO, El Salvador (2); Independent Expert, El Salvador; Program Coordinator, International NGO, El Salvador (2).
- 147 Program Manager, International NGO, El Salvador (2); Independent Expert, El Salvador; Program Coordinator, International NGO, El Salvador (2); Program Coordinator, Salvadoran Civil Society Group.
- 148 Program Manager, National NGO, El Salvador; Program Manager, International NGO, El Salvador.
- 149 Program Manager, Government of El Salvador; Program Manager, Government of El Salvador.
- 150 Program Coordinator, Government of El Salvador (2).
- 151 Weiss Fagen, 11.
- 152 Program Manager, Government of El Salvador (2).
- 153 Program Manager, Government of El Salvador (2); Project Coordinator, Multilateral Organization in El Salvador.
- 154 Program Manager, Government of El Salvador; “Política Nacional del Medio Ambiente 2012.”
- 155 Independent Expert, El Salvador.
- 156 Regional Program Manager, Government of El Salvador.
- 157 Regional Program Manager, Government of El Salvador; Program Manager, National NGO, El Salvador (5).
- 158 Program Coordinator, International NGO, El Salvador (2); Independent Expert, El Salvador; Program Manager, National NGO, El Salvador (5).

- 159 Program Coordinator, National NGO (4).
- 160 <http://www.preventionweb.net/english/countries/statistics/?cid=80>, accessed 5/18/13.
- 161 Foley, 5.
- 162 EM-DAT: The OFDA/CRED International Disaster Database, “Mozambique Country Profile,” accessed 5/16/13.
- 163 Program Coordinator, Government of Mozambique.
- 164 EM-DAT: The OFDA/CRED International Disaster Database.
- 165 <http://www.preventionweb.net/english/countries/statistics/?cid=80>, accessed 5/18/13.
- 166 Disaster Risk Financing and Insurance Program, GFDRR and FCMNB, “Mozambique: Disaster Risk Financing and Insurance Country Note” (2012), accessed 5/18/13, http://www.gfdr.org/sites/gfdr.org/files/DRFICountryNote_Mozambique_Jan072013_Final.pdf, 9–11.
- 167 World Risk Index data, <http://www.worldriskreport.com/Tables.364.0.html?&L=3>, accessed 5/18/13.
- 168 <http://www.preventionweb.net/english/countries/statistics/?cid=80> accessed 5/18/13.
- 169 Foley, 10.
- 170 Zefanias Matsimbe, “Assessing the Role of Local Institutions,” 15–16.
- 171 <http://www.emdat.be/result-country-profile>, accessed 5/18/13.
- 172 Academic Expert on Disaster Management, Mozambique.
- 173 Ibid.
- 174 Foley, 13.
- 175 <http://www.preventionweb.net/english/countries/statistics/?cid=117>, accessed 5/18/13.
- 176 Matsimbe, 43.
- 177 Academic Expert on Disaster Management, Mozambique.
- 178 Foley, 13; Academic Expert on Disaster Management, Mozambique.
- 179 Academic Expert on Disaster Management, Mozambique.
- 180 Foley, 13; Program Manager, Government of Mozambique.
- 181 Program Manager, Government of Mozambique.
- 182 <http://www.emdat.be/result-country-profile>, accessed 5/18/13.
- 183 Matsimbe, 45–46.
- 184 Program Manager, Government of Mozambique.
- 185 Ibid.
- 186 Foley, 13.
- 187 <http://www.preventionweb.net/english/countries/statistics/?cid=117>.
- 188 Foley, 13.
- 189 Program Manager, Government of Mozambique.
- 190 Foley, 6.
- 191 Peter Walker, Colin Rasmussen, Sebastián Molano, 7.
- 192 Academic Expert on Disaster Management, Mozambique.

- 193 Ibid.
- 194 Project Coordinator, Multilateral Organization in Mozambique; Academic Expert on Disaster Management, Mozambique.
- 195 Academic Expert on Disaster Management, Mozambique; Program Manager, Government of Mozambique.
- 196 Matsimbe, 39; Program Manager, Government of Mozambique.
- 197 Peter Walker, Colin Rasmussen, Sebastián Molano, 9.
- 198 Project Coordinator, Multilateral Organization in Mozambique (2); Program Manager, International NGO in Mozambique (2); Program Coordinator, International NGO in Mozambique; Project Coordinator, Multilateral Organization in Mozambique.
- 199 Foley, 15.
- 200 Peter Walker, Colin Rasmussen, Sebastián Molano, 11.
- 201 Program Coordinator, Government of Mozambique.
- 202 Foley, 15.
- 203 Matsimbe, 41–42.
- 204 Program Coordinator, International NGO in Mozambique; Program Manager, International NGO in Mozambique (2).
- 205 Program Manager, International NGO in Mozambique (2); Program Manager, International NGO in Mozambique; Program Coordinator, Government of Mozambique.
- 206 Peter Walker, Colin Rasmussen, Sebastián Molano, 11.
- 207 Program Coordinator, Government of Mozambique.
- 208 Project Coordinator, Multilateral Organization in Mozambique (2).
- 209 Program Manager, Government of Mozambique.
- 210 Program Coordinator, International NGO in Mozambique.
- 211 Program Coordinator, International NGO in Mozambique; Project Coordinator, Multilateral Organization in Mozambique (2).
- 212 Ibid.
- 213 Program Manager, International NGO in Mozambique; Program Coordinator, International NGO; Program Manager, International NGO in Mozambique (2); Project Coordinator, Multilateral Organization in Mozambique (3).
- 214 Project Coordinator, Multilateral Organization in Mozambique (2).
- 215 Project Coordinator, Multilateral Organization in Mozambique (2); Program Coordinator, International NGO in Mozambique.
- 216 Program Coordinator, Government of Mozambique; Program Manager, Government of Mozambique.
- 217 UNDP Philippines, “UNDP Fast Facts: AdapTayo, Building Resilience to Climate Change and Disaster Risk,” accessed 5/21/13, <http://www.undp.org.ph>.
- 218 World Risk Index data, <http://www.worldriskreport.com/Tables.364.0.html?&L=3>, accessed 5/18/13.
- 219 “UNDP Fast Facts.”
- 220 <http://www.preventionweb.net/english/countries/statistics/?cid=135>, accessed 5/21/13.
- 221 EM-DAT: The OFDA/CRED International Disaster Database, “Philippines Country Profile,” accessed 5/21/13.

- 222 <http://www.preventionweb.net/english/countries/statistics/?cid=135>, accessed 5/21/13.
- 223 Philippines Presidential Decree No. 1566, “Strengthening the Philippine Disaster Control, Capability and Establishing the National Program on Community Disaster Preparedness,” accessed 5/21/13, http://www.lawphil.net/statutes/presdecs/pd1978/pd_1566_1978.html.
- 224 Program Coordinator, Government of the Philippines.
- 225 Academic Expert on Disaster Management, the Philippines; Program Manager, National NGO, the Philippines.
- 226 Ibid.
- 227 Ibid.
- 228 NASA, “Hurricane Season 2009: Typhoon Ketsana (Western Pacific),” accessed 5/21/13, http://www.nasa.gov/mission_pages/hurricanes/archives/2009/h2009_Ketsana.html.
- 229 Academic Expert on Disaster Management, the Philippines; Program Manager, National NGO, the Philippines; Program Coordinator, Government of the Philippines.
- 230 World Bank, “Climate Change Adaptation in Coastal Communities: A Documentation of Project Experience” (Pasig City, the Philippines, 2012), 5.
- 231 Ibid.
- 232 Ibid., 2–3.
- 233 Tasneem Mowjee, “Independent Review of the Value Added of the Central Emergency Response Fund (CERF) in the Philippines: Final Report” (Policy2Practice Team, September 2012), accessed 5/21/13, <https://docs.unocha.org/sites/dms/CERF/Revised%20CERF%20Philippines%20Review%20Final%20Report%20120930.pdf>, 6.
- 234 Note: The United States government has provided Incident Command System training and support.
- 235 Project Manager, Multilateral Organization in the Philippines; Program Coordinator, International NGO in the Philippines (2); Program Coordinator, International NGO in the Philippines.
- 236 Program Coordinator, Government of the Philippines.
- 237 Program Coordinator, Government of the Philippines; Project Manager, Multilateral Organization in the Philippines; Program Coordinator, Civil Society Group in the Philippines.
- 238 Program Coordinator, Government of the Philippines.
- 239 Program Coordinator, Government of the Philippines; Regional Program Coordinator, Government of the Philippines.
- 240 Program Coordinator, Government of the Philippines (2).
- 241 Program Coordinator, International NGO in the Philippines (2); Program Coordinator, International NGO in the Philippines.
- 242 Academic Expert on Disaster Management, the Philippines; Program Coordinator, International NGO in the Philippines.
- 243 Program Coordinator, International NGO in the Philippines.
- 244 Program Coordinator, Government of the Philippines; Program Coordinator, International NGO in the Philippines; Regional Program Coordinator, Government of the Philippines (2).
- 245 Program Coordinator, International NGO in the Philippines; Program Coordinator, Civil Society Group in the Philippines.

- 246 Project Manager, Multilateral Organization in the Philippines (2); Project Manager, Multilateral Organization in the Philippines (3); Program Coordinator, Government of the Philippines (2).
- 247 Project Manager, Multilateral Organization in the Philippines; Program Coordinator, Government of the Philippines; Regional Program Coordinator, Government of the Philippines.
- 248 Program Coordinator, International NGO in the Philippines; Program Manager, Community Disaster Management Organization; Program Manager, Community Disaster Management Organization (2); Program Manager, Community Disaster Management Organization (3).
- 249 Project Manager, Multilateral Organization in the Philippines; Project Manager, Multilateral Organization in the Philippines (4).
- 250 Program Manager, Multilateral Organization in the Philippines; Program Coordinator, Government of the Philippines (2); Program Manager, Government of the Philippines.
- 251 Program Manager, Multilateral Organization in the Philippines; Program Coordinator, Government of the Philippines (2).
- 252 Program Manager, Government of the Philippines.
- 253 Program Coordinator, International NGO in the Philippines (3).
- 254 Project Manager, Multilateral Organization in the Philippines; Project Manager, Multilateral Organization in the Philippines (4).
- 255 Program Coordinator, International NGO in the Philippines.
- 256 Regional Program Coordinator, Government of the Philippines (2); Program Manager, Community Disaster Management Organization.
- 257 Project Manager, Multilateral Organization in the Philippines; Program Coordinator, Government of the Philippines; Program Coordinator, International NGO in the Philippines.
- 258 Government of the Republic of Indonesia and United Nations, “United Nations Partnership for Development Framework 2011–2015, Indonesia” (2010), 2.
- 259 <http://www.preventionweb.net/english/countries/statistics/?cid=80>, accessed 6/2/13.
- 260 United States Census Bureau, <http://www.census.gov/population/international/data/idb/rank.php>.
- 261 Willitts-King, 8.
- 261 <http://www.preventionweb.net/english/countries/statistics/?cid=80>, accessed 10/6/13.
- 263 Willitts-King, 10.
- 264 Naim Kapucu, *Network Governance in Response to Acts of Terrorism: Comparative Analyses* (New York: Routledge, 2012), 85–86.
- 265 Willitts-King, 10–11.
- 266 Willitts-King, 7.
- 267 Willitts-King, 7.
- 268 Project Manager, Multilateral Organization in Indonesia.
- 269 Willitts-King, 8.
- 270 Area Program Coordinator, Government of Indonesia.
- 271 Willitts-King, 12.
- 272 Program Coordinator, Indonesian Civil Society Group.

- 273 Badan Nasional Penanggulangan Bencana and United Nations Development Programme, Indonesia, 7, 12.
- 274 Willitts-King, 11.
- 275 Badan Nasional Penanggulangan Bencana and United Nations Development Programme, Indonesia, 11.
- 276 Ibid.
- 277 Ibid.
- 278 Area Program Coordinator, Government of Indonesia; International Donor, Indonesia.
- 279 International Donor, Indonesia; International Donor, Indonesia (2); Program Manager, International NGO in Indonesia (2); Program Manager, International NGO in Indonesia.
- 280 International Donor, Indonesia; Area Program Coordinator, Government of Indonesia (2).
- 281 International Donor, Indonesia (2); International Donor, Indonesia; Area Program Coordinator, Government of Indonesia.
- 282 Area Program Coordinator, Government of Indonesia.
- 283 Program Manager, International NGO in Indonesia; Program Manager, International NGO in Indonesia (2).
- 284 Badan Nasional Penanggulangan Bencana and United Nations Development Programme, Indonesia, 11.
- 285 Area Program Coordinator, Government of Indonesia.
- 286 Program Coordinator, Indonesian Civil Society Group.
- 287 Area Program Coordinator, Government of Indonesia (2); International Donor, Indonesia.
- 288 Project Manager, Multilateral Organization (2) in Indonesia; Program Manager, International NGO in Indonesia (2).
- 289 Indonesian Law 24/2007, Chapter 5, Article 27.
- 290 Program Manager, International NGO in Indonesia (2); International Donor, Indonesia (2).
- 291 International Donor, Indonesia; Program Manager, International NGO in Indonesia.
- 292 International Donor, Indonesia; Program Manager, International NGO in Indonesia (2); Program Manager, International NGO in Indonesia.
- 293 Ibid.
- 294 International Donor, Indonesia; Program Manager, International NGO in Indonesia (2).
- 295 Area Program Coordinator, Government of Indonesia.
- 296 Program Coordinator, Indonesian Civil Society Group.
- 297 Peter Walker, Colin Rasmussen, Sebastián Molano, 18.
- 298 Area Program Coordinator, Government of Indonesia.
- 299 Area Program Coordinator, Government of Indonesia.



Feinstein International Center
Tufts University
114 Curtis Street
Somerville, MA 02144
USA
tel: +1 617.627.3423
fax: +1 617.627.3428
fic.tufts.edu