Handbook on Recovery Institutions

A Guidebook for Recovery Leaders and Practitioners

NOVEMBER 2021

UNDP is the leading United Nations organization fighting to end the injustice of poverty, inequality, and climate change. Working with our broad network of experts and partners in 170 countries, we help nations to build integrated, lasting solutions for people and planet.

Learn more at undp.org or follow at @UNDP.

Foreword

As I write, we are just over one year and a half into the global COVID-19 pandemic and ongoing recovery efforts. It has been a year marked as well by a great number of adverse hazard events throughout the world which have led to compounded disasters. The increasing intensity and frequency of such disasters require us to capitalize on past recovery experiences, while taking a closer look at how these responses were managed at the institutional level and what additional efforts may be necessary to strengthen the capacities of national governments to plan for and effectively manage recovery from disasters.

More than ever, the global pandemic has made us acutely aware of the multisectoral challenges that disasters present for the lives and livelihoods of the people and communities affected. Therefore, effective and efficient recovery processes are crucial in order to maintain those development gains that remain after an adverse event and build resilience in the efforts to "bounce forward" to improved development pathways. Avoiding delays, carrying out successful recovery interventions and building back better, stronger and faster are central components in the reduction of disaster impacts. For this to occur, it is imperative that countries have a clear institutional set up to lead, manage and monitor their paths to recovery. Supported by evidence shown in this *Handbook on Recovery Institutions*, we advocate that planning the institutional arrangements for recovery before a disaster occurs greatly enhances the likelihood of a positive recovery process and has the potential to result in more sustainable outcomes.

The *Handbook on Recovery Institutions* is a tool for national government leaders and officials to plan for and establish the dedicated institutional support needed for delivering effective recovery outcomes. As recovery is multidimensional, this handbook is intended as a resource for experts, practitioners and anyone tasked with developing, supporting and implementing institutional recovery plans.

Recognizing that recovery processes require a complex range of knowledge, skills and capacities to manage multisectoral recovery efforts, the *Handbook on Recovery Institutions* supports designing or refining the relevant recovery institutional arrangements in line with national, regional or local government priorities, needs and disaster scenarios.

In addition to presenting key elements for success and good practices, which are informed by the analysis of six case studies (Chile, India, Indonesia, New Zealand, Serbia, Mozambique), we also wish to provide practical support by sharing the universal Tool to Assess Recovery Preparedness at Country Level and sample Terms of Reference for key institutional staff involved in recovery processes.

The key driver behind the *Handbook on Recovery Institutions* is our strong collective desire to see communities recover quickly and become more resilient, through a path facilitated by the most appropriate and robust institutional arrangements.

Ronald Jackson
Head of the Disaster Risk Reduction &
Recovery for Building Resilience Team (DRT)

Acknowledgements

This guide was written by independent consultants Laura Olson and Josef Leitmann under the guidance of Krishna Vatsa and Rita Missal, United Nations Development Programme (UNDP). Many people went out of their way to provide their insights, innovative practices and advice regarding how best to build effective Institutional Arrangements for Recovery. We thank all UNDP Country Office staff who contributed to the development of the case studies:

- Angelika Planitz, Team Leader, Disaster Risk Reduction & Recovery for Building Resilience Team, UNDP Crisis Bureau
- Claire Rubin, CEO of Claire B. Rubin and Associates LLC, author of the Recovery Diva Blog.
- Dr Roberto Moris, Director of Plans and Urban Projects UC PPUC, Professor of Architecture and Urban Studies, UC: Pontificia Universidad Católica de Chile.
- Dr William Siembieda, Professor of City and Regional Planning, College of Architecture and Environmental Design, California Polytechnic University, San Luis Obispo. Member of CIDIGEN - Chile's Research Center for Integrated Disaster Risk Management.
- Elizabeth McNaughton, Director, McNaughton and Wills Company, former Executive Director, Canterbury Earthquake Recovery Lessons Learned project in the Department of the Prime Minister and Cabinet, former National Recovery Manager, New Zealand Red Cross and recipient of the Winston Churchill Fellowship for Disaster Recovery Leadership.
- Ian McLean, former Member of New Zealand's Parliament (1978 to 1990), former Chair of the Earthquake Commission, lead author of the 2012 Review of the CDEM Response to the 22 February Christchurch Earthquake.
- Laurie Johnson PhD AICP, Principal, Laurie Johnson Consulting and Research.
- Nadia Adrião – Program Coordinator, GREPOC, Mozambique.
- Roger Sutton, former CEO of the Canterbury Earthquake Recovery Authority (CERA), New Zealand.
- Sandra Nedeljkovic, Deputy Director, Public Investment Management Office, Government of the Republic of Serbia.
- Titus Kuuyuor, Former Chief Technical Adviser for Disaster Risk Reduction/Climate Change Adaptation-UNDP Mozambique, Crisis Prevention, Recovery and Environment Unit (CPR/E).
- Violeta Sretenovic, Coordinator of Key Partnerships, Public Investment Management Office, Government of the Republic of Serbia.

We would also like to thank Joana Sampainho (UNDP) and Geraldine Becchi (UNDP) for their invaluable support as reviewers of this document.

Finally, UNDP would like to thank the European Union, the European Commission Service for Foreign Policy Instruments and the Government of Luxembourg for their support for the publication of this document through the projects "Strengthening Capacities for Post-Disaster Needs Assessment and Recovery Preparedness" and "Building Capacities for Resilient Recovery".

Table of Contents

Tables

Figures

Boxes

Abbreviation

ADB	Asian Development Bank
BBB	Building Back Better
BRR	Agency for the Rehabilitation and Reconstruction of Aceh and Nias (Indonesia)
CERA	Canterbury Earthquake Recovery Authority (New Zealand)
CMICT	Committee of Ministers of Infrastructure, City and Territories (Chile)
CSO	Civil Society Organization
DRF	Disaster Recovery Framework
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EU	European Union
FAAARO	Government Office of Reconstruction and Flood Relief (Serbia)
GFDRR	Global Facility for Disaster Reduction and Recovery
GSDMA	Gujarat State Disaster Management Authority (India)
IFI	International Financial Institution
IHRC	Interim Haiti Recovery Commission
INGC	National Institute for Disaster Management (Mozambique)
IO	International Organization
M&E	Monitoring and Evaluation
MDTF	Multi-Donor Trust Fund
NGO	Non-Governmental Organization
PDNA	Post-Disaster Needs Assessment
PIMO	Public Investment Management Office (Serbia)
PIU	Project Implementation Unit
PPP	Public-Private Partnerships
UNDP	United Nations Development Programme
UNDRR	United Nations Office for Disaster Risk Reduction
WB	World Bank

1. OVERVIEW

Objectives and scope

This Guidebook describes institutional options, successful characteristics and management lessons based on real-world experience with disaster recovery operations. It is a planning tool for practitioners and policymakers who need to design, manage and assess recovery following a disaster. This is an effort to remove some of the uncertainty from decision-making after a major event. The **main objective** of this Guidebook is to inform the design of effective institutional arrangements for recovery, both before and after a disaster occurs.

The Guidebook is based on current literature, relevant examples and a new set of case studies from six countries (summarized in Annex 2) that draw lessons from the institutional arrangements and recovery management strategies put in place after catastrophic disasters, including the COVID-19 pandemic. The case studies demonstrate how a range of different countries took on the challenge of recovery and structured their institutional, legislative and policy frameworks to support their recovery goals. These real-life examples are based on the operational context inside their respective recovery institutions and describe the structures, functions and processes that were critical components of effective recovery.

Intended audience

This resource is intended for anyone tasked with setting up, leading, supporting, or working with a government agency dedicated to the management of disaster recovery after a catastrophic event. Recovery leaders and practitioners with real-world experience across the globe were interviewed during the preparation of this Guidebook, and asked for their advice as to the information future leaders need to lead successful recovery.

This Guidebook is a manual for recovery leaders, subject matter experts, practitioners, government officials, the private sector, community representatives and development partners tasked with developing, supporting and implementing effective legal and institutional recovery plans.

It presents the reader with insights concerning the establishment of effective institutional and management structures for disaster recovery. The Guidebook and accompanying set of six case studies[1] provides the reader with traditional examples of best practices, but also reflects the knowledge gained from failure and what has not worked well. In the final section of this introduction, a set of Guiding Principles for Successful Institutional Arrangements is presented.

Structure

The Guidebook begins with the rationale behind providing guidance on institutional arrangements because they affect the pace and quality of post-disaster recovery (Section 2). It then lays out the criteria for designing and selecting a lead institution and sets out the three main organizational models (Section 3). Regardless of the model selected, there are key requirements for successful institutional arrangements that are laid out in Section 4. Finally, best practices from international experience are presented to build on lessons learned in the field (Section 5). The Guidebook concludes with a checklist of key elements to take into consideration during the process of establishing institutional arrangements. Annexes provide definitions of key terms and concepts, summaries of the case studies, sample terms of reference for key staff, and organograms of different institutional structures.

[1] The case studies carried out for this Guidebook are: Chile (2010 Maule Earthquake), India (2001 Bhuj Earthquake in Gujarat State), Indonesia (2004 Indian Ocean Tsunami/2006 Yogjakarta and Central Java Earthquake), New Zealand (2010-2011 Canterbury Earthquake Sequence) and Serbia (Catastrophic Floods of May 2014).

2. WHY INSTITUTIONS MATTER FOR RECOVERY

This section begins with a definition of the meaning of institutional arrangements for recovery, including key actors and tasks. It then situates these arrangements as a critical element of an overall Disaster Recovery Framework to more effectively achieve resilient recovery. Next, the case is made for putting institutional arrangements in place as quickly as possible so as to build capacity and avoid delays that have real human and economic costs. Finally, the importance of preparedness is emphasized so that the capacity to manage recovery is, to the greatest extent possible, in place before a disaster strikes.

What are institutional arrangements for recovery?

Institutional arrangements for recovery refer to the organizational structures, policies and procedures that countries put in place to plan, manage and implement disaster recovery operations. Recovery and reconstruction governance are emerging as a specialized area of public administration, and institutional capacities for recovery are coming into sharp focus as a critical topic for future research (Johnson, 2014; Ganapati and Mukherji, 2014). The effectiveness and competence of institutional arrangements for recovery is at the centre of every assessment of the success or failure of disaster recovery efforts.

For the purpose of this Guidebook, institutional arrangements for recovery may be defined as:
The institutional system(s) established by government actors to manage effective disaster recovery strategies, plans, policies, programmes, and projects.

Institutional arrangements delineate the government bodies, policies and processes needed to coordinate recovery efforts effectively with intergovernmental and non-governmental stakeholders. They lay out the recovery mandate and strategy, and define the organizational form and functions of the lead agency, executive management team and the roles and responsibilities of all actors that will engage in recovery efforts. These actors can be categorized as:

- *Government:* lead institution, line ministries, state or provincial governments and local governments;
- *Non-Government:* domestic NGOs, the private sector, CSOs, and community groups;
- *International:* international organizations and financial institutions, international NGOs.

Institutional arrangements are crucial as they provide the government at all levels with a framework within which to formulate and implement policies and understand how the recovery mission will be managed. They should clarify how each of the following critical components of the recovery process will be governed (Figure 1).

Institutional arrangements also delineate linkages, levels of authority and participation of organizations at the international, national, state, provincial, regional and local levels and between governmental and non-governmental entities, including local communities and the private sector. They include organizations that have taken on a level of responsibility for recovery, their staff, leadership, funding, equipment and supplies, effectiveness and ability to communicate across organizational boundaries.

Well-designed institutional arrangements will codify information management and reporting practices and ensure a commitment to transparency and accountability to the public, the sources of recovery finance and government leaders. By providing a clear and transparent structure for the recovery process, institutional arrangements build trust and

confidence in government plans, projected outcomes and the recovery mission, and can confer greater legitimacy on governments hoping to obtain outside funding.

Figure 1. *Critical components of how the institutional arrangements govern the recovery process*

Recovery from major disasters is not business-as-usual

Recovery from multi-jurisdictional, large-scale disasters is rarely successful when a 'business-as-usual' approach is applied to this very complex task. This is due to the following characteristics of recovery:

a. Recovery typically involves large-scale programmes, often costing hundreds of millions of dollars, and requiring a diverse set of skills, resources and protocols to plan, implement and monitor;
b. Recovery projects and programmes are prepared quickly and implemented over a fixed time period, usually two to five years or more;
c. They are implemented on an intensive basis in a specific geographical area or areas affected by a disaster;
d. Recovery efforts receive a high degree of scrutiny and demand for accountability, thus necessitating good governance and public trust.

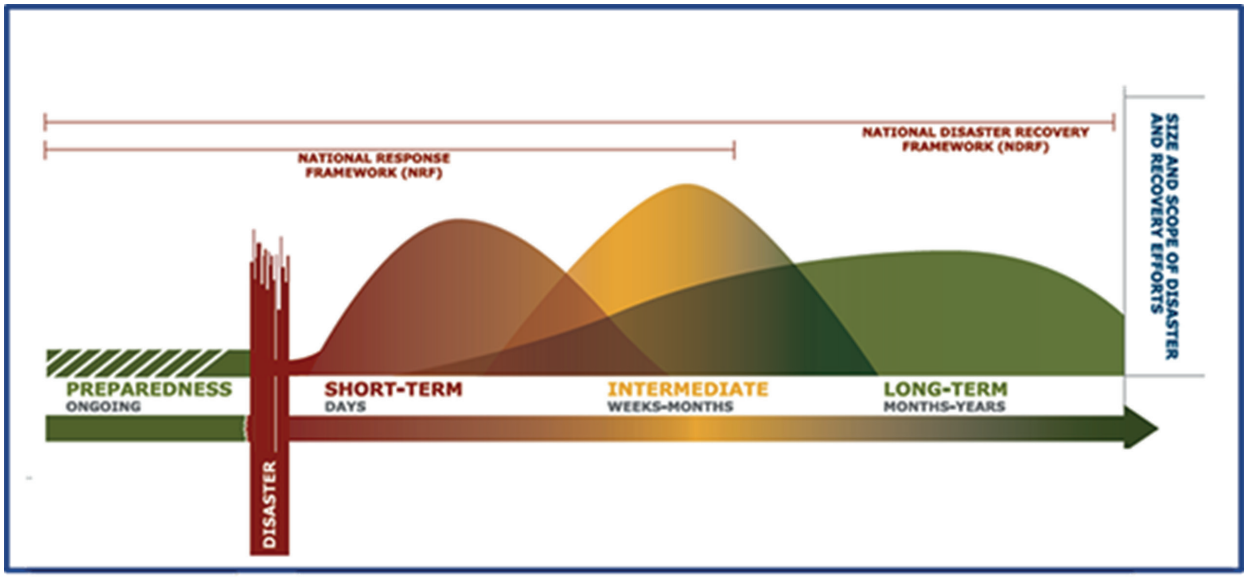
Government organizations tasked with response and disaster risk reduction activities often do not have the range of technical capacities needed for a recovery effort. They also may not have the policies, political authority, staff and public confidence to effectively manage recovery. If a capacity assessment or other evaluation indicates that existing institutional arrangements are inadequate for recovery planning and management, then alternatives need to be considered and a new approach needs to be selected for rapid implementation. All these suggest that recovery cannot be implemented on a business-as-usual basis. Recovery following a major disaster requires exceptional effort, and a dedicated institutional arrangement embodies that effort.

Institutional arrangements are a key element of a Disaster Recovery Framework

Institutional arrangements are a critical component of a larger Disaster Recovery Framework (DRF), a process advocated by the tripartite partners (EU, UNDP, WB) since 2015 to ensure that recovery is swift, inclusive and resilient. By developing a DRF, a country will be in a position to drive a process forward that unites all government, private sector, donor, development partners and community efforts with a focus on building back stronger, faster and more inclusively over the short-, medium- and long-term time frames of recovery. The DRF is a process that involves articulating a vision for recovery, defining a strategy, prioritizing actions, fine-tuning planning and providing guidance on financing, implementing and monitoring the recovery. Depending on the scale of the recovery required, the framework should be finalized within 1 to 2 months after a disaster and, ideally, key elements should already have been prepared prior to the event (GFDRR, 2020).

Post-disaster recovery usually occurs in three phases. The short-term phase, lasting days to weeks, involves response and relief to save lives and protect livelihoods and property. The intermediate phase involves early recovery during the initial weeks to several months following the disaster and includes assessment of damages and losses, finalization of the DRF and priority recovery efforts such as debris removal. The long-term phase, usually lasting up to several years, involves rebuilding affected communities and economies as part of resilient recovery. These phases are illustrated in Figure 2 below. The goal of the final phase should be a return to sustainable social and economic development.

Figure 2. *Phases of Disaster Recovery*



Source: FEMA, 2011

The transition from response to recovery usually implies an institutional "changing of the guard" as disaster relief activities require different skill sets and leadership techniques, and as first responders are no longer

needed to save lives, property and other assets. Longer-term recovery requires technical expertise from a wide variety of sectors that need rebuilding and these extend beyond the traditional boundaries of emergency management to include the economy, infrastructure, housing, engineering, planning, land-use, social welfare, poverty reduction, livelihoods, health, education, cross-cutting issues, etc. The India case study provides just such an example: following the Gujarat earthquake, the humanitarian relief effort was centrally coordinated by the Natural Disaster Management Control Room in close collaboration with the state government. Coordination of recovery operations then shifted to the Gujarat State Disaster Management Authority.

Lack of institutional arrangements can result in delays with human and economic costs

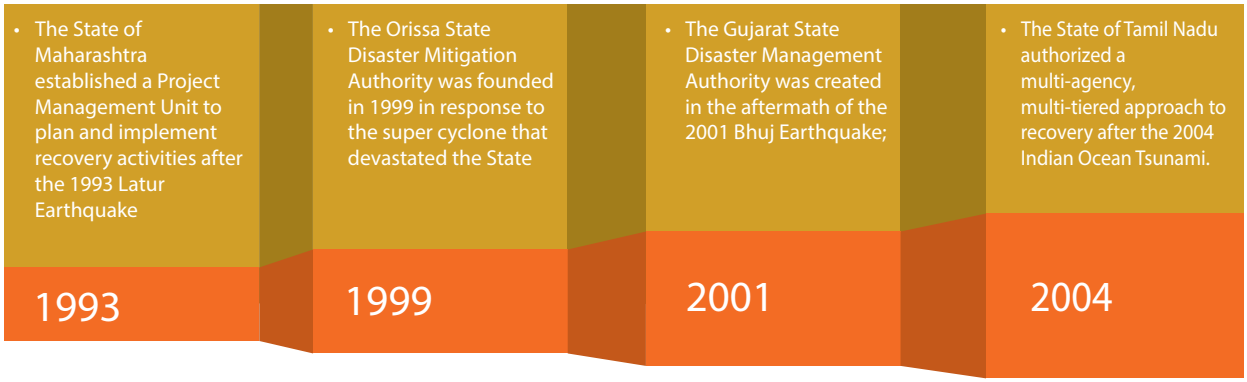
Designing, negotiating and legalizing a new management system requires time, and typically delays the start of the recovery process. These delays have real consequences in terms of human lives, livelihoods and the cost of recovery. In Nepal, initiation of a full recovery programme following the 2015 Gorkha Earthquake was delayed by almost a year, in part because of negotiations, complications and setbacks related to the establishment of the National Reconstruction Authority. Consequently, a second winter relief programme had to be financed and implemented to help homeless and displaced households that had not received assistance for rebuilding. In Indonesia following the tsunami, the national government could not disburse recovery funds for eight months after the disaster because there were no flexible reallocation procedures in place at the time. Fortunately, a considerable amount of recovery financing was "off budget" and could be allocated by NGOs to support the government's recovery programme during that initial period.

A global study indicates that avoiding delays and building back faster will reduce disaster impacts by accelerating reconstruction through measures such as contingent reconstruction plans, advance procurement arrangements, pre-approved contracts and financial arrangements. Estimates show that if the average reconstruction period were reduced by one-third without compromising the quality of reconstruction, global well-being losses could be reduced by 14 per cent—equivalent to increasing global consumption by over US$75 billion per year. These gains are especially pronounced in countries with frequent events, such as small island states or Sub-Saharan countries (GFDRR, 2018).[2]

Importance of preparedness

Institutional arrangements for recovery are usually put in place only after a disaster occurs. The India case study provides examples of this unfortunate phenomenon (Figure 3).

Figure 3. *India case study: examples of post-disaster establishment of institutional arrangements for recovery*



[2] GFDRR (2018). Building Back Better: Achieving resilience through stronger, faster and more inclusive post-disaster reconstruction. Available at https://bit.ly/2JHOydk

Pre-disaster recovery preparedness encompasses a range of policies and actions that can be put in place in advance to support governments and communities to build back stronger, faster and more equitably when disasters strike. Preparing for recovery enables government planners to engage communities and vulnerable groups and to institutionalize and build capacity for inclusive recovery. This might include developing a legal framework to facilitate new institutional arrangements, pre-approved procurement arrangements, standards and protocols for permits so as to expedite everything from housing reconstruction to data collection for recovery. Specific examples can be found in Box 2.1. In addition to institutional preparedness, it is also important to have the capacities for disaster assessment and recovery financing in place before a major emergency (GFDRR, 2020).

BOX 2.1: *Recommendations for better pre-disaster preparedness in New Zealand*

The Auditor-General's 2017 report on CERA's performance, Canterbury Earthquake Recovery Authority: Assessing its effectiveness and efficiency, concluded that New Zealand's national government needed to simplify the establishment of future recovery agencies by conducting intensive pre-disaster planning to determine the basic systems needed by such an agency: financial controls, performance management systems, human resource capabilities, ICT infrastructure, capacity to provide official correspondence and comply with government regulations and laws. Those services would then be outsourced so that necessary processes and protocols could be put in place quickly in the future.

Source: New Zealand Case Study

3. OPTIONS FOR MANAGING THE RECOVERY PROCESS

This section helps the reader think through which institutional arrangements would be most appropriate to his or her context. It begins by outlining the possible roles that a recovery institution or institutions may play. Then, a number of options and examples for assessing institutional capacity are given. Next, three basic models are presented, each of which has several variations. Six criteria are then identified that should be taken into consideration during the process of designing and selecting the most appropriate arrangements, particularly for a lead institution. Finally, the pros and cons of each basic model are summarized.

Institutional roles for recovery

Regardless of the institutional model selected, to ensure that recovery is well-managed, the arrangements should include some or all of the following components:

- **Assessment:** A Post-Disaster Needs Assessment[3] (PDNA) or other such evaluation should be conducted shortly after the disaster in order to quantify the economic damages and losses as well as recovery needs in order to set priorities and mobilize financial resources for recovery. If institutional arrangements are not in place, then the assessment is often led by the Ministry of Planning or Finance.
- **Planning, programming and policy development:** An overall recovery plan and, often, detailed sectoral recovery plans should be developed. These can then be translated into programmes and policies to facilitate implementation. Again, if the lead recovery institution is not in place, this may be coordinated by the Ministry of Planning along with relevant line ministries.
- **Resource mobilization:** Once damages, losses and recovery needs have been assessed and a recovery plan is in place, the financing needed to fund the recovery process must be mobilized. In major disasters, this is sometimes done by organizing a Donor Pledging Conference. If institutional arrangements have not yet been consolidated, this effort may be led by the Ministry of Finance.
- **Capacity-building:** Major disasters can disrupt and diminish the capacity of key actors to carry out their roles in government and society. Thus, institutional arrangements need to support rebuilding this capacity in local, regional and central governments, among civil society organizations, at the community level and within the private sector.
- **Coordination:** With multiple actors engaged in recovery, there is a strong need for coordination so as to avoid duplication, maximize synergies, target priority areas, groups and sectors and facilitate the flow of information. Coordination is needed at several levels: within and between communities, between the local and national levels of government, at the national level between ministries, and between the government and international actors.
- **Communications:** Clear timetables and progress reports need to be communicated to the public in order to set realistic expectations regarding the recovery process. In addition, affected communities need to know about different modes of assistance, including eligibility criteria. Finally, communications must be two-way with feedback from beneficiaries concerning complaints, incidents of corruption, problems with implementation and suggestions for better performance.
- **Monitoring and evaluation:** An M&E system needs to be put in place to a) monitor the progress of the overall recovery as well as individual programmes and projects; b) supervise quality by ensuring that those implementing recovery activities adhere to clear standards, especially when it comes to Building Back Better; c) track financial assistance from governmental as well as non-governmental partners, including any international aid and d) identify any gaps in the recovery process by sector and geographic area so that efforts can be rebalanced and more inclusive.

[3] A PDNA is an assessment conducted jointly by four parties: the national government of the affected country, the United Nations, the World Bank and the European Union. The assessment gathers information to support the post-disaster determination by the government of the physical damages, social and economic losses and costs of recovery needs. The PDNA ensures that the development community aligns behind one comprehensive government-owned process. It assists a country in assessing the situation in a relatively short time, so as to quantify needs and formulate broad recovery strategies.

- **Handover/transition:** The recovery process should have a targeted end date which can also signal the end of temporary institutional arrangements. It is critical to prepare and implement a handover or transition plan to ensure that institutional memory is maintained, rebuilt or newly constructed assets are properly operated and maintained, critical functions continue and capacity is maintained and updated.
- **Implementation:** This role is listed last as it is not commonly the responsibility of a recovery institution. However, in some circumstances where capacity is lacking or coordination with line ministries is challenging, it may be necessary to develop the capacity for financial management, procurement and contracting in order to directly implement recovery activities.

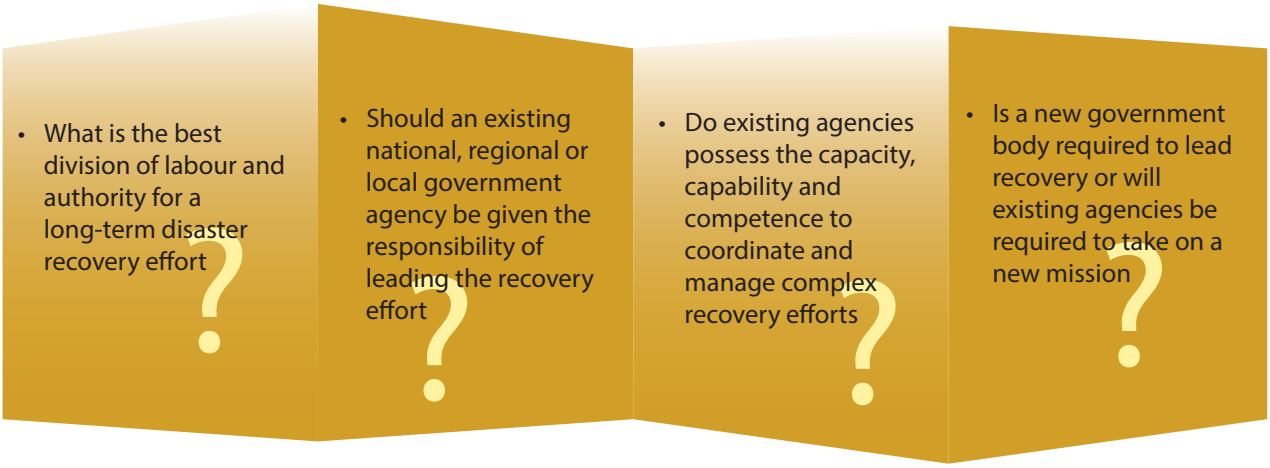
All of these roles should be undertaken through participatory processes that directly engage stakeholders, especially affected communities and vulnerable groups, in planning, implementation and monitoring. In following these processes, the outline of an appropriate institutional arrangement should emerge. For instance, both participatory PDNA and recovery planning pay attention to institutional design questions. These efforts, as well as resource mobilization, coordination and communications, are key to the design of an institutional arrangement. Finally, each role should embody the Building Back Better (BBB) approach to ensure that recovery is resilient and protects communities against future disaster risks.

Assessing existing institutional capacity

The selection of an institutional model for recovery is dependent on a range of factors, among them the size and scale of the disaster event, existing forms of governance, civil service structures and capacity within the affected region and country. Other factors include the projected recovery timeline, whether a deadline is set for recovery completion, and the sense of urgency surrounding the need to transition back to sustainable development practices.

Senior government leaders and executives responsible for designing institutional arrangements for recovery are immediately faced with critical questions (Figure 4).

Figure 4. *Critical question senior government leaders and executives responsible for designing institutional arrangements for recovery face*



The institutional framework for any recovery operation is chosen by governments officials after assessing the existing capacity of government bodies in terms of the skills and technical expertise needed to execute recovery tasks: management, planning, logistics, finance, procurement, implementation, information management, temporary and permanent housing, project management, infrastructure restoration, social services, engineering, mitigation, environmental and natural resource management, communication, public outreach, etc.

Capacity assessment efforts usually begin by scanning the civil protection and disaster management entities already serving the citizens of the country in question, then moving on to line ministries, non-governmental organizations and the private sector. Entrusting recovery or reconstruction operations to existing disaster management systems requires very specific levels of institutional capacity within the national / provincial / local disaster management system of the country. Oftentimes, these agencies are heavily focused on response and disaster risk reduction activities and do not possess the complex array of knowledge and skills required to manage multisectoral recovery efforts.

Effectively supporting a capacity assessment process requires identifying key capacities that already exist and additional capacities that may be needed to reach recovery goals. A capacity assessment is an analysis of desired versus existing capacities and generates an understanding of the skills that need strengthening as opposed to those that already strong and well-developed.

Capacity assessments focused on disaster recovery functions and technical expertise have three broad objectives:

1. To determine the existing capacity to coordinate, lead and implement the recovery process;
2. To determine the existing capacity to implement and/or deliver recovery services at different levels;
3. To determine whether the requisite technical capacities exist across recovery sectors.

The functional capacities required of a lead agency include:

Figure 5. *Lead agency functional capacities*

These are further elaborated in the beginning of Section 3 on the institutional roles for recovery.

Typically, institutional capacity and needs are assessed as part of the PDNA or other post-disaster evaluation. Another opportunity to conduct, update or refine the capacity assessment occurs during the preparation of the Disaster Recovery Framework. Either or both processes provide a clear early opportunity to evaluate institutional capacity and identify gaps that need to be filled to ensure that recovery is well-managed.

There are several tools to assess the institutional capacities of disaster management but very few that assess capacities for recovery and reconstruction. A tool to assess disaster management capacities for all phases is being developed by a coalition of United Nations System agencies, working closely with the International Red Cross and Red Crescent Movement and several non-United Nations partners, to deliver tailor-made capacity development services to countries for disaster risk reduction. This tool, known as the

Capacity for Disaster Reduction Initiative (CADRI), has been used in several countries. A quick, simple tool developed by UNDP for assessing institutional capacities is provided in Annex 3.

Links to CADRI and other relevant tools for capacity assessment are given below:

- Capacity for Disaster Reduction Initiative (CADRI): https://www.cadri.net/en/cadri-tool
- The European Union's self-assessment tool for disaster risk management capacities, primarily designed for local governments: http://drm-capacities.eu/wp-content/uploads/2018/06/CapaCities-Self-assessment-Framework-for-DRM-capacities.pdf
- The IFRC's Vulnerability and Capacity Assessment, which focuses on the capacity of at-risk communities https://www.ifrc.org/vca;
- The After-Action Review Process, an ex-post review by stakeholders of the response to a particular disaster, so as to identify the strengths and weaknesses of institutional arrangements. It has been used by a number of governments, FEMA, WHO and the World Bank, among others.

One possible finding of a capacity assessment may be that the existing arrangements are inadequate and necessitate the creation of a new management structure. This was the case in Serbia following the floods of 2014. Again, preparedness can be critical to accelerating this process. In New Zealand prior to the Canterbury Earthquakes, national capability assessments determined that recovery was the weakest capacity of the existing institution, the Ministry of Civil Defence and Emergency Management, and that the agency was only capable of managing recovery in small- to medium-size events (see Box 3.1). Thus, despite recovery being part of the agency's mandate, the government did not ask it to exercise this role after the earthquakes.

BOX 3.1: *Capacity assessments lead to new institutional arrangements in New Zealand*

Following the Canterbury Earthquakes, the Ministry of Civil Defence and Emergency Management (MCDEM) was the primary organization in charge of disaster management in New Zealand. With a mandate covering readiness, response, risk reduction, and recovery, MCDEM's role was to manage central government recovery functions for large scale events. Unfortunately, prior to the Canterbury sequence of earthquakes, national capability assessments had suggested that recovery capacity within MCDEM was very weak, and confidence in the organization's ability to manage disaster recovery had been eroded.

To resolve the issue of recovery governance for the 2010 Canterbury earthquake, a ***Minister for Earthquake Recovery*** was named and the ***Canterbury Earthquake Recovery Commission (CERC)*** was established with a temporary remit of 18 months to manage the recovery process. By the time the second earthquake hit, it was clear that CERC had not been effective, and disaster recovery operations were going to be much more complex, expensive and lengthy. A second temporary recovery institution with a 5-year term was created and given greater autonomy and budgetary control. The ***Canterbury Earthquake Recovery Authority*** was created on 29 March 2011 to manage and coordinate recovery efforts and advise the Minister for Earthquake Recovery.

Source: New Zealand Case Study

Models for institutional arrangements

The decision to implement a centralized (national government-led), decentralized (provincial, state, or local government-led) or hybrid approach to recovery (shared authority, planning and implementation across multiple levels of government) should be considered carefully. In all cases, a lead governmental body, whether an agency, a ministry or a high-level group, will always need to have an overarching level of control and the responsibility for coordinating and overseeing multi-sector, multi-governmental and multi-organizational recovery processes. Clarity about who is leading and how different levels of government will coordinate their efforts must be part of any set of institutional arrangements for recovery.

For the purposes of this Guidebook, there are three basic models for new institutional arrangements:

1. Strengthen and coordinate existing institutions or line ministries to lead reconstruction;
2. Establish a new institution to manage recovery;
3. Use a hybrid approach to create a new unit within or above existing governmental agencies.

Each of these models has several variations which are described below. Detailed organizational charts for select institutional arrangements are provided in Annex 5.

Recovery efforts are most commonly led by national, regional or local governments with support from non-governmental organizations, community groups, the private sector, sources of finance and international partners. National governments are called upon to demonstrate political will, mobilize resources, provide guidance on leadership, resolve regulatory, legal and policy questions and make much-needed technical assistance available to the recovery effort.

Local governments may need a great deal of support to manage recovery immediately after a major disaster. There are a host of reasons for this, ranging from staff and local leaders themselves being disaster survivors to issues of capacity, capability and/or competence. When this is the case, local government should not be left out of the recovery management process, but be provided with additional human resource support and specialized technical assistance to strengthen staff and technical capacities, enabling them to eventually take an increasingly important role in the recovery process as local capability and capacity expand. Local knowledge, culture and leadership are key to successful recovery efforts and must be recognized for their tremendous value in the recovery process. A separate guidebook is available on engaging local actors in the recovery process.[4]

Figure 6. *Model for new institutional arrangements*

[4] GFDRR (2019). *Local Disaster Recovery Framework Guidebook*. World Bank: Washington, D.C. Available at https://bit.ly/3mVsNoA.

1. Strengthen and coordinate existing line ministries and/or local authorities

This option depends on establishing an institutional arrangement by which individual line ministries and/or decentralized authorities work independently to manage recovery and to supervise and implement projects in their sectors or geographic areas. The key features are:

- A high-level coordination mechanism or ministry is used to set policies, establish an action plan, assess progress and resolve jurisdictional issues;
- Existing capacities of line ministries and/or local authorities are used for planning and implementation and can be strengthened as needed;
- Line ministries and/or local authorities are accountable to a central coordination body or ministry for planning, following common guidelines, using recovery funds, reporting on progress and resolving administrative disputes.

There are two variations of this model:

1. Establishing a central government coordination body to lead the recovery while using existing implementation capacity;
2. Strengthening decentralized institutions to manage recovery, usually at the state or provincial level.

Leadership by a high-level group

In many countries, a High-Level Advisory Committee, Executive Committee or Recovery Task Force is established soon after a disaster to advise the Prime Minister or President, provide oversight, streamline the recovery process and ensure inter-agency collaboration. The heads of critical government ministries such as the Ministries of Finance, Housing, Public Works, Education and Health, are asked to serve on this body, as are political leaders from provinces or states and local community governments such as the Governor, Provincial Leader, State Secretary, Mayor and local community leaders. Specific types of community leadership should also have representation, as should important private sector, NGO and international organization stakeholders in the recovery process. The work of the executive committee or task force is generally executed by a staff of competent technical experts hired to advise the committee on specific issues and to execute directives. Committee or task force members provide honest feedback, critical support and function as readers and editors of any recovery plans or documents created by technical experts as a part of this process. Committees or task forces of this sort tend to have authority to set policy but are not in a position to coordinate other government bodies and stakeholders in the recovery process, and so do not play a leadership role when it comes to field operations. These entities have responsibilities during the early recovery phase primarily, but find that their role becomes less critical when long-term recovery, with its focus on implementation, commences. Box 3.2 provides an example of this variant from Chile, where strong institutions, good governance and implementation capacity were already in place.

Strengthening a decentralized system

In countries with a strong tradition of autonomy and leadership at the state, provincial or local levels, disaster management systems tend to be decentralized, while still relying on strong political support and financing from the national government. In this case, a lead agency may be authorized at the provincial level of government to manage a locally-implemented, central government-supported recovery process (see Box 3.3). The recovery from Hurricane Katrina is another example, in which the City of New Orleans, with support from the State of Louisiana and the federal government, primarily through FEMA, established a recovery programme and a recovery authority.

Most disaster recovery governance systems combine elements of centralized control, such as institutional arrangements, legislation, recovery planning, policy, finance, procurement, technical expertise, administration and accountability, as well as elements of decentralized implementation and local-level recovery planning. Recovery management systems that spread control of the recovery process across multiple levels of government are more effective than those that concentrate power and authority at only one level of the governmental system.

BOX 3.2: *Central government coordination led the recovery efforts in Chile*

Chile has strong government institutions, a professionalized civil service known for its competent public administrative capacities and a long tradition of performance-based public management and budgeting. Recognized for its low levels of corruption, high-functioning audit institutions and well-remunerated central government public servants, the country has a reputation for efficacy and transparency, and a strong capacity to enforce central government policies and execute recovery programmes. Most public intervention is centralized, with regional and municipal government dependent on central government grants and financing. Due to the urgency of the situation, the President viewed the amount of time and political capital required to create a new recovery agency as prohibitive and quickly decided that Chile's existing authorities would lead recovery.

The central government's line ministries created recovery policies, programmes and overarching recovery plans for each sector. An Interministerial Reconstruction Committee was initially established to coordinate the recovery, led by the Minister of the Interior and under the direct supervision of the President. A National Reconstruction Plan was then drafted, laying out the longer-term management structure for reconstruction processes in Chile and giving control of the reconstruction process to the Committee of Ministers of Infrastructure, Cities and Territories (CMICT), which was chaired by the Minister of the Interior. Within the CMICT, a Subcommittee for Reconstruction was created, whose main members were the Minister of Public Works, the Minister of Housing and Urban Development and the Minister of Social Development. The Ministers of Education and Health were also included in this oversight and recovery policy-making body.

Source: Chile Case Study

BOX 3.3: *A tradition of decentralized recovery management in India*

In India, the first fully-developed institutional mechanisms dedicated to the professionalization of disaster recovery, reconstruction and preparedness were exercised at the level of *state government*. Even before the 2006 Disaster Management Act, there had been a strong constitutional and administrative foundation for state leadership in disaster management in India. Innovative and highly effective state government bodies had been created to respond to a series of major disasters that occurred between 1993 and 2004: the 1993 Latur Earthquake, 1999 Orissa Super Cyclone, 2001 Bhuj Earthquake, and 2004 Indian Ocean Tsunami.

Two weeks after the 2001 Bhuj Earthquake, the State of Gujarat established a single unified agency, the *Gujarat State Disaster Management Authority (GSDMA)*, to coordinate longer-term relief and reconstruction, and implement a massive earthquake rehabilitation programme. GSDMA was established as a temporary recovery mechanism, modelled on the Orissa State Disaster Mitigation Authority and applying important lessons from earlier recovery efforts in the State of Maharashtra. In 2003, two years after its creation, GSDMA became a permanent government body in the State of Gujarat and was given authority to deal with long-term disaster management, preparedness for future events and disaster risk reduction in addition to recovery.

Source: India Case Study

2. Establish a new agency

This option creates a single lead implementing agency. The agency envisions, strategizes, plans, implements and coordinates the overall multisectoral reconstruction programme. The creation of a new institution may be desirable in situations in which existing government agencies are unlikely to be able to coordinate and implement a large number of additional projects at increased speed while maintaining their usual public services. Resources for this option are often be brought in from other relevant agencies, through secondments, private sector consultancy, short-term assignments and financial recoupment arrangements.

There are two variants of this model: either the new agency can be created with a built-in end date, i.e., for a set period considered necessary in order to implement the recovery, or it can be set up for an indefinite period as an agency that will be responsible for the implementation of all future disaster recovery.

Temporary

A common variant is the temporary recovery agency. A great number of assumptions concerning the complexity of the recovery process and the identification of unmet needs may enter into any decision to establish a lead recovery agency. A decision to establish a *temporary* entity implies that a recovery agency will only be needed for a short period of time and, once rebuilding is finished, things will return to "normal" and the recovery agency will no longer be needed.[5] Another reason this model is strongly favoured is that by the agency's temporary nature, potential inter-agency conflicts and competition with existing line ministries are avoided.

When a temporary recovery agency model is chosen, a date is set for its closure and at that point, any continuing recovery operations are transferred to line ministries, local institutions or a combination of both. It is important to understand that a sunset or closure date establishes public expectations regarding the timeline for recovery. Whenever possible, a conservative date for closure should be established, building in room for the unexpected complications that are part and parcel of every recovery process.

Their past experience directing temporary recovery agencies has enabled many leaders to capture the lessons they learned and recommend future improvements of the model on that basis. Assessments of the effectiveness of temporary recovery agencies indicate that early estimations of recovery time frames may be too optimistic, and delays may cause the lifespan of the temporary agency to be extended. One of the largest and most successful temporary recovery agencies is the Agency for the Rehabilitation and Reconstruction of Aceh and Nias (BRR) in Indonesia, which was set up following the Indian Ocean Tsunami (see Box 3.4). Another example is the National Reconstruction Authority in Nepal, which was set up through legislation that included a five-year sunset clause, after which time the Authority would transition to regular arrangements.

The limited lifespan of a temporary recovery agency requires a carefully planned exit strategy. A large number of lessons learned show that benchmarks and milestones for the closure process should to be put in place early to ensure that local communities are empowered with the capabilities they need to continue recovery efforts. This avoids public dismay over missed recovery deadlines, which may take on political overtones and cast recovery operations in a negative light. In New Zealand, CERA, the temporary recovery agency, did not adequately consider how knowledge should be transferred so as to build capacity in local governments and communities. It completed the recovery tasks it had been assigned but when its responsibilities were transferred to local partners, they lacked the requisite skills and knowledge to move the recovery process forward without serious delays. In Mozambique, after Cyclones Idai and Kenneth, GREPOC (*Gabinete de Reconstrução Pós-Idai and Kenneth,* Cabinet of Reconstruction Post-Cyclones), a new temporary recovery agency, was created to ensure the coordination of the damage and loss assessment and to prepare the

[5] The assumption that recovery expertise is only needed on a temporary basis is very optimistic and is currently being challenged in many countries, where a changing climate, weather patterns and the increasing intensity and frequency of disasters have either led to multiple temporary institutional arrangements or to the move to establish a single permanent recovery agency.

reconstruction and recovery programme for affected areas. GREPOC's attributions were later expanded to coordinate overall recovery and reconstruction efforts within the country. The challenges and lessons learned from the Mozambican experience will be covered in an upcoming Mozambique Case Study.

BOX 3.4: *A successful temporary recovery agency in Indonesia*

In April 2005, the Government released the Master Plan for the Rehabilitation and Reconstruction of Aceh and Nias, which included the organizational mandate and institutional structure of a **new ministerial-level agency** that would manage recovery and reconstruction operations.

The new agency was put under the direct authority of the President. Major goals for the new agency were to build the capacity to address the needs and priorities of local communities and help hundreds of local and foreign organizations minimize gaps in reconstruction and avoid duplication of efforts. The newly formed *Agency for the Rehabilitation and Reconstruction of Aceh and Nias (BRR)* sought to bring coherence at the level of policy and programmes, channel available funds and provide oversight for implementation.

BRR was given ministerial-level authority to coordinate reconstruction efforts and to implement the Master Plan. The regulatory framework that established BRR gave the agency a four-year timeframe, from April 2005 to April 2009, to begin and end its post-disaster reconstruction programme. That sunset clause set the date for BRR to cease all functions and turn responsibility for continued recovery operations over to established line ministries and local government.

Source: Indonesia Case Study

Temporary recovery agencies are established using different mechanisms. Many are set up when a government invokes extraordinary measures or a Presidential Decree is issued, and are later formalized once appropriate legislation has been drafted and passed. In every case, a temporary recovery agency must be officially recognized through legal instruments, which not only formally establish the institution, but also confer authority and legitimacy upon the new entity as it assumes its position at the helm of recovery operations. Legal instruments define the mandate of the temporary recovery agency and its roles and responsibilities coordinating, leading and managing recovery efforts. In many cases, implementation becomes part of the new agency's mandate as recovery progresses and it becomes clear there is no other actor willing, able or prepared to take on the full scope of recovery projects awaiting implementation. Thus, it is important to fully consider the "who" and "how" of implementation while planning for the full set of activities that will need to be covered by institutional arrangements.

INDONESIA: Young student during a tsunami drill at his school

Permanent

In this variant, establishing a new permanent government agency for disaster recovery is determined to be the best solution for disaster recovery operations. The decision to create a new government agency in any country is based on that country's history and development trends. Major defining events such as disasters and growing social problems (health care, poverty, education, etc.) may result in the need to restructure government to meet the needs of citizens.

In many countries, the path to the establishment of a permanent agency for disaster recovery begins with the formation of a temporary or ad hoc agency that leads recovery after a specific event. In these countries, as the number of disasters resulting in major recovery efforts increases, so does the need for specialized recovery expertise. The recovery learning curve includes different structures that have been used to manage the recovery process, with some providing lacklustre results. In the experience of many countries, temporary agencies have performed extremely well, and eventually a decision is made not to discontinue the temporary agency as planned, but to grant it permanent status. The Case Studies on Serbia, Indonesia, and India provide excellent examples of how assumptions about the value of these recovery agencies evolve and result in their being given permanent status.

In Serbia, the assumption that the need for a temporary recovery agency and its specific expertise would be short-lived proved incorrect and, a year after its creation, the Public Investment Management Office (PIMO) was made a permanent government agency (see Box 3.5). In the states of Odisha and Gujarat, India, the temporary recovery agency also eventually transitioned to a permanent government body. In Indonesia, the temporary recovery agency set up to manage recovery after the 2004 tsunami closed down according to plan but when the Yogyakarta and Central Java earthquake impacted another region of the country, the central government established a permanent entity that would be able to mount recovery operations for the frequent disasters that occur in the Indonesian context. The lessons learned during the recovery from each successive event have informed changes meant to improve the approach. A final example is the Earthquake Reconstruction and Rehabilitation Authority in Pakistan which was set up on a temporary basis but later became permanent.[6]

BOX 3.5: *A temporary recovery agency becomes permanent in Serbia*

On 14 May 2014, a powerful cyclone system unleashed violent storms, record rainfalls and widespread flooding over the Republic of Serbia. In one week Western and Central Serbia received the quantity of rainfall that would normally have fallen over a three-month period. Eight of the country's rivers crested, swelling beyond capacity and overflowing their banks, causing a Flash Flood Emergency of a magnitude not seen in 120 years. The next day, the Government declared a State of Emergency. Eight days after the storm, the *Government Office for Reconstruction and Flood Relief (FAAARO)* was established by executive decree as a temporary agency tasked with the coordination of disaster assistance, management of donor funds, as well as the oversight and monitoring of flood recovery and reconstruction.

FAAARO was to be disbanded in July 2015, one year after its establishment. However, the Government determined that more time was needed to complete the recovery process and extended FAAARO's mandate. Six months later, the National Assembly passed new legislation, titled the *Permanent Law on Reconstruction following Natural and other Hazards*. Instead of closing FAAARO, the agency was renamed and transitioned to become a permanent government agency, the Public Investment Management Office (PIMO). This step created a permanent legal framework for disaster recovery in Serbia. The new law expanded the mandate and responsibility of PIMO, making resilience and prevention an essential part of the government's institutional infrastructure for DRM.

Source: Serbia Case Study

[6] See http://www.erra.gov.pk

3. Hybrid approach

A third option increasingly used by governments is the hybrid institutional model. The salient features of this arrangement are:

- An existing government structure is strengthened through the creation of a single unit, department or external commission dedicated to the recovery;
- The unit provides overarching central guidance and support services to keep the reconstruction programme on its planned course. It is the single point of coordination of national and international stakeholders;
- The unit is responsible for ensuring the inclusion of line ministries, local authorities, the private sector and civil society in all phases of the recovery. It has authority to work with local governments and NGOs to delegate implementation responsibilities;
- The unit does not plan or implement individual recovery projects or programmes itself.

The hybrid option ensures that reconstruction projects are delivered relatively quickly and that targets are met. There are two variants of this option: the internal Project Implementation Unit and the external International Commission.

Project Implementation Unit

The first variant of the hybrid model is the Project Implementation Unit (PIU), a compact organizational structure that is sometimes used to coordinate and manage smaller-scale, project-focused recovery processes. PIUs are sometimes referred to by other names, such as Project Coordination Units, Project Management Units or Project Management Offices. Favoured for their efficiency, PIUs are used by International Financial Institutions (IFIs) in particular, "primarily…as a mechanism to implement projects and to create capital assets, rather than as a tool to build human or institutional capacity" (ADB, 2005), or because they "fill in the technical skills gap in the administration of development assistance programmes in the Bank's borrower countries" (World Bank, 2012).

When used for disaster recovery purposes, the PIU is often located in the Office of the Prime Minister or President, in order to ensure that the authority of the country's political executive extends to it. In this way, the entity has the power to set policy and see that it is enforced. Alternatively, a PIU may be established as an office or unit within a ministry or department, and as such does not require a legal instrument to formalize it within the greater government structure. Typically, a PIU model is not well-suited to large disaster settings because it cannot be easily expanded.

The roles and responsibilities exercised by a PIU usually encompass general management functions. PIUs promote a project management culture, manage high-level infrastructure and housing projects, and conceptualize recovery management as a rational, linear process. PIUs establish policies, regulations, functions, processes and procedures and assign responsibilities that define the establishment, management and control of projects, programmes or portfolios. They also collect and track progress on different projects, creating information management systems and using data to analyse system performance and implement adaptations where necessary. PIUs often institute processes that must be used across all departments to ensure that project delivery can be kept up to standard throughout the system. Masters of administrative functionality, the units design project management guidance, methods, systems, tools and metrics that are intended to result in consistent project outcomes in a recovery process. In many contexts, PIUs have been called invaluable and very efficient (World Bank, 2012). In post-disaster situations specifically, this approach can help make the number of projects and implementation difficulties manageable. Applying good project management techniques to a carefully thought-out process is always critical to ensuring a successful recovery (see Box 3.6).

BOX 3.6: *Using a Project Implementation Unit in Turkey*

Following the 1999 Marmara Earthquake in Turkey, as part of the Marmara Earthquake Emergency Reconstruction project, the World Bank provided a loan to the Government to finance housing reconstruction. A Project Implementation Unit (PIU) was established in the Prime Minister's office to coordinate and manage the process of selecting plots of land, designing, building and distributing permanent housing units to eligible households.

Although the PIU was required to make the process participatory, this was not in fact the case. Before the participatory process could even begin, the housing units to be financed by the Bank already had floor plans, a firm had been contracted to build the units and another hired to inspect construction after completion. Public meetings grew heated as the beneficiaries judged the housing designs as unsuitable to their needs due to their location far from the city center, the lack of supporting infrastructure, their size, and the inclusion of Western rather than Turkish-style toilets. Because the meetings were held late in the project implementation process, the feedback received from the beneficiaries was not used to change the planning process and the housing units were built as originally planned, with only one minor modification.

One year after the homes were distributed by lottery, half of them remained vacant. Research shows that the participatory process had not been synchronized with the construction process. If efficiency is measured based on completing projects within an allotted time frame, the recovery work done by this PIU was a success. The fact that the housing units were rejected by the beneficiaries and participatory processes were only pro forma obliges us to re-think how success should be measured. In conclusion, when a PIU variant is used, the institutional arrangements should base success on local participation in the recovery process.

Source: Ganapati and Mukherji, 2014

International Commission

A relatively rare but notable variant of the hybrid approach is the establishment of an international body to coordinate and supervise recovery initially when recovery from a major disaster is to be financed largely with external resources. In Haiti, there was no agency within the government with the mandate to lead disaster recovery and reconstruction after the earthquake in January 2010. This led the government to realize that such an agency was urgently needed, and until it could be established, an interim body was necessary. The Interim Haiti Recovery Commission (IHRC) was launched, co-chaired by Prime Minister Bellerive and United Nations Special Envoy Clinton, with the aim of aiding the mobilization of financial and technical resources as well as facilitating coordination between international partners and the Government of Haiti. With a mandate of 18 months, it was not intended to be a funding body or an operational agency, but rather a high-level forum for donor coordination, recovery planning, resource mobilization, monitoring and evaluation. The Haiti Reconstruction Fund was initially designed to complement the IHRC, but with a longer lifespan and mission. Similar to the IHRC, it was governed in partnership between the government and the international community. However, after the IHRC's mandate expired, the anticipated recovery agency was not created and the IHRC's responsibilities were taken over by regular agencies within the Government (GFDRR, 2014).

Haiti Earthquake

Comparison of models

Table 1. *Comparison of models*

Model	Pros	Cons
Use existing capacities: • A central body sets policies, establishes an action plan, assesses progress and resolves jurisdictional issues • Existing capacities of line ministries and/or local authorities are used for planning and implementation • Line ministries and/or local authorities are accountable to the central body	✓ Relies on existing institutions, protocols and capacities ✓ Can accelerate decision-making ✓ Limited or no legislation required ✓ Does not create new institutional rivalries	✓ Rapid recruitment of temporary human resources may not adequately supplement capacities ✓ Recovery coordination may be difficult if line ministry staff do not have experience or actively resist ✓ Line ministries may struggle to focus on recovery programmes at the expense of longer-term goals
Establish a new agency: • Envisions, strategizes, plans, implements and coordinates the overall multisectoral reconstruction programme • Used when existing capacity is not capable of responding to recovery needs • Requires significant resources to be operational • In some cases, can implement recovery activities	✓ Roles and responsibilities for recovery are clearer ✓ More effective internal and external communication ✓ Better capacity to handle complicated financial and M&E arrangements ✓ Is not bound by business-as-usual approach	✓ Potential friction with line ministries due to compromised authority and duplicated mandates ✓ Transaction costs of setting up a new institution can slow the recovery down and increase costs ✓ When the temporary agency closes, its accumulated capacity, knowledge and experience may be lost
Hybrid approach: • Uses and/or strengthens an existing structure • Provides coordination, guidance and support but not implementation • Responsible for inclusion of key stakeholders • May be a unit within an agency or dedicated commission	✓ Efficient means of implementing recovery, especially at the project level ✓ Can provide the opportunity for greater transparency and participation in the recovery process for donors when significant international aid is involved	✓ May result in creation of parallel organizations with external technical staff who answer to donors and can undermine government policy agenda ✓ May reduce government ownership of the development and recovery process

Criteria for selecting an appropriate model

If institutional arrangements have not been thought through and defined prior to a disaster, a model for institutional arrangements will have to be chosen. The selection process usually depends on six criteria:

Figure 7. *Six criteria to consider to select the appropriate institutional process*

When institutional arrangements include the direct implementation of recovery efforts, there must also be a high level of capacity in place for procurement, contracting and financial management.
Some examples of how these criteria may be applied:

- If a disaster is relatively small, a decentralized recovery institution at the local level might be the most effective institutional arrangement;
- If the disaster occurs in a country where disaster management capacities are limited, it may be necessary to establish a dedicated recovery agency;
- If the disaster occurs in a location where there is previous experience with recovery programmes and projects, it may be possible to rely on an existing government agency, with some capacity strengthening if and as needed;
- If a major disaster affects a range of sectors and jurisdictions, a high-level coordination body capable of orchestrating recovery across line ministries and different levels of government will likely be required, with or without the involvement of the international community.

INDIA-Students at KDPM as they carry an injured student to the first aid point

4. KEY REQUIREMENTS FOR SUCCESS

For any institutional arrangement to be successful, regardless of the model or variant chosen, experience indicates that there are a number of key requirements that must be met. These include **a legal framework, leadership for effective recovery, adequate staffing, stakeholder participation, good governance and linkage to financing mechanisms**.

Figure 8. *Key requeriments for sucess*

Legal framework

Legislation should clearly codify the functions and powers of the implementing institution(s), including the scope of any rulemaking authority, clarify funding mechanism(s) and establish a lifespan for the institution. Often, the legal framework of an institutional arrangement for recovery allows for greater flexibility and powers than is usually the case. Pre- and post-disaster legislation should specify which agency will reconstruct which asset, thus setting the basis for organizing recovery institutions and implementing programmes. Experience shows that recovery may stumble if there is legislative confusion over institutional ownership and responsibility. It may lead to duplicating efforts and failing to identify critical gaps as well as creating institutional friction among line ministries, development agencies, reconstruction authorities and non-governmental implementing agencies. The early involvement of the agencies that are to inherit responsibility for any reconstructed assets will facilitate effective and efficient recovery by ensuring that operations and maintenance are carried out. This includes services such as energy, transport, health and education and any physical assets that will be transferred to local or central government. The legal frameworks from four cases are summarized in Box 4.1.

BOX 4.1: *Legal frameworks for institutional arrangements*

- INDIA: GSDMA was given cabinet-level powers. Rules and regulations differed from the norm, allowing the agency to move quickly and circumvent normal administrative procedures. The new agency also had the ability to receive funds from international organizations while ensuring accountability and transparency.
- INDONESIA: BRR's legal authority was founded on an emergency law which made it a ministerial-level agency on equal footing with line ministries. A Presidential Regulation set out the organizational structure and mechanisms of the agency, and these legal instruments were subsequently endorsed by Parliament.
- NEW ZEALAND: CERA was established five weeks after the February 2011 earthquake with legal mandates to a) lead and coordinate recovery policy and planning, b) collaborate with external stakeholders, c) develop a recovery strategy and d) implement recovery programmes and projects.

Source: Case Study

Creating a legal mandate for post-disaster land-use planning and standards

Land use, land-use planning and building codes are important aspects of post-disaster recovery and reconstruction, especially in the aftermath of disasters such as earthquakes, hurricanes or heavy floods that may lead to the temporary or permanent relocation of some or all of the affected population. Building and construction standards should be in place to ensure that new housing and infrastructure are disaster-resilient. Clear standards also allow for the lead recovery institution to guide new construction and monitor quality and compliance with building standards.

It is therefore important that governments be prepared before a disaster strikes to ensure that they have proper legal institutional mandates for planning land use and setting standards. Those mandates may be modified based on post-disaster needs, but a clear pre-disaster mandate and framework will facilitate a revision after the disaster, if needed. There are three effective ways to create a legal mandate for new or improvised institutional arrangements for strategic post-disaster land use and building standards: amending existing legislation; introducing new legislation; and creating a mandate through ordinances and government orders or regulations.

Leadership for effective recovery

A recovery institution is empowered through a clear mandate, the appointment of an experienced, informed leader to manage it and enough technical capacity to support it. The importance of politically respected, competent and empathetic leadership is crucial to ensuring political and community ownership and recovery financing. The characteristics of an effective leader include:

- A commitment to the recovery process, strong team-building skills and the capacity to reach out to affected people;
- A reputation for integrity that commands respect from a wide range of stakeholders, from line ministries to affected communities;
- An ability to pursue good recovery practices, including Building Back Better and managing the expectations of disaster-affected communities;
- A focus on ensuring that risk reduction initiatives are an intrinsic part of the recovery process;
- The capacity to mobilize financial, human and other resources from different sources;
- Skill at overcoming institutional barriers.

A strong recovery leader also needs to have high-level political access and support. The recovery leadership in several of the case studies (Chile, India, Indonesia, New Zealand and Serbia) all benefited from direct access to the executive branch of government which ensured that the recovery leader commanded respect and was able to resolve problems at the highest level. Sample terms of reference for a recovery leader are included in Annex 3.

However, strong leadership at the top may also result in a top-down recovery model, which fails to consult or foster participation. The strength and composition of the recovery team or agency staffing are as important as charismatic leadership.

Staffing

Depending on the nature and scope of the disaster, staffing for recovery may be a challenge. Situations may arise where governments need to be able to call on additional expertise to respond to recovery needs in a wide range of sectors, such as when an epidemic breaks out as a result of a disaster. They may also need to increase their staff temporarily or longer-term. The lead recovery institution will need personnel with the skills to fill the following roles:

- **Leadership (**Recovery Manager, Deputy Recovery Manager)
- **Financial management** (Chief Financial Officer)
- **Legal** (Chief Legal Officer)
- **Building Back Better** (Chief Resilience Officer)
- **Communications and external relations** (Communications Manager, Stakeholder Liaison Manager)
- **Sectoral expertise (**Economic Recovery Manager, Housing Manager, Human Services Manager, Infrastructure Manager)
- **Capacity-building** (Local Recovery and Capacity-Building Manager)
- **Assessment** (Monitoring and Evaluation Manager)

Terms of reference for these positions can be found in Annex 3.

While capacity needs should be anticipated before a disaster occurs, capacity after a disaster must be re-evaluated via a rapid capacity needs assessment. This will enable the government to assign roles and responsibilities to the different stakeholders in place and get a clear understanding of the capacities and limitations of the institutions and organizations involved. The assessment may also be an important factor in determining the lead institution(s) and the functions to be assigned to line ministries and agencies as well as to subnational entities. The assessment should also cover the private sector, civil society organizations, professional associations and NGOs in order to identify which organizations should be involved and in what type of activities. Finally, the assessment may help to prepare a capacity strengthening strategy to improve the performances of all of the implementing actors.

If the government is unable to meet the increased professional and technical requirements for recovery over both the short and longer terms, expertise may be sought elsewhere to direct programmatic activities. Staffing procedures should be part of the Disaster Recovery Framework. The successful procedures that were used in New Zealand are presented in Box 4.2.

Immediate human resource needs

An agency's human resources —personnel with the needed professional, administrative and specialist skills— may be strengthened through targeted employment policies. As noted above, in some instances a new lead agency is formed while in others, an existing institution is made responsible for recovery. In both instances, the agency's human resources almost invariably need to be increased by acquiring additional personnel, often with specialized skills. One means of finding suitable staff is to draw on other sources, such as line departments, humanitarian response agencies, the domestic and international private sectors, civil society and international organizations. Reporting lines can be transferred to the lead agency by secondments and other special arrangements, even if temporary. There are significant advantages to forming recovery teams whose members are already well-connected to the wide variety of recovery stakeholders. By recruiting experts from domestic and international agencies and/or experienced NGOs, the lead institution can bring global good practices to its recovery effort. Examples of how immediate human resource needs can be met are presented in Box 4.3.

BOX 4.2: *Strategies to meet staffing needs in New Zealand*

CERA's staffing requirements were met through a variety of different modalities either on a short-term or a longer-term basis:

- Secondments from central government departments, local authorities and the private sector;
- Fixed term employment agreements for staff needed longer-term;
- Contractors to provide specialized skills, such as engineering, commercial property development, demolition, legal services, etc.;
- Consultants to provide targeted expertise on topics such as planning, zoning, land use, financial management, media advice and communications, and
- Temporary staff to fill administrative gaps, work in the call-center, and fill other shortfalls.

Over time, Human Resources management improved, and CERA established its own website for employment. The hiring of an experienced Human Resources person helped the organization to successfully carry out multiple restructuring efforts, including the need to change out people in the organization as its mandate and the skill sets necessary continued to evolve. Wages and salary scales in the agency were among the highest in government, rivalling those in the private sector, so as to be competitive and draw talent into the staff pool. The rates paid to consultants and contractors were determined according to industry standards.

Source: New Zealand Case Study

BOX 4.3: *Rapidly meeting immediate staff needs in Indonesia*

Indonesia's BRR was able to increase its personnel to 370 full-time staff in its first year of operation by:

- ✓ Aligning salaries with salary scales in international organizations, ensuring that highly qualified staff would not be enticed away by competitors offering higher salaries, reducing the risk of corruption and facilitating staff retention over the long-term;
- ✓ Basing hiring criteria on competence and proven capabilities, not seniority;
- ✓ Drawing secondments from line agencies, donors, IOs, and the private sector, with each secondee reporting to a BRR office to encourage team formation;
- ✓ Building institutional memory and the agency's knowledge base through secondments and transferring skill sets through in-service training;
- ✓ Strongly emphasizing the hiring of local staff in order to strengthen knowledge of local needs and conditions as well as build the reputation of the BRR as a neutral, trustworthy entity and not an extension of the central government.

Source: Indonesia Case Study

Long-Term Human Resource Requirements

Long-term staffing and institutional affiliations should be very carefully considered in the Disaster Recovery Framework. Maintaining a large number of professional and technical experts to support recovery efforts is not usually sustainable beyond the initial years of post-disaster recovery. However, it is prudent to maintain a core of recovery professionals who are either on staff or who can be mobilized rapidly to help lead rebuilding after disasters in the future. The intense, demanding nature of post-disaster recovery typically creates social capital and valuable experience that can be drawn on when facing new challenges. There is also a long-term need to facilitate the handover of the recovery portfolio, including its assets, policies and information, to local authorities and line ministries. The lead institution can recruit liaison officers and transition teams from these agencies early in the recovery process. These individuals can then participate from the outset as planning partners in the recovery. Combining short-term and longer-term human resource needs can also alert the lead institution to the capacities and requirements of local authorities and line ministries. Brief terms of reference for key recovery staff, both immediate and long-term, are provided in Annex 3.

Ensuring stakeholder participation

There is wide consensus in disaster recovery literature that successful recovery strategies should not be informed solely by top-down problem solving on the part of technocrats, 'experts' or powerful elites in society. Affected populations should have a voice in decisions about the places where they live and work and where their children go to school. Sustainable recovery solutions should be inclusive and informed by the experiences and perceptions of community members. Asking community members to 'denaturalize' their disaster experience and examine the root causes of vulnerability —social, economic, political, and cultural systems— can open up new analyses of risk that do not focus solely on geographic factors. Different communities and groups progress through the stages of recovery based on access to resources and assistance, as well as on inequality and social vulnerability. Engaging communities in analysis and recovery action is a winning strategy, but one that is difficult for centralized government agencies to implement.

Recovery from the Canterbury Earthquakes provides examples of both good and bad practices:

- CERA drafted a participatory recovery strategy nine months after the September 2011 earthquake, involving national ministries, city and district councils, the regional council and the Maori Tribe. The final plan was considered very successful.
- The Christchurch City Council prepared a Central City Recovery Plan involving extensive public engagement, including the 'Share an Idea' campaign that generated 106,000 public inputs. Public input was then used to identify and structure the Plan's themes and anchor projects.
- The Central City Recovery Plan was rejected by the Minister for Earthquake Recovery. Using his statutory power, he amended the plan. It was released 16 months after the earthquake, without undergoing the process of public consultation, thus further exacerbating the tensions surrounding the document.
- This resulted in a loss of public trust and gave rise to the perception that the public, although strongly engaged, did not have a voice in its own recovery. Following this misstep, CERA invested heavily in public engagement and communication strategies but these remained largely ineffective (New Zealand Case Study).

As the above discussion shows, there can be a range of approaches to public participation within a single recovery process, with differing consequences for each.

Ensuring public participation also means a more equitable sharing of the benefits of reconstruction. Building back more inclusively will ensure that post-disaster support reaches all affected population groups. This emphasizes the importance of providing reconstruction support to low-income households, which are typically more exposed, more vulnerable and less comprehensively supported. If all countries were able to provide their poorest people with the post-disaster support found in developed countries, the losses in global well-being due to disasters induced by natural hazards could be reduced by 9 per cent, equivalent to a US$52 billion increase in annual global consumption (GFDRR, 2018).

Good governance

Elements of good governance such as transparency, accountability and public participation (see above) are critical to the success of institutional arrangements for recovery. Good governance has a number of benefits for the recovery process:

- It guarantees that resources are used more effectively;
- It signals that corrupt practices and waste will not be tolerated;
- It ensures a higher level of confidence in the recovery process on the part of the public and those providing the resources to finance the reconstruction;
- It fosters a greater sense of public ownership of the recovery;
- It is more capable of accurately monitoring and evaluating progress.

A policy group or other review mechanism may be set up with the authority to provide regular oversight for the recovery programme and suggest course corrections. As a result, this might also improve performance accountability within the recovery programme itself.

Much of good governance is about good financial management. The credibility of a government-led recovery is based on delivering the resources promised for recovery and using them for their intended purposes within a set time frame. Accountability to the affected population and to the funding sources is critical.

Often, as part of the accountability process, it is beneficial for the government to have an independent, third-party auditor. Both internal and external audits are required because each serves a different purpose. In general, the scope of an external audit is more clearly defined, with a set end. External audits typically focus on the accuracy of historical financial statements, or focus on a distinct event and ask, "What, if anything, went wrong in managing recovery expenditures?" The scope of an internal audit, on the other hand, is broader and more open-ended. Internal audits focus on an ongoing process and assess risks and controls to answer the question, "What could go wrong at various levels in the management of recovery financing?" External auditors, such as accounting firms, can also audit an organization's internal controls over financial reporting and identify gaps between observed processes and controls and the standards adopted by international bodies for acceptable internal controls. In selecting an external auditor, care must be taken both by the government and the external auditor to ensure that the selected auditor is truly "independent" of the government and has no interests that would prevent them from exercising objective judgment.

Tracking recovery aid is very important as financial contributors to the recovery will likely insist on guarantees that resources are being allocated efficiently and that specific sectors and subsectors are fully financed. Tracking humanitarian aid may be quite complex because of the range of funding sources and the channels through which funds are allocated. However, it is critical to set up a tracking system very early to ensure that funds are spent for the purposes intended. The tracking system should be able to capture aid flows at the individual sector level as well as at project level. An effective tracking system should be able to carry out the simultaneous tracking of multiple streams of funding, including public sources, donor funds on and off budget, private sector contributions and NGO sources. Examples of transparent and accountable recovery practices are presented in Box 4.4.

BOX 4.4: *Examples of transparency and accountability from Indonesia and Serbia*

- ✓ INDONESIA: In BRR, accountability began with the selection of a recovery leader who had a strong reputation for integrity. An Anti-Corruption Unit was set up to fight graft and any abuse of public resources. BRR's finances were audited by independent, external auditors and serious steps were taken to remedy any problems detected. Staff were well-paid so as to reduce the risk of corruption and everyone was required to take an oath of integrity. Independent aid tracking was facilitated by the World Bank. (Indonesia Case Study)
- ✓ SERBIA: All PIMO investments in publicly-funded recovery projects were made public, which enabled citizens and local governments alike to carry out their own due diligence to ensure that assistance was reaching the right households and supporting appropriate projects. Full transparency resulted in the public reporting of any fraudulent use of resources. PIMO prosecuted corruption quickly and efficiently, thus fostering a high level of public trust in the agency.

Source: Serbia Case Study

Linkage to financing mechanisms

Successful institutional arrangements usually influence how recovery resources are allocated for projects and programmes both geographically and by sector. Action may range from setting financing priorities through a PDNA for example, to directly managing a significant recovery budget. In a PDNA, financing needs are identified on a sector-by-sector basis, and sometimes geographically as well, and compared with available resources. Any gaps are then identified and priorities are set for the recovery programme. If the lead institution has minimal control, its role may be limited to advocating with funding partners so as to fill the financing gaps and monitoring whether recovery financing is being allocated according to the recovery plan. At the other extreme, institutional arrangements may give the lead institution full authority to manage the recovery budget in part or in full, requiring the lead institution to have the capacities necessary in financial management, procurement and contract management. Examples of this latter case are presented in Box 4.5.

BOX 4.5: *Examples of strong linkages to financing*

- CHILE: A Local Reconstruction Fund, managed by CMICT, ensured the financing of specific projects in each community as well as of central ministry projects. The rebuilding or repair of 220,000 housing units was financed through the sovereign wealth fund generated by copper revenues.
- INDONESIA: BRR managed a government budget of US$2.1 billion and determined how nearly US$700 million in donor resources would be spent through the Multi Donor Fund. This amounted to 40% of available recovery financing. Allocation of the remaining 60% was negotiated with partners for both on and off-budget use.
- SERBIA: Following the 2014 floods, the Government was able to mobilize nearly a billion euros in donor pledges. Although PIMO coordinated these resources, along with national funds, the funds were spent largely through Local Self Government Units.

Source: Serbia Case Study

INDONESIA-Students in Indonesia taking part on the tsunami drills exercise

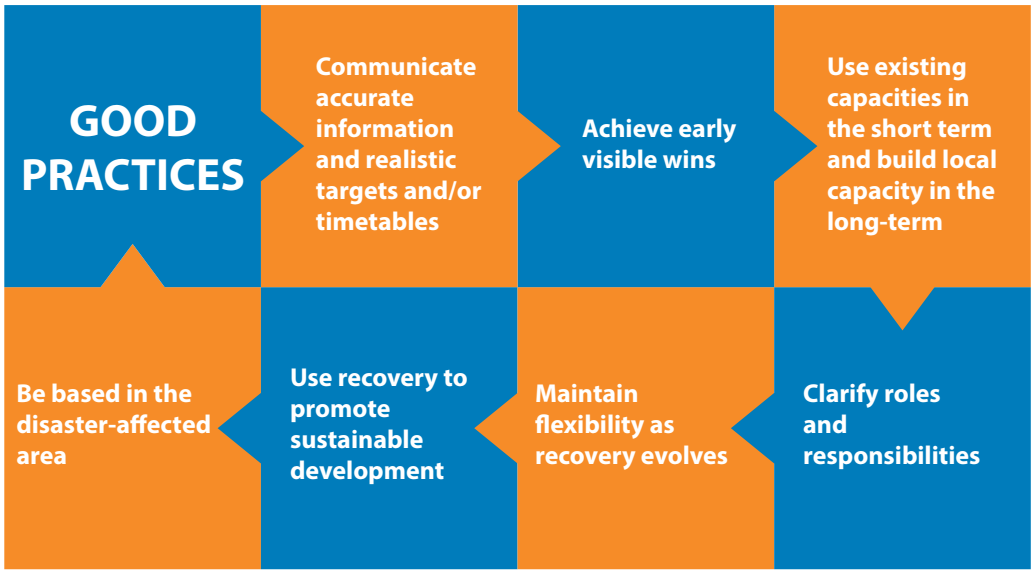
5. GOOD PRACTICES

There are many good practices when it comes to institutional arrangements for recovery. In the case studies, these are summarized at the end of each case. This section presents a sample of seven of the most important practices that should be considered to improve the management of the recovery process.

Communicate accurate information and realistic targets and/or timetables

Clear and accurate communication about the recovery process, its timetable, targets, progress and policies will give everyone involved a realistic sense of what to expect. Unfortunately, the tendency in many recoveries is to overpromise and underdeliver, resulting in frustration and mistrust when things go more slowly than had been promised. This is especially the case in complex, large-scale initiatives such as housing reconstruction and repair, land (re)titling and road construction. Box 5.1 provides an example of the phenomenon from Chile.

Figure 9. *Good practices*



BOX 5.1: *Lessons learned from unrealistic communication in Chile*

Chile's recovery process was marked by the overly ambitious timelines that were set for rebuilding housing and infrastructure. The President himself set many of the target dates but his team had little experience in government and the housing programme met with initial delays. The completion of repairs and reconstruction fell behind official pronouncements. Public expectations for recovery were based on government statements about the speed at which it would occur. Early targets failed to be met, although the pace of housing production sped up significantly later on. The result was lost confidence in public leadership and the realization within the President's leadership team that these expectations should have been tempered early on and more realistic timelines set.

Source: Useem, Kunreuther and Michel-Kerjan, 2015

Specific steps to improve communications may include:

- Developing and implementing a communications strategy which directs key messages to critical stakeholders via the most effective means;
- Recruiting or appointing a Communications Manager and team with responsibility for developing and implementing the communications strategy;

- Establishing a public website which is updated regularly with information on programmes, projects, financing, eligibility criteria for receiving support, key contacts and progress made in implementation;
- Providing targeted information to affected communities as to how to participate in planning, implementation and evaluation, financial resources for community activities and upcoming projects;
- Maintaining a clear flow of information to and between implementing partners;
- Setting up a feedback mechanism for complaints regarding projects and programmes, reporting incidents of corruption and suggestions for improvement.

Achieve early visible wins

The lead institution may need to establish its legitimacy, especially if the institutional arrangements are new. One means of doing so is to demonstrate success early on in a way that is visible and easily understood. For example, after the tsunami in Indonesia, one of the first recovery projects to be completed was the rebuilding of the main mosque in the provincial capital of Banda Aceh. This was both spiritually symbolic for the population and a highly visible sign of hope. It also demonstrated that BRR was sensitive to the needs of the local community and was capable of delivering on its promises. Box 5.2 summarizes other early wins.

BOX 5.2: *Examples of small, visible, early wins in New Zealand*

The first CEO of CERA noted that some of the organization's early successes were the result of delegating responsibility for critical activities such as its Residential Red Zone Recovery Programme to qualified actors from the private sector. In this effort, CERA worked to make land zoning decisions in the face of extensive liquefaction and damage, and could expropriate land with an offer of compensation, as well as order the demolition of structurally unsound buildings. The ability to outsource and delegate the resolution of these issues enabled government actors to avoid getting mired in their execution.

Other significant successes include infrastructure repair and the implementation of smaller-scale projects that were completed quickly and inexpensively, such as a rugby stadium that was built in 100 days and a temporary cathedral, both of which replacing structures that had been damaged. The former CEO referred to this as the "10% rule" -- projects carried out at 10% of the cost, in 10% of the time and with 10% of the effort when compared with the grander projects that were planned for recovery. These projects demonstrated to the public that progress was being made, and were much more successful than the high-cost anchor projects that are still awaiting completion today.

Source: New Zealand Case Study

Use existing capacities in the short term and build local capacity in the long-term

While it may be necessary to create new institutional arrangements to manage recovery, it is often more effective to rely on existing implementation arrangements with partners that have already proven their ability to deliver on the ground. This is especially true when there is a need to achieve results quickly at the beginning of the recovery process. Over the longer term, it is important to invest in building or rebuilding local capacities that may have been depleted or devastated due to the disaster. For example, in Serbia in the aftermath of the May 2014 floods, the activities that were assigned to local authorities in many cases exceeded their abilities. They lacked technical expertise and capacity in assessment, hazard mitigation measures, recovery planning such as land use, zoning, building codes, hazard mapping and watershed studies, and how to oversee project implementation. As a result, there was a need for training, partnerships and intergovernmental collaboration (Serbia Case Study). Additional examples are provided in Box 5.3.

BOX 5.3: *Examples of the use of existing capacities*

- INDIA: In Gujarat, the 2001 Bhuj Earthquake severely damaged the local government structure. A strong network of 29 NGOs mobilized to support shelter reconstruction, dam repairs, livelihood programmes and community-driven rebuilding in 300 affected villages (India Case Study).
- INDONESIA: An existing community-driven development programme was used to transfer US$80 million to affected communities quickly, and facilitators were trained to serve as agents for an owner-driven housing reconstruction programme.
- YEMEN: After the 2008 tropical storm, Yemen created the Reconstruction and Recovery Fund and drew on technical, engineering, and legal experts from the private sector as well as individuals who had experience working with the local authorities. Thanks to the presence of these individuals, needed skills were mobilized and the link between citizens and the fund was facilitated (GFDRR, 2014).

Source: Case studies

Clarify roles and responsibilities

Legislation should clearly codify the functions and authority of the implementing institution(s), including the scope of the agency's rulemaking authority if any, identify funding mechanism(s) and establish an end date or a transition strategy for the institution. Pre- and post-disaster legislation should include specifying which agency is responsible for rebuilding which assets, thus setting a firm foundation for organization and implementation. It may also be necessary to develop clear administrative rules regarding business processes for the institutional arrangements. Experience shows that recovery can stumble if there is legislative confusion over institutional ownership and responsibility. Confusion can lead to the duplication of efforts, a failure to identify critical gaps and institutional friction among line ministries, reconstruction authorities, non-governmental implementing agencies, and international partners (see Box 5.4).

BOX 5.4: *Clarifying the role of international partners*

Some disasters require significant international assistance. Creating joint ownership of the government-led recovery process among international partners enables them to become familiar with the specific complexities of the context. Joint ownership also can encourage partners to make long-term commitments to projects that they have pledged to fund and implement. However, partners' long-term involvement must be balanced with the need to ensure that the lead institution does not cede control of the recovery programme to international agencies and development partners. By clarifying the role of international agencies and development partners from the outset, the government can identify avenues for their participation in the recovery. The government can then establish clear guidelines concerning their roles, responsibilities and mandates.

Source: GFDRR, 2020

Maintain flexibility as recovery evolves

It is a given that new demands and challenges will arise which could not be anticipated or planned for when the institutional arrangements were initially designed. There is a need for flexibility so that arrangements can evolve in line with new events, opportunities and lessons learned. In New Zealand, as recovery progressed past the emergency and planning phases, CERA's role evolved to include the design and delivery of recovery programmes and projects. This was not part of the original 2011 Canterbury Earthquake Recovery Act but rather an evolution and interpretation of the lead agency's mandate (New Zealand Case Study). Similarly, BRR, despite its limited four-year mandate, went through several major periods of reorganization as its mandate expanded to include project and programme implementation, as lessons were learned and as the need to be closer to the affected population became apparent. This included decentralizing staff to six regional offices in Aceh Province, in addition to the main office in Banda Aceh, maintaining a representative office in Jakarta and setting up a branch office on the island of Nias (Indonesia Case Study). In this way, an empowered agency or coordinating body can help to maintain needed flexibility.

Use recovery to promote sustainable development

Following the adage that every crisis is an opportunity, recovery can be used to help a country achieve development objectives such as attaining the Sustainable Development Goals, promoting low-carbon and climate-resilient growth and/or pursuing a reform agenda.

Be based in the disaster-affected area

The primary location for temporary lead institutions for recovery should be in the area of impact and not in a national capital where central government agencies are commonly headquartered. While temporary agencies often have small satellite offices in capital cities to ensure proper reporting to oversight entities and to coordinate important business with other government bodies and external stakeholders, the entity's operational headquarters and largest presence should be at the site of the event to which it is responding. Moreover, if the disaster has seriously impacted a range of jurisdictions, it is important to have an institutional presence in each of the affected areas.

After the Indian Ocean Tsunami and New Zealand's Canterbury Earthquakes, great care was taken to ensure that the temporary recovery agencies run by the central government were located in the disaster zones, thereby countering the perception that central government bureaucrats far away were planning and managing recovery without knowing anything about the communities and cultures that had been directly affected (see Box 5.6). Such decentralization also ensures that critical staff positions can be filled locally, enabling local personnel to share their unique understanding of the local context to inform the recovery planning and implementation process, and establishing local participation as the cornerstone of all recovery policies and programmes.

BOX 5.6: *Basing institutional arrangements in the disaster-affected area*

INDIA: Nine months after the Bhuj Earthquake, a new Chief Minister came to power and appointed eleven Senior Secretaries to the most affected sub-districts in Gujarat, requiring them to spend three days on site every week. This proved to be an effective mechanism for monitoring and oversight while creating pressure to make improvements in the reconstruction process.

INDONESIA: BRR was based in Banda Aceh, becoming the first cabinet-level agency to be located outside of Jakarta. Similarly, the Ministry of Finance set up its first financial management unit outside of Jakarta to better monitor and facilitate resource flows for the recovery.

NEW ZEALAND: CERA was headquartered in Christchurch, the first central government agency ever established outside of Wellington, the country's capital.

Source: Case studies

CHECKLIST OF KEY CONSIDERATIONS

Table 2. *Checklist of key considerations*

☐	**Preparedness**	Set out as much of the institutional framework and procedures for managing the recovery process as possible before a disaster actually takes place.
☐	**Speed**	Quickly select a highly-respected person to lead the recovery effort and establish institutional arrangements.
☐	**Mandate**	Ensure that the necessary legal and administrative requirements have been met so that the institutional arrangements have a proper mandate, and roles and responsibilities are clearly defined.
☐	**Policies**	Develop or amend policies for key recovery activities, such as who is eligible to receive assistance and how corruption will be deterred, detected and dealt with.
☐	**Staffing**	Quickly recruit and hire key staff to manage the recovery, especially in areas where skills are lacking.
☐	**Participation**	Ensure that all key stakeholders, and especially disaster-affected communities, participate in recovery planning, implementation, monitoring and evaluation.
☐	**Communications**	Implement a communications strategy that accurately transmits realistic information about the recovery while soliciting feedback from affected communities.
☐	**Financing**	Institutional arrangements should be linked to and coordinate with key sources of recovery financing.
☐	**Capacities**	Maximize use of existing, successful implementation in the short term while building or rebuilding local capacity for the longer term.
☐	**Credibility**	Demonstrate performance and enhance credibility by achieving early visible wins.
☐	**Location**	Base the recovery institution in the disaster-affected area.
☐	**Flexibility**	Institutional arrangements may need to evolve during the recovery to accommodate new demands, responsibilities and conditions.
☐	**Exit strategy**	Have a clear strategy for the transition from recovery to business-as-usual and how that will affect the institutional arrangements.

ANNEXES

1. Key concepts and terms

The following concepts and terms are particularly relevant to this Guidebook. They are drawn from internationally endorsed definitions prepared by the United Nations Office for Disaster Risk Reduction.[7]

Table 3. *Key concepts and terms*

Affected	People who are affected, either directly or indirectly, by a hazardous event. Directly affected are those who have suffered injury, illness or other health effects and who have been evacuated, displaced, relocated or have suffered direct damage to their livelihoods, economic, physical, social, cultural and environmental assets. The indirectly affected are people who have suffered consequences, other than or in addition to direct effects, over time, due to disruption or changes in the economy, critical infrastructure, basic services, commerce or work, or social, health and psychological consequences.
Build back better	The use of the recovery, rehabilitation and reconstruction phases after a disaster to increase the resilience of nations and communities through integrating disaster risk reduction measures into the restoration of physical infrastructure and societal systems, and into the revitalization of livelihoods, economies and the environment.
Capacity	The combination of all the strengths, attributes and resources available within an organization, community or society to manage and reduce disaster risks and strengthen resilience. Capacity may include infrastructure, institutions, human knowledge and skills, financing and collective attributes such as social relationships, leadership and management.
Disaster	A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts. The effect of the disaster can be immediate and localized but is often widespread and could last for a long period of time. The effect may test or exceed the capacity of a community or society to cope using its own resources, and therefore may require assistance from external sources, which could include neighbouring jurisdictions, or those at the national or international levels.
Disaster risk management	The application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and the reduction of disaster damages and losses.
Economic damages and losses	Damages are the monetary value of total or partial destruction of physical assets existing in the affected area. Losses are the decline in economic value (output and productivity) resulting in direct economic loss and/or human and environmental impacts.
Preparedness	The knowledge and capacities developed by governments, response and recovery organizations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current disasters. Preparedness action is carried out within the context of disaster risk management and aims to build the capacities needed to efficiently manage all types of emergencies and achieve orderly transitions from response to sustained recovery.
Recovery:	The restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society, aligning with the principles of sustainable development and “build back better”, to avoid or reduce future disaster risk.

[7] https://www.undrr.org/terminology

2. Case studies

Characteristics of the cases

Table 4. *Case studies*

Country	Disaster	Region	Economic level*	Capacity*	Political system	International support?
Chile	Major earthquake	Latin America	Middle-income	Capable civil service; Clean (67)**	Centralized	No
India	Major earthquake	South Asia	Low middle-income	Capable civil service; corruption (41)**	Decentralized	Yes (moderate)
Indonesia	Major earthquake and tsunami	East Asia	Low middle-income	Capable civil service; corruption (40)**	Decentralized	Yes (significant)
Mozambique	Cyclone and flooding	Africa	Low income			
New Zealand	Earthquakes	Pacific	High-income	Capable civil service; clean (87)**	Decentralized	No
Serbia	Cyclone and flooding	Europe	Middle-income	Capable civil service; corruption (39)**	Decentralized	Yes (moderate)

*at the time of the disaster

**a lower score indicates a higher level of corruption (Transparency International, 2020).

Summaries of the case studies

CHILE – 2010 Maule Earthquake

On 27 February 2010, the southcentral portion of Chile was rocked by an 8.8 M_w magnitude earthquake which triggered a tsunami measuring 3.5-11.1 metres along the central coast. These events resulted in 524 fatalities, damage to or destruction of 370,000 homes and US$30 billion in economic damages and losses.

Following an uneven relief phase, the incoming President worked with his economic team to assemble domestic sources of financing for a recovery estimated to cost US$8.4 billion. Backed by strong government institutions and a professional civil service, the President decided that recovery would be managed by his senior leadership team (22 Cabinet Ministers and 15 regional governors). The central government would coordinate financing and the policy agenda while regional and local governments would design and implement their own recovery plans. An *Interministerial Reconstruction Committee* was created to coordinate recovery. It was led by the Minister of the Interior, under the direct supervision of the President, and included 11 other ministries. The Committee prepared and oversaw the implementation of a National Reconstruction Plan which was executed through line ministries and local governments. The institutional experience resulted in the creation of a permanent Research Centre for Integrated Disaster Risk Management in 2012.

Summary of Lessons and Good Practices

Lessons

- **Legal framework:** Having in place comprehensive, strictly enforced building codes before any disaster strikes can save lives as well as structures. The decision to use existing authorities and programmes minimizes the need for new legal arrangements.
- **Communications:** Realistic recovery timelines and milestones should have been set and communicated to the public.
- **Level of decision-making:** Decentralizing planning and implementation can boost capacity and ensure greater success.
- **Phasing:** The relief and recovery phases may call for different institutional arrangements.
- **Participation:** A range of stakeholders, including affected communities and political opponents, should be engaged in the recovery process from the outset when planning takes place. An ambitious political agenda and timetable may conflict with more time-consuming participatory planning and implementation.

Good Practices

- **Political priority:** By making recovery a political priority soon after the government took office, the institutional arrangements stood a better chance of receiving support at the highest levels.
- **Financing:** Institutional arrangements were linked to clear sources of domestic financing to pay for the recovery, thus ensuring that they had real power.
- **Leadership:** The appointment of a high-level political appointment to head coordination facilitated access to and support from the presidency.
- **Preparedness:** Pre-certification of construction companies and contractors accelerated the housing recovery programme.

INDIA – 2001 Bhuj Earthquake

On 26 January 2001, a 7.7 M_w magnitude earthquake struck Gujarat State, leaving 20,000 dead, 167,000 injured, nearly one million houses damaged or destroyed, and damages and losses estimated at US$2.1 billion.

Two weeks after the disaster, the State established the *Gujarat State Disaster Management Authority* to coordinate longer-term relief and manage a massive recovery programme. GSDMA was headed by the Chief Minister and given Cabinet-level powers to make policy decisions, design recovery programmes, receive and manage funds from international sources, and monitor and evaluate all reconstruction efforts. A CEO was responsible for the functioning of the Agency and senior management was decentralized to affected subdistricts. Stakeholder participation was channelled through a state-level Advisory Committee and NGOs helped to bolster the weakened capacity of local governments. In 2003, GSDMA became a permanent government body with overall authority for DRM.

Summary of Lessons Learned and Good Practices

Lessons

- **Preparedness:** Institutional arrangements for recovery too often follow, rather than precede, a major disaster.
- **Political access:** Access to the highest political levels (Chief Minister and Chief Secretary) facilitated the work GSDMA was undertaking.
- **Clarity:** Clear roles, responsibilities and procedures aided GSDMA's effectiveness. This included special rules and regulations that helped the agency move quickly and circumvent normal administrative procedures.
- **Good governance:** Participation and accountability were bolstered by the creation of a state-wide Advisory Committee of stakeholders. However, other participatory mechanisms were abandoned because they became too time-consuming.
- **Capacity:** No effort was made to build the capacity of local government to take over and maintain reconstructed assets.

Good Practices

- **Build on experience:** The rapid establishment of GSDMA was facilitated by building on previous experience, notably the Orissa State Disaster Mitigation Authority.
- **Location of staff:** Senior Secretaries were required to be field-based three days a week. Reviewing their experiences on a weekly basis was a means of monitoring progress and addressing issues.
- **Institutionalization:** GSDMA was transformed into a permanent government agency, thus maintaining its institutional memory and expanding its mandate to DRM. However, becoming a permanent fixture may bring about a certain bureaucratic malaise.
- **Monitoring and evaluation:** M&E was facilitated by creating a project implementation cell in each supporting line ministry.
- **Staffing:** Recruit the best staff available in a flexible manner.
- **Phasing:** Different coordination mechanisms were used for the relief and recovery phases.

INDONESIA – 2004 Indian Ocean Earthquake and Tsunami

On 26 December 2004, a 9.0 M_w earthquake occurred off the northern tip of Sumatra and triggered a massive tsunami, swamping the northern and western coasts of the island -- Aceh Province and Nias Island. The combined events resulted in 110,229 deaths, more than 600,000 internally displaced persons, and damages and losses estimated at US$4.45 billion.

In April 2005, the ministerial-level *Agency for the Rehabilitation and Reconstruction of Aceh and Nias* (BRR) was created with a four-year mandate to implement a reconstruction plan, coordinate recovery efforts, direct the use of donor funds, and prioritize projects. BRR was headed by a widely respected official and reported directly to the President. It was guided by a High-Level Advisory Board of stakeholders and a Supervisory Board to handle grievances and oversight. Staffing eventually peaked at 1600 personnel who worked through BRR headquarters in Banda Aceh, a branch office in Nias, a liaison office in Jakarta, and six regional offices in Aceh Province. Institutional innovations included an Anti-Corruption Office, aid tracking to identify gaps in recovery finance, the direct management of US$2.1 billion in government projects, capacity-building for local governments and the use of community-led recovery planning and implementation. When BRR closed on schedule, it handed over responsibility for the new or rebuilt assets to local governments and shared its lessons learned. Following the Yogyakarta and Central Java earthquake, a second disaster in 2006, a *National Disaster Management Agency* (BNPB) was created to handle all DRM responsibilities including recovery management.

Summary of Lessons Learned and Good Practices

Lessons

- **Leadership:** The selection of a proven leader with integrity was critical for building confidence among stakeholders, especially in a setting plagued by corruption.
- **Staffing:** Align salary scales with those in use in international organizations so as to recruit the most highly skilled individuals, increase personnel retention and loyalty, and reduce the risk of corruption.
- **Institutionalization:** Recurring disasters may provide the impetus to create a permanent disaster risk management institution which is able to draw on the experiences and staff of agencies such as BRR.

Good Practices

- **Clear mandate:** BRR was set up as a Cabinet-level agency with a four-year lifespan which facilitated planning, moderated expectations and reduced friction with existing agencies and ministries.
- **Location:** BRR located its headquarters in the affected region and decentralized its field offices to be closer to beneficiaries and recovery projects.
- **Political support:** High-level access to and support from the President helped BRR to overcome issues with line ministries and local governments.

MOZAMBIQUE – 2019 Cyclone(s) Idai and Kenneth

On the night of 14 March 2019, Tropical Cyclone Idai made landfall near Beira City in central Mozambique (Sofala Province) as a Category 4 cyclone, bringing exceptionally strong winds (180 – 220 km/hour) and heavy rain (more than 200 mm in 24 hours). Idai caused two major rivers, the Buzi and the Pungue, to burst their banks, submerging villages in floodwaters over 10-meters in height and sweeping many to their deaths. Only six weeks later, Cyclone Idai was followed by Cyclone Kenneth, another Category 4 storm that made landfall in Cabo Delgado Province on April 24, 2019. Kenneth and Idai represented the first time that two cyclones, more than Category 2 in strength, had ever made landfall in Mozambique in the same season. Jointly, Cyclones Idai and Kenneth were the deadliest and most destructive cyclones in Mozambique's history.

The GoM declared a National State of Emergency on March 19, 2019 and implemented important reforms to strengthen government disaster management capacities. A new government institution, the ***Post-Cyclone Idai / Kenneth Cabinet for Reconstruction and Recovery (GREPOC)*** was created on April 9, 2019. The GREPOC is a temporary government institution with a 5-year lifespan and a mandate to oversee planning, recovery operations, monitoring & evaluation, and resilient reconstruction in cyclone-damaged provinces. On April 30, 2019, GREPOC's mandate was expanded to include the recovery / reconstruction of the areas affected by Kenneth.

Summary of Lessons and Good Practices

Lessons

- **Legal framework** – The decision not to follow previous disaster-relate institutional planning efforts and have an entity running recovery operations situated within the INGD created confusion about the role of the INGD in recovery. Many interviewees suggested the INGD would have been better suited for this role due to its higher levels of authority and access to those in the seats of power. Structures that grant real authority to recovery institutions will significantly improve recovery outcomes.
- **Level of decision-making** – making the GREPOC an institution that is not housed in any ministry and having it answer to the Minister for Public Works, Housing, and Water Resources weakened its authority and ability to react to the need for accelerated decision-making. Recovery institutions can execute their tasks best when empowered administratively and financially. Temporary governance structures run the risk of not being taken seriously if they lack access to the tools needed to govern recovery successfully.
- **Financing Recovery** – The international community could not agree on how to manage the financial resources for recovery in Mozambique. This was due to the desire to have a transparent mechanism that would be accountable for the recovery funds that flowed to it. Thus, two years after the donors conference, a fair number of the pledges had yet to be mobilized. The structure of funding mechanisms and plans to audit the recovery process should receive special attention at the time new recovery institutions are designed to avoid delays in the transfer of funds to implementing parties.
- **COVID-19** – The March 11, 2020 declaration of a pandemic came three days before the one-year anniversary of Cyclone Idai. The one-year point after a catastrophic event is usually a time when recovery planning has concluded, and recovery interventions begin to gain momentum and bring positive changes to traumatized communities. COVID disrupted a well-conceptualized recovery process and lockdowns prevented much-needed assistance from reaching those still in need in affected areas. The first year of the COVID pandemic was a secondary disaster for cyclone survivors (a pattern that was repeated across the globe as recovery in many nations faltered). The cessation of humanitarian and recovery operations does not result in good outcomes in any area of impact, and this global lesson of the COVID era played out in Mozambique as it was doing elsewhere. Recovery workers must be on the ground to understand continual changes in the recovery landscape in order to respond effectively. Recovery cannot be well-managed remotely. This lesson is one the entire world has had to learn in the COVID era.

Good Practices

- **GREPOC** – the establishment of this new institution to manage the recovery process was completed within three weeks of Cyclone Idai making landfall and before the Post-Disaster Needs Assessment commenced. The speed and efficiency of the institutional response allowed GREPOC to quickly assume its leadership role. In the aftermath of catastrophic events, quick interventions to establish "who" is in charge and "what" their roles and responsibilities are, is of paramount importance.

NEW ZEALAND – 2010/11 Canterbury Earthquakes

Following a 7.2 magnitude M_w earthquake on 4 September 2010 and thousands of aftershocks, a 6.3 M_w magnitude aftershock severely damaged Christchurch on 22 February 2011, causing 185 fatalities, injuring up to 7000 people, and damaging nearly 90 % of the housing stock. Recovery costs were estimated at NZ$40 billion[8], 20 % of the country's GDP.

Given the extent of the damage and the complexities of rebuilding, the existing institutional arrangements for disaster recovery were judged to be inadequate. In March 2011, CERA, the *Canterbury Earthquake Recovery Authority* was established to develop a recovery strategy, lead and coordinate recovery policy, engage with external stakeholders and implement recovery activities. Its first CEO was a widely respected private sector manager from the local community who recruited high-quality staff and offered attractive, competitive salaries. CERA was generally successful in its mission and closed on schedule in April 2016, handing over its roles to two new entities.

Summary of Lessons and Good Practices

Lessons

- **Capacity assessment:** Prior to the earthquakes, New Zealand had already assessed the capacity of CDEM and determined that the agency was only capable of handling recovery in instances of small- to medium events. Similarly, after the second major earthquake, CERC was evaluated as not having the capacity to handle such a complex recovery.
- **Preparedness:** A CERA performance evaluation concluded that extensive pre-disaster planning was needed to determine and facilitate the outsourcing of services following a major disaster.
- **Participation:** Public participation was critical to the design and implementation of post-earthquake recovery but was not always handled adequately.

Good Practices

- **Location:** CERA's headquarters were located in Christchurch, the first central government agency ever established outside the nation's capital. This enabled it to operate in close proximity to stakeholders, including local authorities.
- **Mandate:** The CER Act clearly established the mandates of the Minister for Earthquake Recovery and CERA. It set the lifespan of the latter at five years.
- **Flexibility:** CERA's mandate evolved over time. The agency took on responsibility for managing and delivering recovery programmes and projects, although this was later assessed negatively as mission creep.
- **Leadership:** The first CEO of CERA was widely respected for his leadership, effectiveness and private sector experience, as well as for his ability to lead complex strategies and operations, honest communications and strong ties to the local community.
- **Staffing:** CERA was flexible and creative in recruiting staff. It set up a Human Resources position and paid competitive salaries. These practices enabled the agency to grow rapidly while attracting and retaining highly capable professionals.
- **Visible early wins:** In order to show the public that progress was being made, CERA deliberately undertook smaller projects that were completed quickly and inexpensively.
- **Transition:** CERA established a transition management office and implemented a clear strategy to hand over roles and responsibilities to central agencies and local authorities.

[8] Approximately US$32 billion.

SERBIA – 2014 Catastrophic Flooding

On 14 May 2014, a cyclone system made landfall and stalled over the Balkans, unleashing violent storms, record rainfalls and widespread flooding. In one week Western and Central Serbia received the same quantity of rainfall as would normally have fallen over a three-month period. The subsequent flooding and landslides resulted in 57 fatalities, 32,000 displaced people, extensive damage to 30 municipalities, and damages and losses estimated at €1.53 billion[9].

Eight days after the landfall, the Republic of Serbia established the *Government Office of Reconstruction and Flood Relief* (FAAARO) as a temporary agency to coordinate disaster assistance, manage donor funds and monitor recovery efforts. In December 2015, FAAARO transitioned to become the *Public Investment Management Office* (PIMO), a permanent government agency for DRM. A widely respected NGO leader was chosen to head FAAARO / PIMO, bringing proven integrity to the management of public funds. While staffing proved to be an ongoing problem, recovery planning and implementation were successfully decentralized to local governments.

Summary of Lessons and Good Practices

Lessons

- **Capacity assessment**: The Government determined that the existing institutional arrangements would not be adequate to coordinate and execute a massive recovery process and that a new institution was required.
- **Lifespan and institutionalization:** FAAARO was initially given an unrealistic one-year lifespan, which was later extended. It then transitioned to become a permanent government agency, PIMO.
- **Staffing:** Staffing of the recovery agency was constrained by austerity measures which necessitated a heavy reliance on consultants. Salaries were not competitive with the private sector, administration was outsourced and secondments were not used.
- **Local capacity:** Despite decentralization, local government capacity still needs to be strengthened so as to undertake other aspects of disaster risk management, such as preparedness, response and mitigation.

Good Practices

- **Resource mobilization:** The Government played a key role in resource mobilization by working with the European Commission to host an international donor conference and to mobilize gap financing.
- **Linkage to financing:** FAAARO, and later PIMO, were given a legal mandate to receive, disburse and manage recovery funds.
- **Leadership:** The recovery director was widely respected for his integrity and immediately brought credibility to financial management and the tracking of public funds.
- **Coordination:** PIMO focused on the coordination, oversight and monitoring of the recovery process rather than on implementation.
- **Transparency and accountability:** All PIMO investments were made public, enabling citizens to conduct their own due diligence. Thanks to full transparency, the public was able to report any instances of fraud, which PIMO then prosecuted.
- **Decentralization**: Recovery goals were rapidly achieved by putting municipal governments in charge of the assessment of flood impacts, recovery planning, project implementation and the supervision of construction work.

[9] ApproximatelyUS$ 2.03 billion.

3. Terms of reference for key staff

Sample terms of reference are provided in the next pages for the following categories and positions:

- **Leadership (**Recovery Manager, Deputy Recovery Manager)
- **Financial management** (Chief Financial Officer)
- **Legal** (Chief Legal Officer)
- **Building Back Better** (Chief Resilience Officer)
- **Communications and external relations** (Communications Manager, Stakeholder Liaison Manager)
- **Sectoral expertise (**Economic Recovery Manager, Housing Manager, Human Services Manager, Infrastructure Manager)
- **Capacity-building** (Local Recovery and Capacity-Building Manager)
- **Assessment** (Monitoring and Evaluation Manager)

Mozambique 2020. Housing rehabilitation

RECOVERY MANAGER
Sample Terms of Reference

Background
This section should a) explain the nature, extent and impact of the disaster; b) lay out the institutional arrangements for recovery; and c) explain how the Recovery Manager will relate to stakeholders, subordinates, peers and higher-level authorities. It should also set out the initial duration of the assignment, including the process for contract renewal, and specify to whom the Recovery Manager is accountable (such as the Minister, President or Prime Minister, an oversight board or other).

Responsibilities
The Recovery Manager will be responsible for the following tasks and duties:

- Lead the strategic planning and policymaking process for recovery, such as the development of a Master Plan, Disaster Recovery Framework or other blueprint for rebuilding;
- Manage the recovery institution -- human resources, team leadership, budgeting, organizational structure, reporting, communications, etc.;
- Serve as the key spokesperson for the recovery with responsibility for keeping all key stakeholders informed regarding progress, challenges and midcourse corrections, often done through the development and implementation of a communications strategy;
- Identify and assist in mobilizing financial, human and informational resources for the recovery;
- Promote inclusiveness in the recovery process by ensuring that vulnerable groups participate in and benefit from the recovery equitably;
- Ensure that credible indicators are developed and used to monitor and evaluate the recovery, including adherence to quality and safety standards;
- Identify and respond to potential sectoral and geographic gaps in recovery policies, programmes and projects so as to ensure a balanced recovery;
- Work with communities and partners to implement a BBB approach that incorporates mitigation and resilience-building reconstruction measures;
- Coordinate partners' local, national, international and non-governmental recovery efforts within a common framework to maximize impact and minimize waste;
- Supervise key positions directly, such as the Deputy Recovery Manager, Chief Financial Officer, Chief Legal Officer and Chief Resilience Officer.

Attributes
The Recovery Manager should possess all of the following essential attributes and at least some of the desirable attributes.

Essential attributes:

- Experience with and understanding of post-crisis recovery, preparedness, resiliency planning, public administration, organizational management and/or community development;
- Demonstrated ability to establish credibility, instil confidence and communicate effectively;
- Prior success in working with a diverse group of stakeholders and partners to achieve common objectives;
- Ability to work in difficult situations characterized by ambiguity, limited resources and demanding deadlines;
- Demonstrated empathy, reliability, professionalism, problem-solving abilities and team-building skills.

Desirable attributes

- Self-motivation;
- Flexibility and openness to new ideas;
- Commitment to personal and professional staff development;
- Ability to assess his or her own performance, recognize limitations and seek support when needed;
- Leadership skills and ability to motivate others.

DEPUTY RECOVERY MANAGER

Sample Terms of Reference

Background

This section should a) explain the nature, extent and impact of the disaster; b) lay out the institutional arrangements for recovery; and c) explain how the Deputy Recovery Manager will relate to stakeholders, subordinates, peers and higher-level authorities. It should also set out the initial duration of the assignment, including the process for contract renewal, and specify that the Deputy is accountable to the Recovery Manager.

Responsibilities

The Deputy Recovery Manager will be responsible for the following tasks and duties:

- Support the Recovery Manager in strategic planning and policymaking, managing the recovery institution, implementing a communications strategy, mobilizing resources, promoting inclusiveness, monitoring, evaluation and quality control, promoting BBB and coordination;
- If the recovery institution is new, early tasks will include:
  - Establishing relationships with other stakeholders to be involved in the recovery;
  - Finalizing recovery staff recruitment, roles and structure;
  - Working with the Chief Financial Officer to develop a budget;
  - Working with the Chief Legal Officer on legislative and regulatory requirements as well as contracting arrangements;
  - Working with the Chief Resilience Officer on a BBB approach to recovery;
- Substitute for the Recovery Manager as needed;
- Supervise key positions directly, such as the directors responsible for Communications, Monitoring and Evaluation, Infrastructure, Human Services, Community Recovery and Capacity-Building, Green Recovery, Stakeholder Liaison and/or Local Government, some or all of whom could make up a senior management team that the Deputy would lead.

Attributes

The Deputy Recovery Manager should possess the following essential attributes:

- Senior management skills, preferably acquired in a central or local government environment;
- Successful experience in managing and implementing complex projects;
- Experience in setting up community consultations, stakeholder collaboration and partnerships;
- Ability to lead a small team of managers from a range of sectors;
- Knowledge of governmental and non-governmental organizations relevant to the recovery effort;
- Experience in budgeting and financial management;
- Demonstrated ability to establish credibility, instil confidence and communicate effectively;
- Ability to work in difficult situations characterized by ambiguity, limited resources and demanding deadlines;
- Demonstrated empathy, reliability, professionalism, problem-solving abilities and team-building skills.

CHIEF FINANCIAL OFFICER (CFO)

Sample Terms of Reference

Background

This section should a) explain the nature, extent and impact of the disaster; b) lay out the institutional arrangements for recovery; and c) explain how the Chief Financial Officer (CFO) will relate to stakeholders, subordinates, peers and higher-level authorities. It should also set out the initial duration of the assignment, including the process for contract renewal, and specify that the CFO is accountable to the Recovery Manager.

Responsibilities

The CFO will be responsible for the following tasks and duties:

- Support the Recovery Manager on issues of public finance, resource mobilization from non-public sources (foundations, charitable organizations, international donors, private enterprises, etc.), internal financial management, auditing, and financial reporting;
- Work with the Deputy Recovery Manager to develop a potentially multi-year budget, mobilize a finance team and set internal financial procedures for the recovery institution;
- Work with the Monitoring and Evaluation Manager on the financial and/or aid-tracking system;
- Establish working relations and procedures with the Ministry of Finance or the Treasury;
- Develop relations and working mechanisms with non-public sources of finance;
- Manage the process of transitioning from emergency financing to a regular budget cycle;
- Design and implement anti-corruption measures to prevent, detect and punish corrupt practices;
- Organize and implement recommendations from regular independent financial audits;
- Provide any other financial information and analyses requested by the Recovery Manager.

Attributes

The CFO should possess the following essential attributes:

- Public financial management skills, preferably acquired in a central or local government environment, including relations with the Ministry of Finance or the Treasury;
- Successful experience in the financial management of complex organizations and programmes;
- Experience with budgeting, financial resource mobilization, internal financial procedures, financial and/or aid-tracking, the budgetary cycle, anti-corruption measures and/or auditing;
- Ability to lead a small financial management team;
- Skills in organizing, analysing and presenting financial information;
- Demonstrated ability to establish credibility, instil confidence and communicate effectively;
- Ability to work in difficult situations characterized by ambiguity, limited resources and demanding deadlines;
- Demonstrated empathy, reliability, professionalism, problem-solving abilities and team-building skills.

CHIEF LEGAL OFFICER (CLO)

Sample Terms of Reference

Background

This section should a) explain the nature, extent and impact of the disaster; b) lay out the institutional arrangements for recovery; and c) explain how the Chief Legal Officer (CLO) will relate to stakeholders, subordinates, peers and higher-level authorities. It should also set out the initial duration of the assignment, including the process for contract renewal, and specify that the CLO is accountable to the Recovery Manager.

Responsibilities

The CLO will be responsible for the following tasks and duties:

- Support the Recovery Manager on issues of legal requirements, inter-organizational relations, contracting, dispute resolution, etc.;
- Work with the Deputy Recovery Manager on legal and regulatory requirements as well as contracting procedures for the recovery institution;
- Work with the CFO to design and implement anti-corruption measures to prevent, detect and punish corrupt practices;
- Work with the Monitoring and Evaluation Manager to ensure compliance with the recovery strategy, guidelines and/or quality standards;
- Ensure that the recovery institution meets all legal requirements as a public entity and employer, including finalizing internal policies and procedures;
- Ensure that contracts are in place for the provision of support services, including for seconded personnel and contractors;
- Advise on legal matters specific to recovery, such as demolition, land acquisition and compensation;
- Develop and monitor a Code of Conduct to ensure integrity among recovery institution staff;
- Provide any other legal information and analyses as requested by the Recovery Manager.

Attributes

The CLO should possess the following essential attributes:

- He or she is a lawyer qualified to practice within the jurisdiction;
- Experience in public law, legislative and policy practices, contracting, compliance, anti-corruption measures, employer law and/or recovery-specific legal matters;
- Ability to provide legal advice across multiple areas of law at a senior level;
- Demonstrated ability to establish credibility, instil confidence and communicate effectively;
- Ability to work in difficult situations characterized by ambiguity, limited resources and demanding deadlines;
- Demonstrated empathy, reliability, professionalism, problem-solving abilities and team-building skills.

CHIEF RESILIENCE OFFICER (CRO)

Sample Terms of Reference

Background

This section should a) explain the nature, extent and impact of the disaster; b) lay out the institutional arrangements for recovery; and c) explain how the Chief Resilience Officer (CRO) will relate to stakeholders, subordinates, peers and higher-level authorities. It should also set out the initial duration of the assignment, including the process for contract renewal, and specify that the CRO is accountable to the Recovery Manager.

Responsibilities

The CRO will be responsible for the following tasks and duties:

- Support the Recovery Manager on issues of Building Back Better, green recovery, environmental impact, natural and cultural resource management, and sustainable development;
- Work with the Deputy Recovery Manager to develop a resilience strategy to ensure that recovery policies, programmes and projects incorporate the BBB principle of assisting communities and neighbourhoods to better withstand future shocks and stresses;
- Advise the Monitoring and Evaluation Manager on resilience and sustainability indicators;
- Develop and disseminate green recovery guidelines to ensure that projects and programmes foster greater sustainable development;
- Provide support and information to recovery project and programme managers to ensure that recovery-related investments adhere to environmental impact assessment requirements;
- Assess how the recovery portfolio can contribute to a region or country's progress towards achieving its Sustainable Development Goals;
- Manage the process of transitioning from emergency financing to a regular budget cycle;
- Provide specific advice and guidance concerning activities to improve environmental management and address a changing climate;
- Provide any other information and analyses on the environment, resilience, natural and cultural resources, and sustainability as requested by the Recovery Manager.

Attributes

The CRO should possess the following essential attributes:

- Environmental and disaster risk management skills, preferably acquired in a central or local government environment, including relations with the Ministry of Finance or Treasury;
- Successful experience in financial management of complex organizations and programmes;
- Experience with resilience, environmental management, environmental impact assessment, green growth, climate mitigation and adaptation, natural and cultural resources, and/or BBB;
- Skills in organizing, analysing and presenting resilience and environmental information;
- Demonstrated ability to establish credibility, instil confidence and communicate effectively;
- Ability to work in difficult situations characterized by ambiguity, limited resources and demanding deadlines;
- Empathy, reliability, professionalism, problem-solving abilities and team-building skills.

COMMUNCIATIONS MANAGER

Sample Terms of Reference

Background

This section should a) explain the nature, extent and impact of the disaster; b) lay out the institutional arrangements for recovery; and c) explain how the Communications Manager will relate to stakeholders, subordinates, peers and higher-level authorities. It should also set out the initial duration of the assignment, including the process for contract renewal, and specify that the Communications Manager is accountable to the Deputy Recovery Manager.

Responsibilities

The Communications Manager will be responsible for the following tasks and duties:

- Draft a communications strategy to guide how key messages and information will be communicated to key stakeholders, including affected communities and the media, during the recovery process;
- Validate and finalize the communications strategy in consultation with key stakeholders and recovery staff;
- Manage and monitor implementation of the communications strategy;
- Develop and disseminate regular reports (quarterly or annual) and press releases on recovery progress, challenges and changes in collaboration with the Monitoring and Evaluation Manager;
- Organize public consultations, stakeholder meetings and press briefings;
- Design and manage the recovery institution's website and social media presence;
- Prepare and operate a feedback mechanism for receiving and responding to complaints and suggestions about recovery policies, programmes and projects;
- Provide specific communications products and analyses at the request of the (Deputy) Recovery Manager;
- Work in close collaboration with the Monitoring and Evaluations Manager to ensure that accurate and timely information is available as part of the communications strategy.

Attributes

The Communications Manager should possess the following essential attributes:

- Public communications and external relations skills, preferably acquired in a central or local government environment;
- Successful experience in developing and implementing communications strategies;
- Demonstrated ability to prepare effective reports, websites, social media campaigns, meetings and briefings in a timely fashion;
- Experience with feedback mechanisms, including handling complaints and grievances;
- Overall understanding of the recovery process, its goals, targets, mechanisms and relationships;
- Ability to work in difficult situations characterized by ambiguity, limited resources and demanding deadlines;
- Demonstrated empathy, reliability, professionalism, problem-solving abilities and team-building skills;

STAKEHOLDER LIAISON MANAGER

Sample Terms of Reference

Background

This section should a) explain the nature, extent and impact of the disaster; b) lay out the institutional arrangements for recovery; and c) explain how the Stakeholder Liaison Manager will relate to stakeholders, subordinates, peers and higher-level authorities. It should also set out the initial duration of the assignment, including the process for contract renewal, and specify that the Stakeholder Liaison Manager is accountable to the Deputy Recovery Manager.

Responsibilities

The Stakeholder Liaison Manager will be responsible for the following tasks and duties:

- Advise the (Deputy) Recover Manager on issues of outreach and partnership with key stakeholders. Depending on the context for recovery, the key stakeholders will vary but may include vulnerable groups or communities, local charities and foundations, local governments, international partners, NGOs and/or professional associations;
- Seek inputs from key stakeholders concerning the barriers to and opportunities for their engagement in the recovery process;
- Develop protocols and systems to keep key stakeholders informed and involved in recovery planning, implementation, monitoring and evaluation;
- Provide advice and support for policies, programmes and projects to engage key stakeholders in planning, implementation, monitoring and evaluation;
- Provide specific information and assessments of key stakeholders at the request of the (Deputy) Recovery Manager;
- Share lessons learned regarding engaging key stakeholders with the Monitoring and Evaluation Manager.

Attributes

The Stakeholder Liaison Manager should possess the following attributes:

- Experience working with key stakeholder groups on policies, programmes and projects;
- Successful experience in stakeholder engagement, communications, external relations, vulnerable groups or communities, local government, NGOs and/or professional associations;
- Knowledge of stakeholder-related institutions, laws, regulations and procedures;
- Demonstrated ability to develop partnerships with key stakeholders;
- Overall understanding of the recovery process, its goals, targets, mechanisms and relationships;
- Ability to work in difficult situations characterized by ambiguity, limited resources and demanding deadlines;
- Demonstrated empathy, reliability, professionalism, problem-solving abilities and team-building skills.

ECONOMIC RECOVERY MANAGER

Sample Terms of Reference

Background

This section should a) explain the nature, extent and impact of the disaster; b) lay out the institutional arrangements for recovery; and c) explain how the Economic Recovery Manager will relate to stakeholders, subordinates, peers and higher-level authorities. It should also set out the initial duration of the assignment, including the process for contract renewal, and specifying that the Economic Recovery Manager is accountable to the Deputy Recovery Manager.

Responsibilities

The Economic Recovery Manager will be responsible for the following tasks and duties:

- Advise the (Deputy) Recover Manager on issues of private sector support, business continuity, livelihoods, poverty alleviation, and economic development;
- Work with the Monitoring and Evaluation Manager to formulate indicators for economic health, employment, equity, and poverty;
- Seek inputs from businesses, business associations, the finance sector, and employees, including labour unions, concerning the barriers to and opportunities for economic recovery;
- Provide advice and support for policies, programmes and projects to support small and medium-size enterprises such as microcredit or credit guarantees, livelihoods, such as cash-for-work and payroll protection, and local economic development, including local procurement and lowering the costs of doing business;
- Provide specific information and assessments of economic recovery at the request of the (Deputy) Recovery Manager;
- Share lessons learned regarding local economic recovery with the Monitoring and Evaluation Manager.

Attributes

The Economic Recovery Manager should possess the following attributes:

- Experience working in economic development and recovery;
- Successful experience in business development, SMEs, business finance, livelihood support programmes, local procurement and/or economic development;
- Knowledge of local planning institutions, laws, regulations and procedures;
- Ability to assess the needs of SMEs, employees and business finance institutions;
- Demonstrated ability to develop partnerships within the private sector and between the private sector and affected communities;
- Overall understanding of the recovery process, its goals, targets, mechanisms and relationships;
- Ability to work in difficult situations characterized by ambiguity, limited resources and demanding deadlines;
- Demonstrated empathy, reliability, professionalism, problem-solving abilities and team-building skills.

HOUSING MANAGER

Sample Terms of Reference

Background

This section should a) explain the nature, extent and impact of the disaster; b) lay out the institutional arrangements for recovery; and c) explain how the Housing Manager will relate to stakeholders, subordinates, peers and higher-level authorities. It should also set out the initial duration of the assignment, including the process for contract renewal, and specify that the Housing Manager is accountable to the Deputy Recovery Manager.

Responsibilities

The Housing Manager will be responsible for the following tasks and duties:

- Advise the (Deputy) Recover Manager on issues of land tenure, housing repair and rebuilding, support for renters and landlords, and disaster-resilient construction techniques;
- Work with the Monitoring and Evaluation Manager to formulate indicators for housing repair and rebuilding, owner satisfaction with housing support programmes and improved construction techniques;
- Seek inputs from homeowners, renters, landlords, real estate professionals, and the construction industry concerning the barriers to and opportunities for housing recovery;
- Provide advice and support for policies, programmes and projects to repair and rebuild houses and multi-family dwellings, support disaster-affected renters and landlords, and build back better with disaster and climate-resilient construction techniques;
- Provide specific information and assessments of housing at the request of the (Deputy) Recovery Manager;
- Share lessons learned concerning housing recovery with the Monitoring and Evaluation Manager.

Attributes

The Housing Manager Manager should possess the following attributes:

- Experience working in housing construction and repair;
- Successful experience in civil engineering, construction, real estate, green building, land tenure, owner-built housing and/or public housing;
- Knowledge of institutions, laws, regulations and procedures relating to housing construction;
- Demonstrated ability to develop partnerships with homeowners, renters, real estate experts, construction industry professionals, community groups and neighbourhood associations;
- Overall understanding of the recovery process, its goals, targets, mechanisms, relationships;
- Ability to work in difficult situations characterized by ambiguity, limited resources and demanding deadlines;
- Demonstrated empathy, reliability, professionalism, problem-solving abilities and team-building skills.

HUMAN SERVICES MANAGER
Sample Terms of Reference

Background

This section should a) explain the nature, extent and impact of the disaster; b) lay out the institutional arrangements for recovery; and c) explain how the Human Services Manager will relate to stakeholders, subordinates, peers and higher-level authorities. It should also set out the initial duration of the assignment, including the process for contract renewal, and specify that the Human Services Manager is accountable to the Deputy Recovery Manager.

Responsibilities

The Human Services Manager will be responsible for the following tasks and duties:

- Advise the (Deputy) Recover Manager on issues relating to rebuilding critical human service delivery systems such as education, family planning, health, psychosocial counselling and social protection, with special emphasis on reaching vulnerable groups and communities;
- Work with the Monitoring and Evaluation Manager to formulate indicators for the recovery of human service delivery systems;
- Seek inputs from public and private owners and operators of human service delivery systems, customers and especially vulnerable group and communities regarding the barriers to and opportunities for the recovery of human services;
- Provide advice and support for policies, programmes and projects to repair and rebuild basic human services, ensure that rebuilt systems are properly operated and maintained and build back better through disaster and climate-resilient human service delivery systems;
- Provide specific information and assessments of human services at the request of the (Deputy) Recovery Manager;
- Share lessons learned concerning human services recovery with the Monitoring and Evaluation Manager.

Attributes

The Human Services Manager should possess the following attributes:

- Experience working in human service delivery and systems management;
- Successful experience in education, family planning, health, psychosocial counselling, social protection, serving vulnerable groups and communities, and/or social development;
- Knowledge of human service-related institutions, laws, regulations and procedures;
- Demonstrated ability to develop partnerships with human service delivery system owners and operators, vulnerable groups, communities and user groups;
- Overall understanding of the recovery process, its goals, targets, mechanisms and relationships;
- Ability to work in difficult situations characterized by ambiguity, limited resources and demanding deadlines;
- Demonstrated empathy, reliability, professionalism, problem-solving abilities and team-building skills.

INFRASTRUCTURE MANAGER
Sample Terms of Reference

Background
This section should: a) explain the nature, extent and impact of the disaster; b) lay out the institutional arrangements for recovery; and c) explain how the Infrastructure Manager will relate to stakeholders, subordinates, peers and higher-level authorities. It should also set out the initial duration of the assignment (including the process for contract renewal) and that the Infrastructure Manager is accountable to the Deputy Recovery Manager.

Responsibilities
The Infrastructure Manager will be responsible for the following tasks and duties:

- Advise the (Deputy) Recover Manager on issues of infrastructure repair and rebuilding, operations and maintenance of key assets and nature-based solutions for more resilient infrastructure;
- Work with the Monitoring and Evaluation Manager on indicators for infrastructure repair and rebuilding, operations, maintenance and resilient infrastructure;
- Seek inputs from public and private infrastructure owners and operators as well as customers concerning the barriers to and opportunities for the recovery of critical infrastructure;
- Provide advice and support for policies, programmes and projects to repair and rebuild critical infrastructure such as drainage, education, energy, health care, transportation, water and sanitation, ensure that rebuilt assets are properly operated and maintained, and build back better through disaster and climate-resilient infrastructure;
- Provide specific information and assessments of infrastructure at the request of the (Deputy) Recovery Manager;
- Share lessons learned regarding infrastructure recovery with the Monitoring and Evaluation Manager.

Attributes
The Infrastructure Manager should possess the following attributes:

- Experience in infrastructure management and civil engineering;
- Successful experience in infrastructure development and management, operations and maintenance, and resilient (green and grey) infrastructure;
- Knowledge of infrastructure-related institutions, laws, regulations and procedures;
- Ability to work with a wide range of infrastructure owners, operators and customers;
- Demonstrated ability to develop partnerships with infrastructure owners, operators, engineering associations, communities and user groups;
- Overall understanding of the recovery process, its goals, targets, mechanisms and relationships;
- Ability to work in difficult situations characterized by ambiguity, limited resources and demanding deadlines;
- Demonstrated empathy, reliability, professionalism, problem-solving abilities and team-building skills.

LOCAL RECOVERY AND CAPACITY-BUILDING MANAGER
Sample Terms of Reference

Background
This section should a) explain the nature, extent and impact of the disaster; b) lay out the institutional arrangements for recovery; and c) explain how the Local Recovery and Capacity-Building Manager will relate to stakeholders, subordinates, peers and higher-level authorities. It should also set out the initial duration of the assignment, including the process for contract renewal, and specify that the Local Recovery and Capacity-Building Manager is accountable to the Deputy Recovery Manager.

Responsibilities
The Local Recovery and Capacity-Building Manager will be responsible for the following tasks and duties:

- Provide technical and other assistance to affected communities the planning, implementation and monitoring of recovery at the local level;
- Work with the Communications Manager to organize community consultations and provision of timely information to community groups and local governments;
- Seek inputs from and collect information on local governments and community resources, including expertise, programmes, local knowledge, etc., to inform and benefit the recovery process;
- Develop programmes and projects, or components of such projects, to build the capacity of local entities to participate in recovery efforts;
- Facilitating community access to funding, technical assistance, information, and resilience opportunities;
- Providing specific information and assessments of community needs and capacities at the request of the (Deputy) Recovery Manager;
- Sharing lessons learned regarding local recovery and capacity-building with the Monitoring and Evaluation Manager.

Attributes
The Community Recovery and Capacity-Building Manager should possess the following attributes:

- Experience working with disaster-affected communities and local organizations on recovery;
- Successful experience in developing and implementing community consultations and information-sharing;
- Knowledge of local planning institutions, laws, regulations and procedures;
- Ability to assess the capacity needs of local governments and community organizations;
- Demonstrated ability to develop partnerships between communities and other entities for programmes and projects;
- Overall understanding of the recovery process, its goals, targets, mechanisms and relationships;
- Ability to work in difficult situations characterized by ambiguity, limited resources and demanding deadlines;
- Demonstrated empathy, reliability, professionalism, problem-solving abilities and team-building skills.

MONITORING AND EVALUATION MANAGER

Sample Terms of Reference

Background

This section should a) explain the nature, extent and impact of the disaster; b) lay out the institutional arrangements for recovery; and c) explain how the Monitoring and Evaluation Manager will relate to stakeholders, subordinates, peers and higher-level authorities. It should also set out the initial duration of the assignment, including the process for contract renewal, and specify that the Monitoring and Evaluation Manager is accountable to the Deputy Recovery Manager.

Responsibilities

The Monitoring and Evaluation Manager will be responsible for the following tasks and duties:

- Draft a logical or results-based framework with KPIs for the recovery process;
- Finalize and validate the monitoring framework and indicators in consultation with key stakeholders and recovery staff;
- Set up a data-collection system to enable regular monitoring and evaluation;
- Generate data on recovery indicators and progress, and make reports publicly available on a regular basis;
- Establish a financial or aid-tracking system to assess financial flows and identify any sectoral or geographic gaps in the recovery, including available versus needed financing;
- Design and implement a mechanism for capturing and sharing lessons learned regarding recovery management and implementation in order to advise on midcourse corrections and maintain institutional memory, while working in close cooperation with the other Managers;
- Provide specific analyses and evaluations at the request of the (Deputy) Recovery Manager;
- Work in close collaboration with the Communications Manager to ensure that accurate and timely information is available as part of the communications strategy.

Attributes

The Monitoring and Evaluation Manager should possess the following essential attributes:

- Monitoring and evaluation skills, preferably acquired in a central or local government environment;
- Successful experience in monitoring and evaluating complex programmes and projects;
- Experience in the participatory design of results-based or logical frameworks and related indicators;
- Ability to design robust data collection and management systems;
- Knowledge of financial or aid-tracking systems;
- Experience with “lessons learned” exercises and their application to institutional change;
- Overall understanding of the recovery process, its goals, targets, mechanisms and relationships;
- Ability to work in difficult situations characterized by ambiguity, limited resources and demanding deadlines;
- Demonstrated empathy, reliability, professionalism, problem-solving abilities and team-building skills.

4. Tool to Assess Recovery Preparedness at Country Level

Table 5. *Area 1 – Legislation and Policies for Recovery*

REQUIREMENTS	Area 1 – LEGISLATION AND POLICIES FOR RECOVERY	
	Questions	**Response/Remarks**
Institutional Arrangements for Recovery	**Current Institutional Arrangements for Recovery** ■ Have institutional arrangements for recovery been defined? ■ Do the existing disaster management systems specify clear responsibilities for recovery and reconstruction? ■ Which agencies, ministries or local authorities would be the focus of such an effort? ■ What is the role of line ministries in recovery and reconstruction? ■ Is there a need for special arrangements or a separate department for coordinating disaster recovery?	
Legislation on Recovery	■ Does DRR/DRM legislation include a specific mandate for recovery? ■ Does the legislation mandate a specific ministry to lead recovery processes, and specify key functions and capacities for recovery? ■ Does it specify the roles of line ministries, and the roles of national and local (provincial or district) level government officials? ■ Have the roles and responsibilities of the various institutions that will plan and implement recovery been clearly outlined? This includes national and international NGOs, the private sector, local community groups and the affected population. ■ Does the law include provisions to enforce regulations so as to ensure that the environment is protected and disaster risks are addressed during reconstruction? Does it make specific mention of land use for reconstruction? ■ Does the law specify a requirement to develop recovery plans that are informed by a detailed assessment of post-disaster needs?	
Policy on Recovery	■ Is there a policy for recovery? ■ Are there provisions in the policy that specify the vision, priorities and sectors for recovery? ■ Are there provisions that outline the principles and standards for recovery? ■ Are there provisions for compensation and insurance coverage as well as social protection measures for the poor and vulnerable? ■ Does the policy outline the time frame for recovery? ■ Does the policy define how disaster induced displacement will be addressed? ■ Does the policy specify measures to maintain transparency and accountability in finances, procurement and implementation of the recovery and reconstruction process? ■ Does the policy specify the sources of funds for recovery and a strategy for resource mobilization?	

Table 6. *Area 2 – PDNA and Recovery Planning*

REQUIREMENTS	Area 2 – PDNA AND RECOVERY PLANING	
	Questions	**Response/Remarks**
Institutional Arrangements for Assessments	What institution has been mandated to conduct Post-Disaster Needs and Recovery Framework Assessment? ■ Is the role of the national government clearly defined? ■ Is the role of line ministries in assessment clearly defined? ■ Are the roles of district level, municipality level and local governments specified?	
Assessments	■ Has an institution been designated to collect, systematize, analyse and disseminate census data, disaggregated by gender and age, in addition to disaster and risk data? ■ Is there a process and methodology in place for conducting post-disaster needs assessments and developing recovery plans? ■ Are there locally adopted guidelines for PDNA which specify the sectors, the methodology, the process and the timeline for assessments? ■ Do the guidelines provide references to the standard cost unit for the required reconstruction of infrastructure and social recovery? ■ Do the guidelines include tools and templates to support the assessment of the recovery plans? ■ Is there a plan to train all relevant stakeholders in the assessment methodology and planning process? ■ Is there sufficient capacity to conduct PDNA and to train relevant government staff in assessment methodology? ■ Have the roles of international bodies, national associations and academic or research institutes in carrying out the assessments been specified? ■ Is there an identified repository for disaster related data?	

Table 7. *Area 3 – Financing Recovery*

REQUIREMENTS	Area 3 – FINANCING RECOVERY	
	Questions	**Response/Remarks**
Mechanisms to Fund Recovery and Reconstruction	■ Have sources of funds for recovery been identified? ■ Is there a specific fund which could be allocated for recovery and reconstruction? Is this a percentage of the emergency fund or contingency fund? ■ Does the law or policy designate an individual responsible for approving the use of such funds? ■ Is there sufficient staff capacity to manage recovery finances? ■ Are the preconditions for drawing on the funds specified? ■ Are there other financial instruments such as insurance, IFI loans and grants from international and national agencies, donations from the private sector and charities? ■ Does the law support the establishment of insurance mechanisms for houses, livelihood, crops and livestock? ■ Is there is a Catastrophe Deferred Drawn Down Option (CAT DDO) or any similar national or regional funding mechanisms for countries to draw from? ■ Does the law provide for the government to receive private donations and cash grants? Is there a mechanism to receive such funds and procedures to utilize the funds? ■ Are there procedures and systems established for budget planning and approval, disbursement of funds, maintaining accounts, financial reporting, procurement and auditing? ■ Is there a process to track the use of funds at the national and local levels? ■ Is there a mechanism to pre-qualify suppliers for procurement of items required for reconstruction? ■ Is there a process for reallocating budgetary resources for recovery?	
Transparency and Accountability	■ Mechanisms to ensure resources are used for the purposes intended ■ Is there an aid-tracking system established to track the timely disbursement of funds and their utilization from the national level to the local and beneficiary levels? ■ Are there any anti-corruption measures, checks or balances established within the government? ■ Are there pre-established third party audits? ■ Are any social audits planned? ■ Are there any specific provisions to enable swift action to be taken when corruption is detected?	

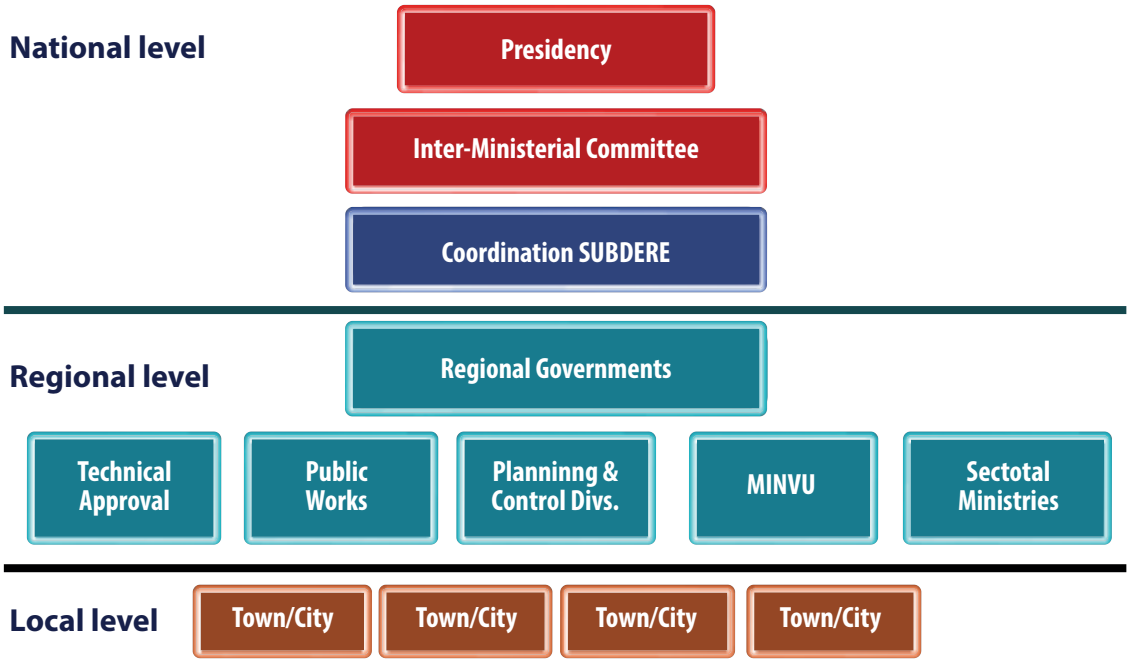
Table 8. *Area 4 – Implementation Arrangements for Coordination Communications and Monitoring*

REQUIREMENTS	Area 4 – IMPLEMENTATION ARRANGEMENTS FOR COORDINATION, COMMUNICATIONS AND MONITORING	
	Questions	**Response/Remarks**
Implementation Capacities	■ **Human Resources** ■ Does the government have a list or database of the profiles of the personnel required for recovery? ■ Are there TORs available for each individual position, role or function? ■ Are there any arrangements for seconding/sourcing staff from different departments or line ministries, twining and back up arrangements with local municipalities and provinces? ■ Is there an agreement concerning the short-term loan of technical experts from international partners? ■ Is there an agreement concerning the short-term loans of experts from other governments in the region? ■ Is there an agreement concerning the short-term loan of experts from regional organizations? ■ Is there an HR policy specifying staff appointment terms, conditions and benefits? ■ Has a salary scale been established, at levels competitive with the private sector, to attract and retain qualified personnel throughout the recovery effort, and to prevent loss to other organizations? ■ Does the HR policy include any non-monetary incentives to encourage specific behaviours? ■ Is there a tool to assess the adequacy and skills of staff in all key positions?	
Coordination	■ Is there a list of the identified stakeholders in recovery? ■ Has an individual, a unit or a department been identified as the focal point for coordinating recovery? ■ Are there terms of reference, a regular meeting schedule and information-sharing protocols to facilitate coordination? ■ Are there thematic working groups to deal with specific recovery issues such as housing, land and settlements, health, education, etc.? Are there TORs and assigned government leads for each thematic working group? ■ Is there a mechanism to review NGOs and pre-qualify them to participate in recovery and reconstruction? ■ Are there agreements with the private sector and academic institutions to support recovery? ■ Is there a strategy to reach out to the overseas national community?	
Communications	■ Is there an identified spokesperson for the Government? ■ Is there a communications strategy which includes key messages, modes of communication and stakeholders? ■ Is there a fixed schedule for media briefing and issuing press releases? ■ Is there focal point for social media and updating relevant websites? ■ Are there contact lists of media, donors, the private sector and the overseas community to facilitate communication? ■ Is there a budget for communication, including translation into relevant national/local languages? ■ Is there a strategy to raise awareness in local communities of recovery assistance packages?	

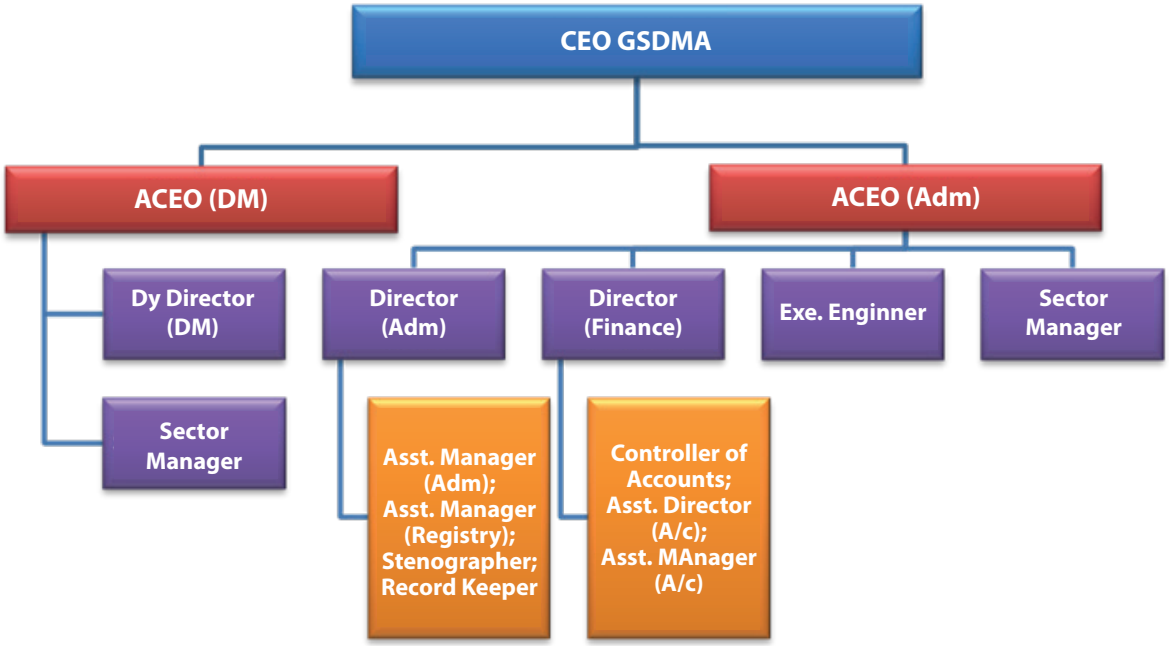
REQUIREMENTS	Area 4 – IMPLEMENTATION ARRANGEMENTS FOR COORDINATION, COMMUNICATIONS AND MONITORING	
	Questions	**Response/Remarks**
Monitoring and Evaluation	■ Is there a monitoring and evaluation strategy? ■ Is there an agreed set of indicators and targets for monitoring progress in all sectors of recovery? ■ Do the monitoring indicators include both use of funds and actual progress against targets for each sector? ■ Are there tools to monitor the implementation of recovery activities? ■ Has a mechanism for online or offline reporting been established, including a timeline and clear mention of frequency? ■ Have the monitoring roles of national, local and line ministries and communities been defined? ■ Has a formal grievance redress mechanism been established where local communities can report issues? ■ Is there a long-term plan for evaluating the recovery and reconstruction programme? ■ Have capacities and funds been designated specifically to monitor recovery?	

5. Organization charts for selected institutional arrangements

CHILE Organogram

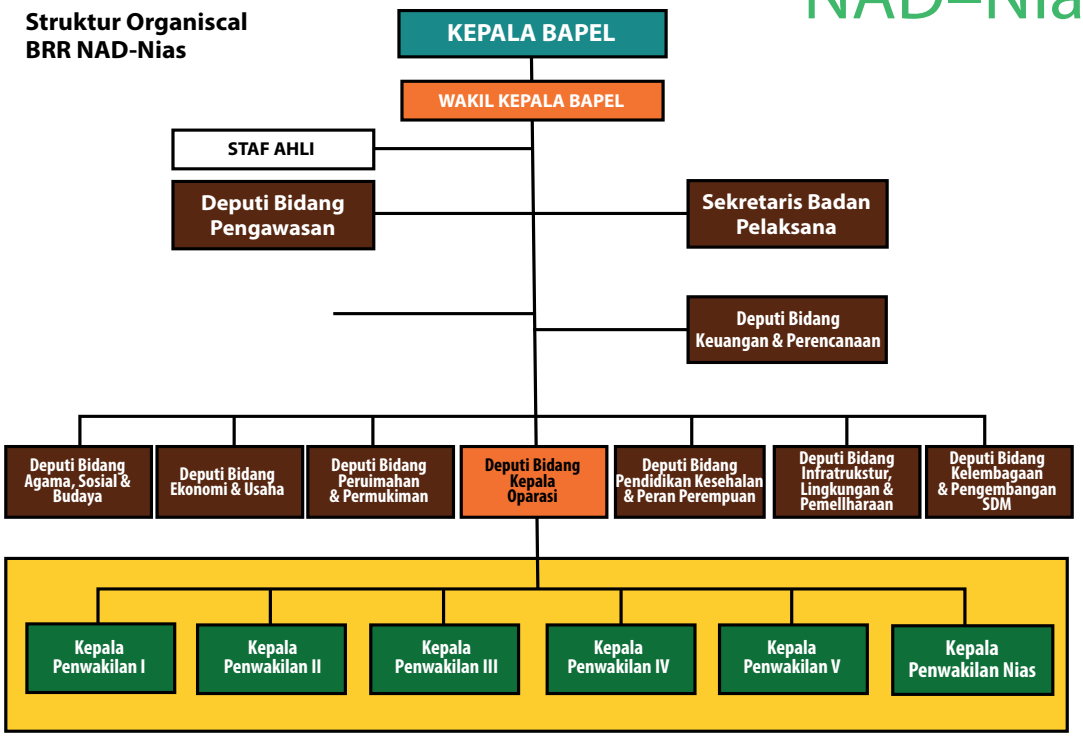


INDIA (Gujarat) Organogram

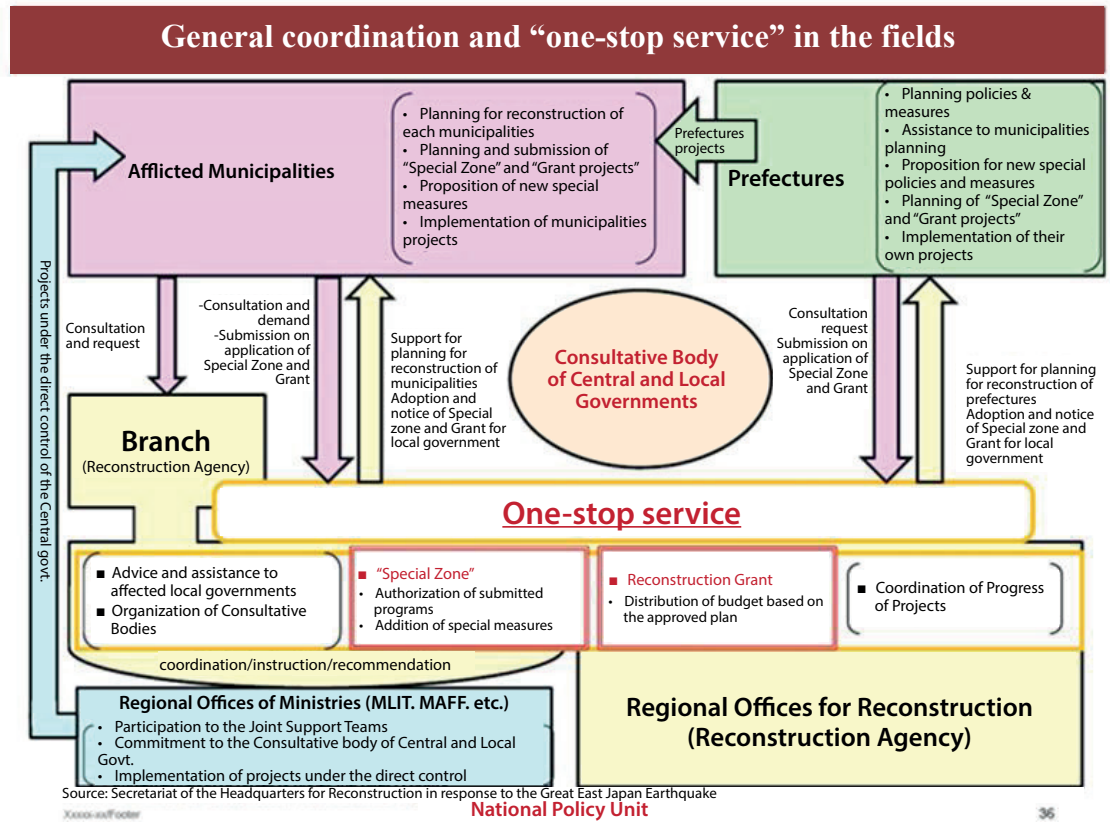


INDONESIA (Aceh) Organogram

Badan Rehabilitasi dan Rekonstruksi NAD–Nias



JAPAN Organogram



Source: Secretariat of the Headquarters for Reconstruction in response to the Great East Japan Earthquake

National Policy Unit

BIBLIOGRAPHY

SCHOLARLY LITERATURE AND ACADEMIC SOURCES:

Barenstein, Jennifer. The politics of participation: involving communities in post-disaster reconstruction. In: G. Lizarralde, C. Johnson and C. Davidson (Eds.), *Rebuilding after disasters: from emergency to sustainability.* New York: Spon Press, 2010.

Birkland, T. A. Lessons of Disaster: Policy Change after Catastrophic Events. Georgetown University Press: Washington, 2007.

Birkland, T. A. Focusing Events, Mobilization and Agenda Setting. *Journal of Public Policy, 18(1), 53-74,* 1998.

Birkmann, J. and others. Extreme Events and Disasters: A Window of Opportunity for Change? Analysis of Organizational, Institutional and Political Changes, Formal and Informal Responses after Mega-Disasters. *Natural Hazards. 55(3): 637-655,* 2008.

Chang Seng, D. S. Tsunami resilience: Multi-level institutional arrangements, architectures and system of governance for disaster risk preparedness in Indonesia. Environmental Science and Policy, vol. 29, pp. 57-70, 2013.

Clarke, Paul Knox. *Between chaos and control: rethinking operational leadership.* ALNAP Study. London: ALNAP/ODI, 2014.

Davis, Ian. What is the vision for sheltering and housing in Haiti? UN Human Settlements Programme Report, 2012. Retrieved from https://reliefweb.int/sites/reliefweb.int/files/resources/Situation_Report_215.pdf

Davis, I. and D. Alexander. *Recovery from Disaster.* London: Routledge Taylor and Francis Group, 2016.

Dimauro, Carmelo. Resilience and responsibility in international law: the achievements of the Sendai Framework through the example of climate change. In *Law and the management of disasters: the challenge of resilience*, A. Herwig and M. Simoncini, eds. Abingdon, England: Routledge, 2017.

Ganapati, N. and A. Mukherji. Out of Sync: World Bank Funding for Housing Recovery, Postdisaster Planning and Participation. *Natural Hazards Review,* 15(1) p. 58-73, 2014.

Ghesquiere, F. and O. Mahul. Financial protection of the state against natural disasters: a primer, policy working paper. Vol. 5429. World Bank: Washington DC, 2010.

Harrald, John R. Agility and Discipline: Critical Success Factors for Disaster Response. *The Annals of the American Academy for Political and Social Science, 604* (Sheltering from the Storm: Repairing the National Emergency Management System after Hurricane Katrina), 2006.

Ishiwatari, Mikio. Institution and Governance Related Learning from the East Japan Earthquake and Tsunami. In *Disaster Recovery: Used or Misused Development Opportunity*, Rajib Shaw, ed., pp. 77-88. Tokyo: Springer, 2014.

Jayasuriya, S. and P. McCawley. *The Asian Tsunami: Aid and Reconstruction after a Disaster*. Asian Development Bank Institute: Tokyo, 2010.

Johnson, Laurie A. Developing a local recovery management framework: report on the post-disaster strategies and approaches taken by three local governments in the U.S. following major disasters. *International Journal of Mass Emergencies and Disasters, 32*(2), pp. 242-274, 2014.

Johnson, Laurie and Robert Olshansky. After Great Disasters: How Six Countries Managed Community Recovery. Policy Focus Report. Cambridge: Lincoln Institute of Land Policy, 2017. Available at https://www.lincolninst.edu/sites/default/files/pubfiles/after-great-disasters-full_0.pdf

Keicho, T. IRP. *Supporting and empowering municipal functions and staff*. Knowledge Note 3-4: Learning from Mega-Disasters. World Bank: Washington DC, 2012.

Kumar, Sudhir. Institutional Arrangements for Managing Large-Scale Recovery: Key Lessons from 2004 Tsunami. In *Recovery from the Indian Ocean Tsunami: A Ten-Year Journey*, Rajib Shaw, ed, pp. 103-119. Tokyo: Springer, 2015. Available at link.springer.com/chapter/10.1007/978-4-431-55117-1_8

Mattingly, Shirley. *Policy, legal and institutional arrangements*. Asian Disaster Preparedness Center: Bangkok, 2002. Available at http://www.adpc.net/v2007/IKM/ONLINE%20DOCUMENTS/downloads/ADUMP/PLI.pdf

Mitchell, James K. The Primacy of Partnership: Scoping a New National Disaster Recovery Policy. *The Annals of the American Academy of Political and Social Science*, 604: 228-255, 2006.

Mukherji, A. and N. Ganapati. Panacea or Problem: Comparing Parallel Governance Structures for Disaster Recovery. *Journal of Public Administration Research and Theory (Under Review)*. Available at https://hazards.colorado.edu/workshop/2018/abstract/researchers-meeting#panacea-or-problem-comparing-parallel-governance-structures-for-disaster-recovery

Osa, Y., J. Sagara and M. Ishiwatari. *Mobilizing and coordinating expert teams, non-governmental organizations and volunteers*. Knowledge Note 3-1: Learning from Mega-Disasters. World Bank: Washington DC, 2012.

Rao, Sumedh. Disaster risk governance at national and sub-national levels. GSDRC Helpdesk Report, 2013. Retrieved from https://www.researchgate.net/publication/301381650_Disaster_risk_governance_at_national_and_sub-national_levels

Rubin, Claire, ed. *Emergency Management: The American Experience 1900-2010*. Boca Raton: CRC Press, 2012.

Schwab, James C., ed. *Planning for Post-Disaster Recovery: Next Generation*. Planning Advisory Service Report 576. Chicago, IL: American Planning Association, 2014.

Shaw, Rajib. Post Disaster Recovery: Issues and Challenges. In *Disaster Recovery: Used or Misused Development Opportunity*, Rajib Shaw, ed., pp. 1-16. Tokyo: Springer, 2014.

Smith, G. and T. Birkland. Building a Theory of Recovery: Institutional Dimensions. *International Journal of Mass Emergencies and Disasters. 30*(2), 147-170, 2012.

Smith, G., A. Martin and D. Wenger. Disaster Recovery in an Era of Climate Change: The Unrealized Promise of Institutional Resilience. In *Handbook of Disaster Research*, pp.595-619, 2017.

Srivastava, Nitin and Rajib Shaw. Institutional and Legal Arrangements and Its Impacts on Urban Issues in Post Indian Ocean Tsunami. In *Recovery from the Indian Ocean Tsunami: A Ten-Year Journey*, Rajib Shaw, ed., pp. 17-27. Tokyo: Springer, 2015. Available at https://link.springer.com/chapter/10.1007/978-4-431-55117-1_2

Thiruppugazh, V. Post-Disaster Reconstruction and Institutional Mechanisms for Risk Reduction: A Comparative Study of Three Disasters in India. In *Disaster Recovery: Used or Misused Development Opportunity,* Rajib Shaw, ed., pp. 17-40. Tokyo: Springer, 2014.

Twigg, J. and others. *Self-Recovery from disasters: an interdisciplinary perspective*. ODI: London, 2017.

Wen, Jet-Chau and others. Typhoon Morakot and Institutional Changes in Taiwan. In Rajib Shaw, ed. *Disaster Recovery: Used or Misused Development Opportunity,* pp. 61-75. Tokyo: Springer, 2014.

GREY LITERATURE FROM PREVENTIONWEB, IRP, AND OTHER RESOURCES (18 SOURCES):

Agency for the Rehabilitation and Reconstruction of the Region and Community of Aceh and Nias (BRR). Ten Management Lessons for Host Governments Coordinating Post-Disaster Reconstruction, 2009. Available at http://www.recoveryplatform.org/resources/organizations/94/agency_of_the_rehabilitation_and_reconstruction_for_the_region_and_community_of_aceh_and_nias_brr

Asian Development Bank. The Role of Project Implementation Units. Manila, Philippines: Operations Evaluation Department Special Evaluation Study (SST): REG 2005-02 (Final), 2005. Retrieved from https://www.adb.org/documents/project-implementation-units

_____ *Validation Report: Indonesia, earthquake and tsunami emergency support project*. ADB: Manila, 2012.

Badan Rehabilitasi dan Rekonstrucksi (BRR). Ten Management Lessons for Host Governments Coordinating Post-Disaster Reconstruction, 2009. Retrieved from http://www.recoveryplatform.org/assets/publication/BRR%2010%20Management%20Lessons%20for%20Host%20Governments.pdf

Department of the Prime Minister and Cabinet. Structure and human resources in a recovery agency: lessons identified. EQ Recovery Learning: Shared insights from the Canterbury Earthquakes. Wellington, NZ: New Zealand Government, 2016.

_____ *Walking the recovery tightrope: Learning and insights from CERA. Earthquake Recovery Learning: Shared insights from the Canterbury Earthquakes project*. Wellington, NZ: New Zealand Government, 2016. Retrieved from http://www.eqrecoverylearning.org/themes/understanding-recovery-context/resource/9454

Federal Emergency Management Agency. *National Disaster Recovery Framework*. Washington, DC: FEMA, 2011.

GFDRR. Legal and Institutional Arrangements (LIA): framework guidebook - Bangladesh urban earthquake resilience project. Earthquakes and Megacities Initiative. World Bank: Washington DC, 2014. Available at http://emi-megacities.org/wp-content/uploads/2015/01/LIA-Guidebook_FINAL.pdf

_____ Recovery framework case study: Lao PDR - strengthening institutional capacities for resilient recovery. Country Case Studies Series: Disaster Recovery Framework Guide. World Bank: Washington DC, 2014. Available at https://www.gfdrr.org/sites/default/files/publication/rcfs-2014-laopDrpdf

_____ Recovery framework case study: Pakistan Earthquake 2005 - The Case of Centralized Recovery Planning and Decentralized Implementation. Country Case Study Series: Disaster Recovery Framework Guide. World Bank: Washington DC, 2014. Available at https://reliefweb.int/sites/reliefweb.int/files/resources/Pakistan%20Earthquake%202005_0.pdf

_____ Recovery framework case study: Senegal – Urban Floods: recovery and reconstruction since 2009. Country Case Study Series: Disaster Recovery Framework Guide. World Bank: Washington, D.C., 2014. Available at https://reliefweb.int/sites/reliefweb.int/files/resources/SENEGAL%20URBAN%20FLOODS.pdf

_____ Recovery framework case study: Philippines - Typhoon Yolanda ongoing recovery. Country Case Study Series: Disaster Recovery Framework Guide. World Bank: Washington DC, 2014. Available at https://www.gfdrr.org/sites/default/files/publication/rfcs-2015-philippines.pdf

_____ Recovery framework case study: Bangladesh - Planning and implementation of post-Sidr housing recovery, practice, lessons and future implications. Country Case Study Series: Disaster Recovery Framework Guide. World Bank: Washington DC, 2014. Available at https://www.gfdrr.org/sites/default/files/publication/rfcs-2014-bangladesh.pdf

_____ Recovery framework case study: Yemen tropical storm 2008. Country Case Study Series: Disaster Recovery Framework Guide. World Bank: Washington, D.C., 2014. Available at https://www.gfdrr.org/sites/default/files/publication/rfcs-2014-yemen.pdf

_____ Recovery framework case study: Haiti earthquake 2010 - recovery from a mega disaster. Country Case Study Series: Disaster Recovery Framework Guide. World Bank: Washington DC, 2014. Available at https://www.gfdrr.org/sites/default/files/publication/rfcs-2014-haiti.pdf

_____ Recovery framework case study: Institutionalizing Post-Disaster Recovery: Learning from Mentawai Tsunami and Merapi Eruption - Recovery Framework Case Study. Country Case Study Series: Disaster Recovery Framework Guide. World Bank: Washington DC, 2014. Available at https://reliefweb.int/sites/reliefweb.int/files/resources/Indonesia%20Post-Disaster%20Recovery%20Institutionalization.pdf

_____ *Guide to developing disaster recovery frameworks: Sendai Version*. World Bank: Washington, DC, 2014. Available at http://www.recoveryplatform.org/assets/publication/GFDRR/DRF-Guide.pdf

_____ *Recovery and reconstruction planning in the aftermath of Typhoon Haiyan*. World Bank: Washington, D.C, 2014. Available at https://www.gfdrr.org/sites/default/files/publication/Recovery%20and%20Reconstruction%20Planning%20in%20the%20Aftermath%20of%20Typhoon%20Haiyan.compressed.pdf

_____ *Building Back Better: Achieving resilience through stronger, faster and more inclusive post-disaster reconstruction*. World Bank: Washington, DC, 2018. Available at https://openknowledge.worldbank.org/bitstream/handle/10986/29867/127215.pdf

_____ *Local Disaster Recovery Framework Guidebook*. World Bank: Washington, DC, 2019. Available at https://www.gfdrr.org/en/publication/engaging-local-actors-drf

_____ *Disaster Recovery Framework Guidebook (revised version)*. World Bank (jointly published with EU and UNDP): Washington, DC, 2020. Available at https://www.gfdrr.org/en/feature-story/revised-disaster-recovery-framework-guide

Harrald, John R. *Testimony for the U.S. Senate Homeland Security Government Affairs Committee – Hurricane Katrina: Recommendations for Reform*. Washington, DC: U.S. Senate, 2006.

Independent Evaluation Group (IEG). *Natural disaster response: lessons from evaluations of the World Bank and others (Evaluation Brief)*. Vol. 16. World Bank: Washington DC, 2011.

International Recovery Platform (IRP) and United Nations Development Programme (UNDP) India. *Governance: Guidance Note on Recovery*. IRP Secretariat: Kobe, 2010.

Jha, A. K. *Safer Homes, Stronger Communities: A Handbook for Reconstructing after Natural Disasters*. Washington, DC: The World Bank, 2010.

McNaughton, E., J. Willis, and D. Lallemant, *Leading in disaster recovery: A companion through the chaos*. Christchurch: New Zealand Red Cross, 2015. Retrieved from https://www.preparecenter.org/resources/leading-in-disaster-recovery

National Disaster Management Agency. *India - National Disaster Recovery Framework (Draft).* New Dehli: NDMA, 2014.

Office of the Auditor-General. *Canterbury Earthquake Recovery Authority: Assessing its effectiveness and efficiency*. Wellington: New Zealand Government, 2017. Retrieved from https://www.oag.govt.nz/2017/cera

Transparency International. *Corruption Perception Index 2019*, 2020. Available at https://www.transparency.org/en/cpi/2019/results/

UNDP. *From Relief to Recovery: The Gujarat Experience*, 2010. Retrieved from http://www.recoveryplatform.org/assets/publication/Gujarat%20Earthquake%20Recovery/gujarat%20recovery.pdf

United Nations Framework Convention on Climate Change. *Institutional arrangements for national adaptation planning and implementation: 2014 thematic report*. UNFCC: Bonn, 2014. Available at http://unfccc.int/files/adaptation/application/pdf/adaption_commitee_publication_-_web_high.pdf

United Nations International Strategy for Disaster Reduction (UNISDR). *Hyogo framework for action 2005–2015: Building the resilience of nations and communities to disasters*, 2005. Available at http://www.unisDrorg/files/1037_hyogoframeworkforactionenglish.pdf

_____ *Sendai framework for disaster risk reduction 2015–2030*, 2015. Available at http://www.wcdrr.org/uploads/Sendai_Framework_for_Disaster_Risk_Reduction_2015-2030.pdf

_____ *Build Back Better in recovery, rehabilitation and reconstruction*. Consultative version. Geneva: UNISDR. 2017. Available at https://www.preventionweb.net/files/53213_bbb.pdf

World Bank. *Disaster recovery in conflict contexts: thematic case study for the disaster recovery framework guide*. Washington, DC: World Bank Group, 2017. Available at http://documents.worldbank.org/curated/en/310171495026430229/Disaster-recovery-in-conflict-contexts-thematic-case-study-for-the-disaster-recovery-framework-guide

_____ Advancing disaster risk financing and insurance in ASEAN member states: framework and options for implementation. World Bank: Washington, D.C., 2012a.

_____ Executive Summary of Knowledge Note: Learning from Mega-Disasters. World Bank: Washington, D.C., 2012b.

_____ *Sendai Report: Management Disaster for a Resilient Future*. World Bank: Washington, D.C., 2012c.

_____ Utilization of Project Implementation Units (PIUs). Washington, DC: Operational Evaluation Department, Independent Evaluation Group, 2012d.

_____ *Turkey - Erzincan Earthquake Rehabilitation and Reconstruction Project, Turkey Emergency Flood and Earthquake Recovery Project, and Emergency Earthquake Recovery Project (English).* Washington, DC: World Bank, 2005. Retrieved from http://documents.worldbank.org/curated/en/406751468311433007/pdf/326760TR.pdf

For more information, please contact:
United Nations Development Programme
Crisis Bureau
www.undp.org