





DEVELOPING DISASTER RECOVERY FRAMEWORKS

Sendai Conference Version MARCH 2015









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ABBREVIATIONS

ADB	Asian Development Bank
BBB	Building Back Better
BRR	Agency For The Rehabilitation And Reconstruction Of Aceh And Nias - Indonesia
CFO	Commission On Filipinos Overseas - Philippines
CMTS	Construction Monitoring Teams
CSOs	Civil Society Organizations
DRF	Disaster Recovery Frameworks
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DRU	District Reconstruction Units - Pakistan
ERRA	Earthquake Reconstruction And Rehabilitation Authority - Pakistan
EU	European Union
FAiTH	Foreign Aid Transparency Hub - Philippines
GDP	Gross Domestic Product
GFDRR	Global Facility For Disaster Reduction And Recovery
IFI	International Financial Institutions
INGC	National Institute For Disaster Management - Mozambique
IRA	Internal Revenue Allotment
LGU	Local Government Units
LINKAPIL	Lingkod Sa Kapwa Pilipino - Philippines
M&E	Monitoring And Evaluation
MDTFs	Multi- Donor Trust Funds
MIRA	Multi-Cluster/Sector Initial Rapid Assessment
MRAZI	Ministry For Restructuring And Managing Flood Zones
NDRRMF	National Disaster Risk Reduction And Management Fund - Philippines
NGOs	Nongovernmental Organizations
OPARR	Office Of The Presidential Assistant For Rehabilitation And Recovery - Philippines
PDNA	Post-Disaster Needs Assessment
PEC	Pakistan Engineering Council
PERRA	Provincial Earthquake Reconstruction And Rehabilitation Authority - Pakistan
PFM	Public Financial Management
PPP	Public-Private Partnerships
RMS	Results Monitoring System
RRF	Reconstruction And Recovery Fund - Yemen
SERRA	State Earthquake Reconstruction And Rehabilitation Authority - Pakistan
UNDP	United Nations Development Programme
WEBEOC	Web-Based Emergency Operations Center - Philippines

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NOTE TO POLICY MAKERS

Instruments such as the Post-Disaster Needs Assessment (PDNA) provide a solid basis for quantifying recovery needs and formulating broad strategies. However, experience in the last several decades has shown that meeting recovery needs must go beyond simply conducting post-disaster assessments. Demand has been growing globally for a disaster recovery framework for resilient recovery that can build on the PDNA or other such assessments.

In response, the World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR) collaborated with the European Union (EU) and the United Nations Development Programme (UNDP) to produce this Guide to Developing Disaster Recovery Frameworks. The guide is intended as a practice-based, results-focused tool to assist governments and partners in planning for resilient post-disaster recovery.

How Can Policy Makers Use the Guide?

The guide provides the essential information to assist policy makers and other stakeholders in formulating a framework for the medium- to long-term post-disaster recovery. This framework will help in articulating the recovery vision; defining the recovery strategy; prioritizing actions; fine-tuning planning; and providing guidance on financing, implementing, and monitoring the recovery. The framework also is a tool that helps in learning and self-evaluation, leading to continuous improvements over the course of the recovery implementation.

Key Considerations for the Policy Makers in the Recovery Process

Depending on the nature of the disaster, the development of a recovery framework can range from being relatively resource-light to being resource-intensive. Similarly, depending on the scale of recovery and reconstruction required, the framework can take from a few weeks to several months to develop.

Institutional Arrangements

The preferable arrangement for post disaster recovery is to have a pre-existing entity for the core recovery planning and oversight functions required to meet recovery objectives. In the absence of such arrangements it is critical to designate an agency to take the lead role in coordinating or planning recovery. A lead recovery agency should be designated early into the recovery process. This guide elaborates a multitude of possible institutional arrangements for recovery implementation. However, the key

elements of an effective lead recovery agency are that it should have a clear mandate and that it should be backed by effective political and technical leadership.

Vision and Guiding Principles

Another important initial step in setting up a recovery framework is the articulation of the recovery vision and guiding principles. They enable the government to convey its recovery priorities to the public, stakeholders, and partners; and to build national or subnational consensus around them. Early setting of the vision and guiding principles for recovery is important to ensure effective transition from the immediate humanitarian response to the medium- to long-term recovery. For example, guiding principles could encourage the use of shelter materials in the humanitarian response that could be reused to reconstruct homes.

Programmatic Approach

The lead recovery agency may help the government develop a framework that takes a programmatic approach to identify priority sectors that are critical for restoring livelihoods. Such a framework would enable the use of holistic recovery management. In it, the activities of government agencies, communities, and nongovernmental entities complement one another under a government-led framework. Because a significant portion of recovery activities are undertaken by the nongovernmental entities, an inclusive recovery process would help avoid duplications and gaps. For example, certain geographic areas or sectors may be allocated to particular donors, NGOs, and implementation partners.

The lead agency would oversee the development of the recovery framework and would play a critical role in its implementation. The lead agency also could play a central role in the coordination, oversight, and monitoring and evaluation (M&E) of the progress of the recovery.

Financing for Recovery

Recovery implementation needs to be supported by the mobilization of funds and coordination mechanisms that channel funds to the implementation entities in a timely manner. Recovery may be funded through government funds, international aid, private sector financing, and community contribution. To manage recovery in a holistic manner, it is recommended that the government have an effective funds tracking mechanism for both on-budget and off-budget funds. A good fund-tracking mechanism along with a strong public financial management system enhance donor confidence and help in mobilizing additional funds for recovery.

Simplified Procurement

The increase in the volume of transactions and the urgency with which they need to be completed often overwhelm existing government systems. Simplified procurement procedures can provide a robust mechanism for the timely purchase of goods and services. Experience suggests that responsible officers are reluctant at times to use the simplified procurement procedures even if they exist within the government systems. The mandate given to the lead recovery agency under the recovery framework is important in invoking and promoting the use of simplified procedures.

Communication

Recovery is often a multisectoral activity that encompasses a broad range of actors and affected communities. For this reason, it is crucial for the government to have a consolidated communications system that conveys the progress of the recovery and addresses the expectations of the affected communities. A coherent communications platform also is useful in communicating with donors and beneficiaries.



INTRODUCTION

The World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR) collaborated with the European Union (EU) and the United Nations Development Programme (UNDP) to produce this *Guide to Developing Disaster Recovery Frameworks* (DRF guide).¹ This DRF guide is intended primarily for audiences involved in recovery planning within the government systems. These groups include policy-makers, leaders, and managers of recovery institutions; financial managers; monitoring and evaluation (M&E) experts; and governmental implementing agencies. Other national stakeholders including civil society organizations (CSOs), nongovernmental organizations (NGOs), and private sector entities also may benefit from the DRF guide.

This DRF guide is based primarily on good practices compiled from (a) nine countries' disaster recovery experiences and (b) collaboration with the international advisory and technical working groups formed to develop the DRF guide. It is intended as a practice-based, results-focused tool to assist governments and partners in planning for resilient post-disaster recovery² following a large-scale disaster. The DRF guide also can be used to respond to smaller scale, recurring disasters. Finally, it provides key planning and decision-making processes for the development of recovery policies and programs. However, the DRF guide does not necessarily cover the full breadth of the actual implementation of recovery.

Why Disaster Recovery Frameworks?

Tools such as the Post-Disaster Needs Assessment (PDNA) or similar assessments provide a solid basis for quantifying recovery needs and formulating broad strategies. Globally, these assessments have become regular practice immediately following disasters. However, experiences in the last several decades have shown that meeting recovery needs must go beyond simply conducting post-disaster assessments. Enabling communities to recover from disasters requires both good preparedness before the disaster and ensuring that recovery measures are aligned with ongoing development following the disaster. Consequently, demand has been growing globally for a framework for resilient recovery that can build on the PDNA or other disaster assessments tools. This framework would guide governments and other implementing stakeholders in the middle and longer term recovery efforts. The framework would help in articulating a vision for recovery; defining a strategy; prioritizing actions; fine-tuning planning; and providing guidance on financing, implementing, and monitoring the recovery.

Through developing a country-level disaster recovery framework, a government will be better positioned to drive a process that unites all development partners' efforts. Additionally, by developing a framework to manage recovery, a government may be able to better address longer term disaster vulnerability through coherent programs that bridge the current gap between recovery and development. For example, such programs could address disaster-resistant housing, building code enforcement, safety nets, green growth, and climate change resilience. As a result of developing its recovery framework, a government likely would be able to prioritize disaster risk reduction and resilience measures within both its short- and long-term development goals.

What Does the DRF Guide Do?

This DRF guide will enable a government to create a national disaster recovery framework (DRFs) that:

- Complements PDNAs or similar assessments as a tool to program and plan the recovery.
- Lays out the roles, responsibilities, and organizing structure of the governmental and nongovernmental agencies, as well as of the local authorities and groups responsible for disaster recovery.
- Provides an integrated, program-level action plan to facilitate multisector recovery planning, prioritization, and activity sequencing. The frameworks also will guide funding and portfolio management decisions.
- Functions as a living baseline document to monitor progress and evaluate impacts.
- Ensures aid effectiveness by bringing together multiple stakeholders, governmental and nongovernmental, around one common and inclusive government-led platform for recovery strategizing, planning, and project management.

The DRF guide is not intended to burden the recovery process with complex rules of engagement or cooperation among national agencies and development partners. It is not a prescriptive or in-depth treatment of country-specific recovery issues and challenges. Instead, this flexible, practice-based guide offers options that can be adapted to an individual country's conditions. Finally, the DRF guide is not an in-depth treatment of all sectoral recovery issues and challenges. Instead, it focuses on broader multi-and intersectoral recovery planning aspects.

DRF Guide Objectives

The DRF guide is intended as a tool to assist governments and partners in planning for resilient postdisaster recovery that will lead to sustainable development. Expected outcomes of implementing recovery frameworks are:

- Informed institutional and policy-setting for recovery
- Prioritization and programming based on an inclusive, transparent process that ensures participation of all stakeholders and uses national and international good practices
- Effective coordination among partners during the recovery and reconstruction processes
- Comprehensive framework for recovery financing
- Improved Implementation and monitoring and evaluation systems for recovery programs.

How Is the DRF Guide Used?

The DRF guide presents information customized to the different needs of target audiences. Understanding its structure will assist users to navigate it. The detailed content of the DRF guide is arranged in six modules, or units. These modules follow the sequence of steps required to develop and implement a framework.

Module 1: Conducting Post-Disaster Damage and Needs Assessment

Module 1 establishes the link between the PDNA, or similar disaster assessment, and the DRF. Additionally, the PDNA provides a brief overview of the key objectives and guiding principles of conducting disaster assessments.

Module 2: Policy and Strategy-Setting for Recovery

At almost the same time that it estimates the total damages and recovery needs of a disaster, the government can begin to set policies and strategies for recovery. Module 2 describes the guiding recovery principles and good practices and the key results associated with developing programs for integrated, cross-sectoral disaster recovery.

Module 3: Institutional Framework for Recovery

In addition to policy formulation and strategy, how institutions are set up is critical for a successful recovery. Module 3 describes good practices and key results associated with the development of effective institutional structures, leadership and human resources –for overseeing, managing, coordinating and implementing reconstruction.

Module 4: Financing for Recovery

Module 4 concentrates on the major financing challenges of post-disaster reconstruction. These challenges include quickly quantifying the economic and financial costs of the disaster, developing reconstruction budgets, identifying sources of financing, and setting up the mechanisms to manage and track funds.

Module 5: Implementation Arrangements and Recovery Management

Recovery programs must be quickly implemented and visibly improve the lives of disaster-affected populations. Module 5 supplies the background information required to ensure that program implementation is effective, equitable, timely, and working toward building back a better future.

Module 6: Strengthening Recovery Systems in National and Local Governance

Module 6 examines various reforms and improvements to institutional and legislative arrangements that can be developed and implemented in advance of disasters. These advance improvements offer the best hope for disaster risk reduction.

Additional features common to all six modules are:

- Each module features Results Charts, which recommend recovery planning processes based on the results intended. The Results Charts all contain the same components: core planning processes, outputs, and actors.
- Checklists are featured at the end of each module. These checklists enable target audiences to assess rapidly whether that module's thematic issues are integrated in the development of a DRF.
- Additional details on the strategic and implementation options available for various modules can be found either in the country good practice text boxes that accompany the main text, or in the country case studies (https://www.gfdrr.org/recoveryframework).

Additional Sections of the DRF Guide

The common best practices and lessons identified from all countries also are combined in a concluding section, "Common Best Practices and Lessons Identified".

All good practice results at various stages of recovery planning are integrated in a Results Framework (appendix 1). It provides a clear overview of all outcomes and outputs generated by the recovery planning.

A broad range of actors come together to develop disaster recovery frameworks. To ensure a shared understanding, this DRF guide provides a Glossary of terms that may not be familiar to all users.

Detailed country case studies—the technical and thematic appendices to the DRF guide—also are available at https://www.gfdrr.org/recoveryframework. Thematic appendices that focus on specialized areas will be added to the online DRF guide progressively.

Endnotes

- "Recovery" is defined as the restoration, and where appropriate, improvement of facilities, livelihoods, and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors. While, "reconstruction" focuses primarily on the construction or replacement of damaged physical structures, and the restoration of local services and infrastructure. The term "recovery" in this guide encompasses both "recovery" and "reconstruction".
- 2 "Resilient recovery" builds resilience during recovery and promotes resilience in regular development. Resilient recovery is a means to sustainable development.



MODULE 1. CONDUCTING POST-DISASTER DAMAGE AND NEEDS ASSESSMENT

A post-disaster needs assessment (PDNA) is a prerequisite for developing a Disaster Recovery Framework (DRF). The affected country decides which damage and needs assessment methodology will be used to conduct the initial assessment. The PDNA is one established methodology for estimating damages and needs that is often used. The intent of Module 1 is to establish the linkage between the PDNA, or similar disaster assessments, and the DRF.¹

Need for post-disaster assessment. Early recovery can start while humanitarian response activities are ongoing. A decision by the government on the nature of the disaster assessment and DRF is the first transitional step from humanitarian assistance to full-scale recovery and reconstruction with defined objectives. In the initial period after impact, questions arise as to what the priority recovery needs are and what the specific objectives of recovery should be. Answering these complex questions will require understanding the magnitude of the disaster. The understanding is acquired by the government undertaking assessments of damage and needs in light of the recovery objectives agreed by government policy-makers and other key actors.

Disaster assessments provide the basis on which the DRF can be further developed. Specifically, assessments help in the development of operational plans for deploying human, financial, and information resources to implement large-scale reconstruction programs. They also help set up credible baselines for the subsequent monitoring and evaluation of the recovery program.

Key elements of a post-disaster assessment. Some disaster-impacted countries may intend to fund the recovery to the fullest extent possible. Other such countries may have to rely on external aid for funding part of their recovery programs. For both groups, it is important at the very outset to commission a disaster assessment that will aggregate the cost of damages and losses. The assessment needs to be government led. However, the assessment also must be inclusive. Inclusion means that the government must ensure participation and consultation by relevant government departments (both horizontally and vertically), civil society, the private sector, and face to face with people in the affected communities.

Assessments should provide a fairly reliable estimate of the overall resource requirements and financing available to a country's reconstruction policy- and financial decision-makers. The estimates then would enable them to initiate strategic and holistic reconstruction planning. Having a strategic perspective helps develop operational plans for deploying human, financial, and information resources to implement large-scale reconstruction programs. It also helps set up credible baselines for the subsequent monitoring and evaluation (M&E) of the recovery program.

Assessments can take different forms depending on the type and size of the disaster and on the national context. Examples follow of the types of assessments that could be used in post-disaster scenarios.

Humanitarian and early recovery assessments. Governments and international actors conduct rapid assessments in the immediate aftermath of disasters to identify humanitarian needs. These assessments often are organized around clusters that will use their sector-specific assessment methodologies and tools. These assessments may be carried out jointly, such as through the Multi-Cluster/ Sector Initial Rapid Assessment (MIRA). In some cases, these humanitarian assessments also identify early recovery needs. In other cases, separate assessments are designed specifically to identify early recovery needs. These assessments are undertaken at the same time as, or immediately following, the humanitarian assessments.

Sector-specific assessments. Governments conduct sector assessments by using the relevant line ministries. However, the individual line ministries may not necessarily form part of a multisectoral assessment. In the sectors in which they have expertise, international organisations such as the World Bank, the United Nations (UN) system, or the European Union (EU) can support sector-specific assessments. In such cases, these international agencies would supply punctual technical assistance to three specific operations:

- 1. Carry out the assessment
- 2. Setting up an assessment team that includes representatives from the relevant government ministries and other relevant stakeholders
- 3. Applying the appropriate assessment methodologies and tools.

Post-disaster needs assessments (PDNA). The PDNA is a common assessment approach developed by the EU, UNDP, and World Bank to support governments to assess damages and recovery needs. It is an inclusive process that builds on the capacity and expertise of national and international actors. When participating in such assessments, the PDNA Guides Volumes A and B should be used.²

This tool is being used in an increasing number of countries, particularly for larger scale emergencies. Governments conduct PDNAs with the support of the international community. The main goal of PDNAs is to assist a government to assess the full extent of a disaster's impact on the country and what is needed for the nation to recover. The findings serve as the basis for designing a resilient recovery framework and for mobilizing financial resources to implement it. PDNAs provide a more comprehensive empirical basis for costing post-disaster recovery and reconstruction and for informing an international donor conference.

Res	Result 1. Post-disaster Damage and Needs Assessment Provides Basis for the Development of Recovery Framework.			
	Process	Output	Actors	
1	Build on the preliminary assessments by government and humanitarian response agencies, and the initial damage surveys	Preliminary assessment reports Compilation and transmittal	Lead Agency: National/subnational focal point	
leading to a disaster assessment.	leading to a disaster assessment.	of damage and loss data to a central node	Others: Line ministries, local government departments, national technical agencies, UN agencies	
2	Select the most appropriate and achievable processes and methodology for conducting early and credible damage and needs assessments.	Credible Disaster damage and needs assessment Quantitative and qualitative baseline for damage, loss, and needs across sectors and administrative divisions Results monitoring and evaluation plan for recovery program	National/subnational focal point, line minis- tries, local government departments	

Key difference between PDNA and DRF. The PDNA and similar disaster assessments are an essential component of a successful DRF. However, their limited scope means that they cannot replace a DRF. The PDNA provides damage and loss estimates, and quantifies needs. The recovery framework (DRF) then builds on the damage and loss assessment for detailed sequencing, prioritization, financing, and implementation of the recovery.

The PDNA and the recovery framework should be implemented together. In most instances, combining the process will not require additional financial resources or time. In fact, the process will significantly increase the likelihood of translating PDNA and DNA recommendations into a recovery that is resilient.

Figure 1 provides a more comprehensive look at how does the DRF build on the results of the PDNA.

Figure 1.1 PDNA and DRF Relationship



Prioritizes needs within sectors; no budgetary review

Prioritizes and sequences needs both within and across sectors based on budget allocations and external financing estimates

Carries out initial assessment of institutional issues and capacity constraints for efficient and effective recovery

Carries out extensive assessment of recovery capacities and skills and institutional options for recovery; identifies corresponding capacity building needs for efficient and effective recovery

Provides initial scope for incorporating recovery into longer term development

Ensures that recovery is an integral part of development.

Provides initial scope for incorporating recovery into longer term developmental resilience and risk reduction

Ensures recovery is integral part of ongoing development resilience and risk reduction efforts

PDNA



Module 1 Checklist

This checklist covers the 8 different steps required to carry out a PDNA or other similar assessment. The list is not comprehensive, but provides an overview of the primary steps to be followed.

- □ Draft terms of reference. The terms of reference guides the needs assessment regarding the sectors to be covered, data to be collected, teams to be deployed, and reports that need to be prepared.
- Schedule and timeframe. The needs assessment should commence after 1 or 2 weeks of disaster. However, the schedule can vary depending on the scale and nature of the disaster. Completing the needs assessment can take a minimum of 3 to 6 weeks. Before the needs assessment is begun, the government must ensure that the relief phase of disaster is almost over and that conducting a needs assessment would not impede the continuance of any relief activity.
- Government participation. The government must nominate its officials and experts to participate in the needs assessment.
- Formation and training of sector teams. The needs assessment must cover all affected sectors. For each sector, [the government will choose] a team that will include the relevant experts from the government departments and other agencies. The government also must support the training of sector teams in needs assessment methods through training programs.
- **Collection of baseline and primary data.** Government agencies should provide baseline data in relation to all the sectors that are being assessed.
- □ Field visits. Sector teams must undertake field visits to carry out assessments. These field visits need to be organized by the government. The number of field visits as well as the places to be visited will be decided in consultation with the government agencies.
- □ Writing the report. All sector teams must write their sector-specific reports and submit them to a core writing team, who will prepare and finalize the needs assessment report.
- Review and approval of the needs assessment report. The report will be submitted to the government for its review. The government will circulate the report within various ministries/ departments for their comments. The review needs to be conducted with a strict deadline. The writing team will incorporate the comments and finalize the report. Once the final PDNA or similar assessment report is submitted to the government, the government should approve it. The needs assessment report then becomes official and will form the basis for recovery planning and implementation.

Endnotes

- 1 For additional details on conducting a PDNA, see EU (European Union), UN (United Nations), and World Bank, Post-Disaster Needs Assessment Guide, Vol. A, 2013, www.recoveryplatform.org.
- 2 EC (European Union, UN (United Nations), and World Bank, *Post-Disaster Needs Assessment Guide*, Vols. A and B, EC, UN, and World Bank, 2013, www.recoveryplatform.org.



MODULE 2. POLICY AND STRATEGY SETTING FOR RECOVERY

Visioning, policy making, and strategy setting can begin at the same time that damage assessments are taking place. These first three processes provide the government with the opportunity to reach out to affected communities to define the scope of programs. Module 2 describes the vision, guiding principles, and appropriate strategies needed to achieve integrated, cross-sectoral disaster recovery.

Figure 2.1 provides a flowchart of the different processes to be followed for recovery planning.

Development of a Central Vision for Recovery

The articulation of a recovery vision enables the government to convey its recovery priorities, and build national or subnational consensus around them. The vision is the starting point around which the entire recovery process will be formulated. The core elements to be included in a recovery vision follow.

- Ensuring that the vision is developed at the highest level of government is critical for building consensus among the range of stakeholders. The government can invite groups of internal and external stakeholders to sessions in which it communicates and seeks input for its vision of recovery. Seeking agreement from stakeholders will smooth the way for unified planning. These consultations at the start of the recovery process then guide the expectations of the affected communities and reconstruction partners
- Ensuring coherence with development programs. The recovery vision is intended to be coherent with the government's broader, longer term development goals and growth and poverty reduction strategies. The vision can provide a strategic continuum between pre- and post-disaster development planning by bridging both pre-existing development gaps and new gaps triggered by the disaster.



- Incorporating resilience and BBB in recovery vision. Resilient recovery is not well understood by
 most development practitioners. Countries are beginning to develop their own standards and definitions for resilient recovery. To support resilient recovery, this DRF guide recommends that countries pay
 particular attention to seven issues: Building Back Better (BBB), gender concerns, equity, vulnerability
 reduction, natural resource conservation, environmental protection, and climate change adaptation.
- Optimizing recovery across sectors. Whenever possible, the recovery vision should encompass public
 and private sectors, and promote norms for nondiscriminatory and equitable asset disbursement among
 individuals and communities. In the past, infrastructure reconstruction often has dominated post-disaster recovery. However, equally important is the priority given to the recovery of the lives and livelihoods
 in disaster-affected communities. People-focused recovery can be facilitated by reconstructing private
 assets through direct subsidies, where affordable; or through other enabling policy measures, where
 appropriate. Showing sensitivity to the needs of the affected population also is important in meeting
 and managing public expectations.

Res	Result 2. A Recovery Vision Acceptable to All Stakeholders			
	Process	Output	Actors	
1	The first step in developing a recovery frame- work is to define a clear vision for recovery at the highest possible political and bureaucratic levels of government. It is key to relate this vision to the country's broader development context and its growth and poverty reduction programs. To be truly inclusive, a vision must in- clude input from multistakeholder consultations.	Articulation of a recovery vision Setting up community meet- ings to build consensus for the recovery vision	Lead Agency: National planning agency Others: Designated recovery agency, national/ subnational government, line ministries, civil society, communities, other partners	
2	The recovery vision needs to be refined to make clear (a) prioritized goals for overall recon- struction and recovery, (b) policy standards, (c) timeframe for implementation, (d) identification of stakeholders, (e) strategic priorities by sector and geographic area, and (f) functional respon- sibilities for recovery program managers.	Working out the sectoral, geographic, and functional details of recovery	Lead Agency: National planning agency Others: Designated recovery agency, national/ subnational government, line ministries	

Policy Frameworks for Recovery

To adequately finance and implement post-disaster recovery and to achieve the vision, a recovery policy framework is critical. The framework should be backed by the country's highest political and policy-making levels as well as by its planning and financial institutions. The framework requires high-level consensus building around the key cross-cutting operating principles and program-level performance benchmarks of multisectoral recovery.

Policy frameworks for large scale recovery from around the world typically consist of the following elements:

- Central policy-making and coordination
- Subsidiarity¹ and local implementation
- Public sector facilitation of private recovery
- Restoration of sustainable livelihoods

- Independent oversight and transparency
- Effective management of public expectations and grievances
- Fostering public-private partnerships.

Ensuring and promoting longer term disaster risk reduction and climate change adaptation, environmental and social safeguards, gender sensitivity, and protection of vulnerable groups.

Res	Result 3. Provision of an Enabling Policy Framework to Achieve a Recovery Vision			
	Process	Output	Actors	
1	The government needs to develop an enabling policy framework for recovery that reflects	Policy framework and guiding principles for recovery	Lead Agency: National planning agency	
	multistakeholder consensus for action at the national and subnational levels.	Consistent and equitable application of key cross- cutting operating principles	Others: Designated recovery agency, national/ subnational government, line ministries	
2	The policy framework identifies the govern- ment's priority sectors for recovery and reflects intrasectoral prioritization. In in most post- disaster contexts, recovery needs are sequenced through the PDNA. The government needs to communicate its top recovery priori- ties to donors, recovery partners, and affected communities. Good communication by the government will build support for its priorities among the various stakeholders.	Identification of primary sectors for inclusion in the recovery program	Lead Agency: National planning agency Others: Designated recovery agency, national/ subnational government, line ministries	

Key Policy Imperatives for Recovery

Successful disaster recovery experiences from around the world have in common the adoption of at least three crucial policies: (a) Building Back Better, (b) converting adversity into opportunity, and (c) prioritizing pro-poor recovery.

- **Building Back Better.** Building Back Better (BBB) is the reconstruction approach that aims to reduce vulnerability and improve living conditions, while promoting more effective reconstruction. BBB addresses the importance of improving community resilience following disasters and identifies what is considered successful recovery. Recovery policy-makers and practitioners lack consensus on what BBB should include or not. However, at a minimum, BBB signifies policy commitment to right-sizing, right-siting, and improving the resilience of critical infrastructure.
- **Converting adversity into opportunity.** Disaster recovery can be an opportunity to replace old infrastructure and update service delivery systems with affordable, resilient improvements.
- **Pro-poor recovery.**² Prioritizing reconstruction planning to address the needs of socioeconomically vulnerable individuals and groups contributes to a more equitable society. If their needs are ignored, the poor and vulnerable are more susceptible to future hazards and shocks. Many disaster recovery programs include the provision of direct livelihood support, income generation opportunities, improved access to finance and microcredit, and new skills training. Governments also subsidize or facilitate the reconstruction of private assets, such as housing and local business enterprises. However, governments cannot substitute for private insurance to pay recovery costs.

Box 2.1 Building Back Better in Queensland, Australia

Following extensive flooding from Tropical Cyclone Oswald in 2013, the Australian and the regional Queensland government pooled resources to create an \$80 million Betterment Fund. The fund enables local councils to restore or replace essential public assets damaged by Tropical Cyclone Oswald to a more disaster-resilient standard than their pre-disaster standard.

Two of the projects financed by the Betterment Fund are described below.

George Bell Crossing Project

George Bell Crossing is a bridge located in the Somerset region of Queensland. The bridge had just finished being rebuilt from damage sustained in 2011 when flooding from Tropical Cyclone Owald completely washed away the crossing. Floodwaters also caused severe scouring and erosion to the eastern approach, resulting in complete demolition of the crossing.

The Betterment project will replace the crossing with a larger concrete bridge. This structure will reduce the risks of the construction material washing out and of the scouring and saturation of the pavement and subgrade. The project will make the asset more resilient against future flood events. As one local authority explained, "These funds will allow Council to replace bridges and causeways with better and more robust structures that will have longer life-spans and hopefully withstand natural disasters.

Upper Mount Bentley Road Project

The Upper Mount Bentley Road Project is located on Palm Island, a remote indigenous community. The road provides the only on-ground access to vital telecommunications infrastructure located at the peak of Mount Bentley. This road was impacted by disaster events 8 times between January 2008 and January 2013, significantly reducing safe access during disaster events.

The Betterment project included constructing concrete surfacing of the steepest or most vulnerable sections of the road. This road repair facilitated repairs to be carried out without delay to the communications tower.

Source: G. Newton, "Building It Back Better to Reduce Risks after Multiple Disaster Events," Queensland Reconstruction Authority, Queensland, Australia, n.d.

Identification of Priority Sectors for Recovery

The next step entails the identification of priority sectors for recovery in line with the broader recovery vision and policy framework, and based on the detailed needs and damage assessment carried out at the PDNA stage. The typical breakdown of programmatic recovery includes the following sectors: rural/urban housing development, water and sanitation, governance, transport, power, communications infrastructure, environment,³ livelihoods, tourism, social protection, health, and education.

Programmatic Framework for Recovery

Programmatic Approach to Recovery

The achievement of the recovery goals, targets, and priorities, as defined by the vision and policy framework, requires development and maintenance of a strategic and programmatic framework. This strategic framework is the central planning tool and oversight mechanism for cross-sectoral and integrated disaster recovery.

Where the center of such recovery planning is located is not important. In cases of inter-provincial recovery programs, it could be within a central government authority. In cases of subnational or local programs,

Box 2.2 Prioritizing Sector Recovery in Practice

Sri Lanka, Tsunami, 2004

Following the December 2004 Tsunami, the government of Sri Lanka prioritized short-term and longterm financial needs in proportion to the damages sustained and the recovery strategy.

- Short-term financial needs included the housing, transportation, and livelihood restoration sectors.
- Damaged assets in housing and health have been replaced with those of equal value.
- Damaged assets in transportation, water supply, and sanitation have been upgraded. (These sectors already had suffered damages before the tsunami due to the civil war.)

Lao PDR, Tropical Storms, 2009, 2011, 2013

Across multiple flood-related disasters over 2009 to 2013, in-depth inter- and intra-sectoral assessments emerged as important aspects of the overall post-disaster assessment framework.

- The government's primary post-disaster data gathering tool was a multisectoral rapid assessment. It was carried out within the first two weeks following a disaster.
- Each line agency assessed the damages and needs for its relevant sector.
- Outputs of these assessments included line agency reports that were forwarded to central level ministries.

planning center could be located within subnational recovery planning and oversight entities. What is important is that large scale recovery should have a central meeting point, or node. At this point, the recovery plans and projects of the national, subnational, and local entities converge to provide the complete programmatic picture of recovery for policy-makers at all relevant levels.

In many countries, the major portion of recovery interventions are undertaken by nongovernmental organizations (NGOs). A programmatic approach also provides an opportunity to exercise holistic management of recovery. In this approach, the activities of government agencies, NGOs, communities, and the private sector complement each other within a government-led framework.

Benefits of Programmatic Approach

Key benefits that can be derived from programmatic and centrally overseen recovery include (a) consistent application of policy principles and imperatives across all sector programs and projects; (b) harmonized and mutually reinforcing recovery results and outcomes across sectors; (c) needs prioritization within and across sector programs; (d) sequencing of recovery activities according to the agreed order of prioritization to ensure the planned outcomes (e) mutually reinforcing governmental and nongovernmental recovery interventions, and (f) a central node

from which to monitor and evaluate recovery at a programmatic level, enabling strategic adjustments to be made as required.

Setting Program-Level Objectives for Recovery

Programmatic recovery objectives are different from sector-specific objectives. Program objectives specify what is meant by effective, efficient, and resilient recovery in the country and post-disaster context. Reconstruction and recovery plans are intended to mitigate not only the effects of the current disaster but also the impacts of future hazard events.

Result 4. Application of Policy Principles for Mutually Reinforcing Recovery Outcomes across Sectors

	Process	Output	Actors	
1	The government needs to develop and main- tain a strategic and programmatic frame- work. This framework will serve as the central planning node and oversight mechanism for cross-sectoral and integrated disaster recovery.	framework National plan Others: Designated re	Designated recovery agency, national/	
	The strategic and programmatic framework increases the likelihood of (a) more equitable resource allocation and equitable needs pri- oritization within and across various sectoral programs; (b) systematic sequencing of recov- ery activities according to the agreed order of prioritization to ensure the planned outcomes at the planned times, and (c) instituting mech- anisms for central monitoring and evaluation of recovery at the programmatic level, thus making space for strategic alterations.		subnational government, line ministries	

Wide-Area Land Use and Physical Planning

Existing development policies should form the basis of recovery and reconstruction planning. However, pre-existing policies may require rethinking land use zoning and the provision of physical infrastructure. Rethinking may be particularly necessary for entire regions that have been devastated and need to be re-planned and reconstructed.⁴

In some post-disaster situations, an area-wide planning process also can be commissioned. It would span, but also differentiate between, the urban-rural and local-regional contexts and requirements.⁵ Area-wide planning can deliver an integrated treatment of a broad range of land uses: settlements and residential areas; commercial areas and productive infrastructure; public infrastructure including physical, economic, and social infrastructure; and typically rural contexts such as community-owned infrastructure, forestry, farmland, animal husbandry, and fisheries.

At local levels, considerations can include plans for consolidation of unused land, improvements in energy efficiency, mitigation of environmental impact, reconstruction of strategic towns, integration of residential, ecological, and economic land uses, and plans for emergency access.

Box 2.3 Resettlement after Disasters

Samoa Earthquake and Tsunami 2009

After the September 29, 2009 earthquake and tsunami, the Government of Samoa considered resettling disaster-affected population centers away from coastal areas.

Since the tsunami, a significant part of the affected population has moved away from the coastal areas and indicated a wish to settle permanently in new locations away from the coast. Such population movements and attempts to rebuild communities away from natural hazard areas are common after tsunami disasters. However, the success—or failure—of communities' and governments' efforts to reduce vulnerability to natural risks by establishing resettlement areas is highly dependent on whether basic services can be provided quickly and sustainably post disaster to relocated people.

Affected Samoans have resettled in traditional plantation areas, in which infrastructure networks (water, electricity, roads) are nonexistent, or of poor quality. To support a more permanent upland resettlement of villages that were destroyed by the tsunami, additional investments are needed to create the necessary infrastructure networks and facilities needed to provide services at the new locations.

China Earthquake 2008

On May 12, 2008 Sichuan Province, China was struck by an 8.0 magnitude earthquake. The World Bank helped the Government develop an "Environmental and Social Safeguards Screening and Assessment Framework". This provided a simple checklist to ascertain whether reconstruction projects needed an Environmental Impact Assessment or a more simplified procedure. Clear guidance was given to communities and cities on which areas could be used for rebuilding and which areas should remain untouched. Most importantly, environmental and disaster reduction considerations were built into the assessment, which enabled local communities to rapidly deploy their resources, rebuild their homes where possible, and return to normalcy. As a result, reconstruction activities did not take place in environmentally sensitive or disaster-prone areas, which greatly helped to minimize the impact of future risk.

Intersectoral Prioritization

Prioritization across sectors can help ensure equitable and demand-responsive recovery across affected jurisdictions and communities. Prioritization also can promote conflict-sensitive, pro-poor, pro-vulnerable, and gender-sensitive recovery agendas.

The areas considered sectors include the social sectors (housing, land and settlements, education, health, and nutrition); production sectors (employment and livelihoods, agriculture, commerce and trade, and industry); infrastructure sectors (community infrastructure, water, sanitation and hygiene, transport and telecommunications, and energy and electricity). Cross-cutting sectors include disaster risk reduction, environment, gender, and governance.

The first step in prioritizing is to identify the sectors targeted for reconstruction. Second, a criteria-based prioritization of recovery needs across competing intersectoral priorities should be made. Such prioritization broadens the resource allocation and the annual on- and off-budgetary flows for recovery throughout the expected recovery period.

The rule of thumb for prioritization is, first, to determine the sectors and sectoral priorities that help leverage direct humanitarian impact in the shortest time. The case studies in this DRF guide show that housing and livelihoods often take precedence over other sectors. These two sectors are given precedence because they directly impact disaster-affected populations. The interventions in these two sectors take place simultaneously with restoration of critical public infrastructure and service delivery. The next phase is medium- to long-term reconstruction and generation of sustainable livelihoods.

Developing Principles for Intersectoral Prioritization

The government needs to establish principles to determine the criteria for intersectoral prioritization to help ensure equitable and demand-responsive recovery across affected jurisdictions and communities. Prioritization grounded in principles ensures that sectoral program development remains consistent with the overall objectives of the reconstruction program.

Certain criteria used to prioritize recovery actions arise consistently in countries' experiences.⁶ These criteria include:

- Potential for direct and widest humanitarian impact
- Pro-poor, pro-vulnerable, and gender-sensitive agendas
- Potential to generate sustainable livelihoods
- Balance between public and private sector recovery
- Balance between physical infrastructure reconstruction and less visible recovery (such as capacity building and governance)
- Restoration and rebuilding of critical infrastructure and services.

Res	Result 5. Ensure Equitable and Demand-Responsive Recovery across Affected Communities			
	Process	Output	Actors	
1	The government needs to establish a set of principles to determine criteria for intersec- toral prioritization. Prioritization ensures that subsequent sector program development and projects remain consistent with the overall ob- jectives of the reconstruction program. Prioriti- zation also helps leverage direct humanitarian impact in the shortest time. The various sectors will compete for available resources. The government needs to estab- lish criteria-based and objectively verifiable cross-sectoral prioritization of recovery needs across these competing intersectoral priorities. Prioritization can help ensure equitable and demand-responsive recovery across affected jurisdictions and communities.	Development of criteria for intersectoral prioritization and their programming and sequencing for recovery Objective, criteria-based resource allocation; annual rationalization of recovery budget	Lead Agency: National planning agency Others: Lead recovery agency, line ministries, Ministry of Finance	

Setting up Sector-Level Recovery

Establishing sectoral strategies early can ensure that they are in line with the government's overarching principles for the recovery.

Developing Sector-Specific Recovery Programs

After the policy framework and intersectoral strategies are established, the lead recovery agency typically undertakes a program-by-program approach to define sector-specific recovery programs. These programs translate the policy priorities into programs and projects that can be financed and implemented. Sectorspecific recovery programs and projects are expected to reflect the policy framework and intersectoral strategies. The programs would draw on information from assessments and surveys to plan individual sectoral projects. This consultative process broadens ownership of the recovery program. Consultation ensures the implementation of the guiding principles at the project level.

Preparatory Actions and Information Collection for Sector Program Development

By developing broad sectoral strategies early in the recovery process, sectoral policies and reconstruction objectives can be aligned to ensure synergy between reconstruction activities and development goals.

The post-disaster needs assessment (PDNA) or similar initial assessment is an important reference for the development of sector-specific recovery plans. These plans can be overseen by the lead implementation agency. Technical agencies would assist with the conceptualization and development of assessment frameworks, objectives, and instruments. The lead implementation agency also may engage other public sector agencies, private sector enterprises, or civil society and community organizations for these purposes.

Result 6. Translate Intersectoral Recovery Strategy into Sector-Specific Programs

	Process	Output	Actors
1	Initial assessments following the disaster provide a baseline for developing sector strat- egies. Sectoral policies and strategies should be refined and checked against realities on the ground. Involving local implementers and affected communities in the design phase is the most effective way to do this.	Detailed sector-specific programs developed and reviewed by affected communities	Lead Agency: National planning agency Others: Local government departments, national technical agencies, civil society, communities, other partners

To inform the development of sectoral recovery programs and projects, the following surveys/assessments may be carried out:

- Land Risk Survey/Assessment. An essential input for determining whether any relocation of communities is necessary.
- Land Tenure Survey/Assessment. Analyzes the issue of land and tenure records. Any disputes over ownership may delay, or even stop, the implementation of the sector planning recommendations.
- Land Availability Assessment. Primary means to identify available and suitable land that may prove socially and economically viable for displaced populations.
- Governance and Implementation Capacity Assessment. Measures the government's capacity to implement programs.
- Social Risks and Vulnerability Survey/Assessment. Assists in identifying vulnerable disasteraffected persons.
- Infrastructure and Service Delivery Survey/Assessment. Provides results that may help design program components for rehabilitating infrastructure and resuming essential services.
- Economic and Livelihood Survey/Assessment. Assists in the adequate resumption of economic activities and livelihoods for beneficiaries of the land use and physical plans.
- Environmental Assessment. An essential input for the program to safeguard environmental objectives.

Setting up Consultative Processes and Forums for Inclusive Planning

Even when centrally initiated and regulated, sector-level program development is most effective when it happens early, takes action, and includes multiple stakeholders. An effective process also has a conflict-sensitive perspective. Consultative processes are important to ensure that sector strategies are relevant across different locales. Thematic open meetings that cut across sectors (such as housing sector recovery planning and housing design) can be organized by the lead recovery agency jointly with the relevant sectoral departments.

Consulting communities about recovery increases the likelihood of widespread acceptance of it. In fact, community participation is fundamental to ensure the demand for, local ownership of, and longer term sustainability of recovery efforts. Communities' participation also ensures that they regain access to viable sources of livelihood, economic infrastructure, and social services that are similar to or better than what they enjoyed before the disaster.

Being Conflict Sensitive and Acting to Reduce Conflicts

To this end, it is essential for the participating agencies to understand the conflict dynamics, particularly the relations between stakeholders and the issues, that create tensions and problems. It then is important to analyze how a particular intervention will impact on these dynamics.

Being conflict-sensitive is not only about understanding but also about acting on the understanding. It is important to build in the appropriate provisions and activities when interventions are first being planned or to adjust ongoing interventions. Taking these actions will ensure that interventions do not worsen, but help to reduce, conflict tensions by reducing inequalities and bridging divisions.⁷

Res	Result 7. Sector-Level Recovery Programs Developed in a Consultative and Inclusive Manner			
	Process	Output	Actors	
1	Establish a consultative process to map all key stakeholders. Mapping will identify the stake-	Process to map key stakeholders	Lead Agency: Line ministries	
	holders to be included in the planning process, thus reducing potential grievances and ensuring wide acceptance of the recovery program.		Others: Lead recovery agency, local government departments, communities, civil society, NGOs	
2	Consultations among sectors and among different levels of stakeholders (from national to community levels) are important to develop and	Diverse consultation modalities	Lead Agency: Line ministries Others:	
	coordinate recovery programs. This communica- tion introduces different perspectives for consid- eration in planning and implementing recovery.		Lead recovery agency, local government departments, communities, civil society, NGOs	
3	Organize open meetings to involve subnational government, civil society, technical institutions,	Forums for wider consultative groups	Lead Agency: Line ministries	
	academia, private sector, and affected commu- nities. These forums can facilitate dialogue and consensus building. They are crucial for building communities' ownership of sector recovery programs at all levels. (See more information on building ownership in Phase 3: Implementation.)		Others: Lead recovery agency, local government departments, communities, civil society, NGOs	

Disaster Recovery in Conflict Contexts

In conflict-affected areas, there is a two-way relationship between intervention/action and conflict. All recovery actions in conflict contexts can be affected by the conflicts. However, the opposite is also true: action in a conflict-affected setting can, and is likely to, have an impact on the conflict.

Box 2.4 Four-Step Conflict-Sensitive-Approach in Disaster Recovery

Understand the context in which you operate, especially the conflict drivers and dynamics.

Understand the nature of intervention. This step means not just what you do (your programming), but also how you operate, where, when, and with whom (your entire engagement in the conflict context).

Analyze the interaction between your intervention and the context to identify conflict risks and peacebuilding opportunities.

Act on this analysis to avoid negative impacts and maximize positive ones.

Being Sensitive to Conflict and Acting to Reduce Conflict

All conflict situations require great sensitivity from the recovery-planning agency. Recovery actions should contribute to conflict prevention, structural stability, and peace building.⁸ To these ends, it is essential to be sensitive to conflict contexts, analyze each intervention for its effects, and act to avoid tensions and build peace.

Ensuring That All Sides in Conflict Situations Receive Fair Treatment

Realization is growing that disaster risk-reduction and conflict-prevention measures should occur together. Disaster response must be conflict sensitive in order to prevent hard-won peace dividends being undermined and to ensure aid programming is effective.

Module 2 Checklist

This checklist covers the different steps required to develop an effective vision, policies, and strategies for recovery. The checklist is not comprehensive, but provides an overview of the primary steps to be followed.

National Planning Agency

- Define a national recovery vision incorporating the development principles of : Build Back Better, Converting Adversity into Opportunity and Pro-poor recovery.
- Ensure vision is coherent with the government's broader, longer-term development goals and growth and poverty reduction strategies.
- □ Formulate a recovery policy which prioritizes sectors for recovery, and defines key operating principles and performance benchmarks.
- Ensure consensus of all participants on policy framework. Setting up Consultative Processes and Forums for Inclusive Planning.
- Develop a program framework that sequences and makes a criteria-based prioritization of sector recovery.
- □ In conflict situations, ensure neutral and impartial treatment.

Lead Recovery Agency

- □ Contribute to development of recovery vision and policy.
- □ Support the development of guiding principles.
- Communicate top recovery priorities to donors, recovery partners and to affected communities.
- Set Program-Level Objectives for Recovery. Program objectives specify what is meant by effective, efficient and resilient recovery in your country and post-disaster context.
- Create forums for consultation with subnational government, civil society, technical institutions, academia, private sector, and affected communities. Multi-stakeholder forums are crucial for building ownership of sector recovery programs at all levels.
- Rethink pre-existing policies on land use zoning and the provision of physical infrastructure. Rethinking may be necessary for entire regions that have been devastated and need to be re-planned and reconstructed.

Line Ministries

- □ Contribute to development of recovery vision and policy.
- □ Support the development of guiding principles.
- □ Set up sector level recovery strategy.
- Identify recovery priorities within each sector. Promote sector needs in line with the broader recovery vision and policy framework and based on the detailed needs and damage assessment carried out in conjunction at the PDNA stage.

Endnotes

- 1 See Glossary.
- 2 World Bank on behalf of the Operationalizing Pro-Poor Growth Research Program, "Pro-Poor Growth in the 1990s: Lessons and Insights from 14 Countries," World Bank, Washington, DC, 2005, http://siteresources.worldbank.org/INTPGI/ Resources/342674-1119450037681/Pro-poor_growth_in_the_1990s.pdf.
- 3 F.G. Renaud, K. Sudmeier-Rieux, and M. Estrella, eds., *The Role of Ecosystems in Disaster Risk Reduction*, United Nations University (UNU) Press, Tokyo, 2013.
- 4 For example, in Samoa, after the 2009 earthquake and tsunami, the Government of Samoa considered resettlement away from the coastal areas.
- 5 A.K. Jha, with J.D Barenstein, P.M. Phelps, D. Pittet, and S. Sena, *Safer Homes, Stronger Communities: A Handbook for Reconstructing after Natural Disasters*, Washington, DC: World Bank, 2010, 3.
- 6 For details, refer to country case studies, Guide for Developing Disaster Recovery Frameworks, vol. 2, www.gfdrr.org/ recoveryframework.
- 7 http://www.saferworld.org.uk/downloads/pubdocs/EUConflictSensitivity_Final.pdf.
- 8 http://capacity4dev.ec.europa.eu/sites/default/files/file/13/11/2013_-900/guidance_note_on_conflict_analysis_in_ support_of_eu_external_action.pdf.



MODULE 3. INSTITUTIONAL FRAMEWORK FOR RECOVERY

How institutions are set up is critical for a successful recovery. A collective effort across government, NGOs, the private sector, and communities promotes a successful recovery process. To effectively manage the contributions of various stakeholders in the recovery, it is important to clarify their roles. Clarifying roles is critical at both the national and community levels. Program implementation must be coordinated since it may involve the private and public sectors, communities, and market-driven recovery.

Module 3 describes good practices and key results associated with the development of institutional frameworks for overseeing, managing, and coordinating recovery.

Ensuring Continuity from Humanitarian Response to Recovery

Humanitarian response and early recovery activities form the first two phases of the recovery continuum. It is important to integrate the knowledge and work of humanitarian action into early recovery.

During and immediately after a crisis, national and international relief agencies concentrate on saving lives, limiting damage and restoring order. However, there is widespread understanding that resilient recovery and a return to longer term development should be an integral part of emergency relief planning. Aid workers develop programs that ensure that relief efforts will contribute to the recovery of national and local systems. These programs concentrate on providing a safe environment capable of delivering basic services, improving livelihoods, lessening the risk of another crisis, and creating conditions for future sustainable development.

To ensure the maximum impact from the humanitarian response phase to early recovery activities, the working methodology for many humanitarian interventions is the cluster approach. Developed by the United Nations, clusters are composed of humanitarian organizations, both within and outside the UN system, both international and national. This cluster of organizations is responsible for managing work in the different sectors impacted by a disaster. These sectors are similar to the multisectors identified for recovery. The cluster sectors are water, sanitation and hygiene, health, nutrition, food security, education, protection, shelter, early recovery, camp coordination and camp management, logistics, and emergency telecommunications.

The experience of humanitarian agencies is that the cluster approach lays the foundation for recovery institutions to continue the work to rebuild affected communities. For these reasons, the government's

medium- to longer term recovery efforts to restore livelihood opportunities, essential infrastructure and services, governance capacity, and social cohesiveness can be greatly strengthened if these efforts follow directly on from emergency assistance programs. Such a transition will establish the continuum from humanitarian operations and recovery initiatives taken by affected communities into longer term recovery on to sustainable development.¹

If the recovery vision, guiding principles, policies, and program framework (Module 2) are established quickly after disaster strikes, they can smooth the transition from humanitarian response to recovery. By establishing these structures early, the government can rapidly identify the humanitarian resources relevant to recovery.

A practical way to ensure continuity from humanitarian response to recovery is to hire professional and technical experts from the relief organizations into the recovery agencies. In this way, their institutional knowledge, as well as the community relationships and goodwill, will continue to grow. Already established contacts and lines of informal communication with the affected communities can be key to sustained and productive community feedback on reconstruction activities. The contacts and communications also help to ensure that recovery and reconstruction objectives stay aligned with the preceding humanitarian response activities.²

Result 8. Continuity between Humanitarian Response and Recovery			
	Process	Output	Actors
1	To the extent possible, recovery should build on the activities of the humanitarian phase. They should not been seen as separate.	Maintenance of institutional knowledge from humanitarian response to recovery	Lead Agency: Designated humanitarian response agency/ Designated recovery agency/ variety of humanitarian phase and recovery implementers

Who Will Manage Recovery?

- **Geographic and political spread of disaster should inform the assessment.** Following a disaster, an immediate step is for the government to assess its existing capacity to conduct post-disaster recovery. The profiles of the lead manager and the lead agency for post-disaster reconstruction will depend on the magnitude and nature of the disaster. Nevertheless, the lead agency needs to be identified at the start of the recovery.³ Factors that may influence the selection of lead manager and lead agency are the geographic impact of the disaster (such as cutting across jurisdictional lines) and whether existing government capacity is adequate for the estimated duration of the reconstruction.
- Skills and logistical capacities need to be assessed. The two main criteria to measure the capacity of an entity to manage recovery are human resource capacity and skill sets. Capacity assessments examine sector-specific requirements. Sufficient (perhaps even excess) expertise to successfully conduct recovery may reside in one sector. Another sector may be under skilled and under staffed.

The lead agency's prior involvement in disaster recovery is not required. More important is its proven ability to produce results under tight deadlines; to multitask; to collaborate with other agencies, local authorities, and civil society; and to be flexible about working within quickly evolving circumstances.

• Capacity to manage contracts and procurements are critical. Consideration of an agency's capacity to manage contracts is important for the procurement of reconstruction equipment and material, evaluation
of tenders, and oversight of recovery projects. These processes require dedicated time and human resources as well as specific technical knowledge. In some recovery operations, third-party contractors form a substantial bulk of the implementers. In these cases, the skill and logistical capacity of the lead agency to manage contracts is critical to the successful implementation of the recovery.

Res	Result 9. Assessment of Human Resource Capacity and Specialist Skills Required		
	Process	Output	Actors
1	Post-disaster resource capacity assessments may begin with the PDNA or similar assess- ments. These assessments should be sensitive to the needs for specialized skills (such as engineering, contract, and project manage- ment). The assessment also should be alert for experts who possess the logistical capacity to undertake the broad range of recovery tasks. Capacity assessments also should be sensitive to sector-specific requirements.	Appropriate capacity assess- ments are conducted	Lead Agency: National planning agency

Selecting an Effective Lead Agency

Lead agency coordinates disparate recovery efforts. In developing the recovery program, the lead agency pays special attention to harmonizing strategies across sectors. Harmonizing strategies means distributing resources to avoid discrimination against minorities and inequities in spending and quality of delivery. The lead agency also must maintain the urgency to deliver results by keeping its focus on deliverables and targets.

Five criteria exist for choosing the lead agency. Globally, post-disaster recovery experience reveals a range of potential institutional set-ups. The selection of the lead agency usually depends on five criteria. They are the (a) characteristics of the disaster; (b) current governance structure; (c) agency's prior disaster recovery experience; (d) agency's ability to reach out and include communities in defining and implementing their recovery process, and capacity to work with local authorities and nongovernmental organizations; and (e) overarching coordination, monitoring, oversight, and control frameworks in operation among a country's agencies, line ministries, local governments, and civil society. The government may choose a lead agency after having necessary consultations with key stakeholders and future implementers of programs both within and outside the government. Nevertheless, the decision must be made urgently.

Three options for structure of lead agency. The three most typical compositions of lead agencies follow.

- 1. Strengthen and coordinate existing sectoral line ministries to lead the reconstruction by sector. This option depends on establishing recovery frameworks under which individual line ministries work independently to manage recovery, and to supervise and implement projects, in their sectors. This option usually begins with the line ministries jointly preparing an action plan for recovery that identifies the respective roles and activities of the line ministries to support reconstruction. In this option, the existing capacities of government line ministries must be adequate to deal with additional urgent responsibilities. Possible difficulties include:
 - Rapid recruitment of temporary human resources may not adequately supplement the capacities
 - Recovery coordination may be difficult if the line ministry staff lack sufficient experience
 - Line ministries may struggle to focus on recovery programs at the expense of longer term goals.

Box 3.1 Senegal's Flood Recovery Institution

In 2012, following widespread urban flooding three years earlier, the Senegalese Government established the Ministry for Restructuring and Managing Flood Zones (MRAZI), the first ministry in Senegal's history exclusively dedicated to address floods.

The ministry was designed to promote coherent flood management. It was based on mobilizing all stakeholders to jointly develop a real strategy for flood risk management and future flood prevention. MRAZI also is intended to reduce the negative impacts of floods and to coordinate the implementation of action plans resulting from the national strategy.

2. Create a new institution to manage recov-

ery. This option creates a single lead implementing agency. This agency envisions, strategizes, plans, implements, and controls the overall multisectoral reconstruction program. This option has several advantages. They are the agency's autonomy, the clear line of responsibilities, effective internal and external communication, and the capacity to handle complicated financial and monitoring and evaluation (M&E) arrangements.

Potential disadvantages of option 2 include the lead agency's lack of authority to achieve results, possible lack of ownership by line ministries, and the line ministries' potential institutional resentment due to compromised

authority and duplicated mandates at various levels of government. Another risk could be insufficient inclusion of civil society and communities affected by the disaster in recovery planning. Moreover, start-up will incur high administrative costs, may inadequately represent local needs, and struggle to meet urgent planning and implementation demands.

Box 3.2 Hybrid Model in Indonesia

The hybrid model was used in Indonesia following the 2004 Indian Ocean tsunami. The sunset clause existed from the outset. The four-year mandate of the Agency for the Rehabilitation and Reconstruction of Aceh and Nias maintained urgency for reconstruction and enforced a handover strategy to the existing administration in Indonesia. **3.** Hybrid arrangement. A third option increasingly being used by governments is a hybrid institutional model. It combines the advantages of the above options while offsetting their risks. Under this arrangement, existing government structures are strengthened through the creation of a temporary agency with a built-in end-date. The agency will provide overarching central guidance, management, and support services to keep the reconstruction program on its planned course.

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 high number of additional projects at increased speed while sustaining their routine public services. The hybrid option ensures relatively speedy delivery of reconstruction deliverables and meeting targets. It consolidates recovery into a single agency that will oversee the process. This agency will be the single point of coordination of national and international stakeholders. It will be responsible for ensuring the inclusion of line ministries, local authorities, the private sector, and civil society in all phases of the recovery. This agency will work with local governments and nongovernmental organizations to delegate implementation responsibilities.

One drawback of the hybrid is that, as the recovery transitions to development and the temporary agency's mandate expires, its accumulated capacity, knowledge, and experience may be lost.

Mandates and Operational Modalities Must Be Clear to Ensure Fair Resource Allocation

Special mechanisms for allocating resources to reconstruction, procurement, and human resources may need to be established by the lead agency. These mechanisms must ensure fair distribution of resources to protect against discrimination or inequities. For time-bound mandates, employment contracts should include a clear termination date so that the designated institution cannot live on beyond its reconstruction mandate.⁴

Choosing the lead agency. There are two distinct types of agencies to consider when selecting a lead agency: the reconstruction-led-agency model and the planning-agency-led model. Table 3.1 provides an overview of their strengths and weaknesses.

Table 3.1 Pros and Cons of Recovery-Specific and Planning Agencies' Participation in Recovery				
	Pros	Cons		
Reconstruction-Led Agency Model	 Has mechanisms to implement reconstruction Has mandate to implement reconstruction Has capacity to address the scope and magnitude of work required Does not have a "business as usual" approach 	 Has insufficient knowledge of long-term development goals 		
Planning Agency-Led Model	 Has knowledge of planning objectives Has knowledge of approval procedures for planning initiatives Has coordination mechanisms to assist with reconstruction 	 Institutional inertia can prevent reconstruction from being imple- mented urgently Lacks the capacity and institu- tional mechanisms to address reconstruction needs with speed and flexibility 		

Lead agency needs to be inclusive. When establishing new agencies to lead recovery, governments should ensure checks on potential unilateral actions by the lead agency. Checking lead agency unilateral actions can be achieved through early and continuous involvement by sector ministries and departments, regional and local governments, nongovernmental organizations, community members, and private sector partners. Together, they can set the overall strategic principles and the design parameters and standards for development and implementation of local reconstruction plans.⁵

Box 3.3 Establishing Mandates and Operational Modalities in Pakistan

Pakistan's Earthquake Reconstruction and Rehabilitation Authority (ERRA) was set up following the 2005 earthquake as a time-bound central authority under the prime minister's office. The authority's purpose was to tackle early recovery, and long-term reconstruction and rehabilitation. Long-term efforts make up the overwhelming bulk of its mandate.

ERRA's scope of work included strategic planning, resource mobilization, coordination with all stakeholders, and monitoring reconstruction and rehabilitation activities in earthquake-affected areas. ERRA was established because of a recognized need for a central oversight body to coordinate the activities of the broad spectrum of actors participating in the reconstruction. These actors included multilateral and bilateral donors, international NGOs, civil society, and government agencies. It was anticipated that having multiple agencies overseeing reconstruction would likely become unmanageable. Centralizing some functions within a single, dedicated body was seen as essential.

Result 10. Mandate and Operational Modalities for Lead Recovery Agency			
	Process	Output	Actors
1	Based on disaster context and type and scale of impacts, an appropriate institutional mech- anism should be chosen or developed to lead the response and recovery effort.	The most relevant institution- al framework is chosen and developed to be central body behind which donors and partners align financing and efforts	Lead Agency: National planning agency

Appointing an Effective Recovery Leader

A recovery institution is empowered through both a clear mandate and the appointment of an experienced and informed leader to manage it.

An effective leader must be committed to the recovery process, have strong team-building skills, and the capacity to reach out to affected people. As stated earlier in the framework, recovery requires the participation of all recovery stakeholders, most importantly, the communities affected. The leader must have the skills to lead an inclusive recovery process that brings together the institutions, authorities, and affected people.

An effective leader can ensure good recovery practices. Effective leadership can drive adoption and implementation of good recovery practices. In certain quarters, these practices may engender political debate. Building Back Better (BBB) is a recovery philosophy entails potential political aspects, such as defining BBB and budgetary implications, and managing expectations of affected populations.

A dedicated and empowered leader of the recovery also can help to keep investments, both monetary and nonmonetary, focused to enable resilient reconstruction. Diverting funds diminishes the impact of risk reduction measures, keeping many of the pre-disaster risks intact.

An effective leader can raise necessary resources. Leadership will be strengthened if the candidate has credibility with all stakeholders in the recovery process, including donors. This credibility is critical to raise funds for recovery. Donor governments, organizations, and individuals look to the leader for guarantees of transparency and accountability in post-disaster recovery efforts.

An effective leader can overcome institutional barriers. Reconstruction organizations often face resistance from existing line ministries, national development organizations, and NGOs that might feel that reconstruction is encroaching on their mandates. The recovery leader must resolve organizational divisions among all participants in the recovery, including donors, international and national nongovernmental organizations, and local and federal governments.

Additionally, strong support for the recovery effort from the highest levels of political leadership can, when necessary, help overcome institutional resistance over issues such as potentially overlapping jurisdictions or mandates. An experienced and informed leader who has good political and communication skills and is well known can strongly attract political backing for the recovery effort.

Res	Result 11. An Empowered Recovery Institution with Effective Leadership			
	Process	Output	Actors	
1	Appoint a respected and credible person to lead the recovery effort.	Choosing the appropriate leader for an empowered recovery institution	Lead Agency: National and local l egislatures, national planning agency	

Creating a Legal Institutional Mandate for Post-Disaster Land Use Planning

A legislative mandate enables institution(s) tasked with overseeing recovery to function successfully. Three effective options exist to create a legal mandate for improvised or new institutional arrangements for post-disaster strategic land use and physical planning. These are by:

- 1. Amending existing legislation
- 2. Introducing new legislation
- 3. Creating a mandate through ordinances and government orders (regulation).

Legislation Establishes Operational Framework for the Institution

Legislation should clearly codify functions and authorities of the implementing institution(s), clarify funding mechanism(s), and establish an end-date or sunset clause for the institution.⁶

Legislation Necessary to Clarify Institutional Roles and Responsibilities

Legislation should include specifications on which agency will reconstruct which asset, thus setting the basis for organizing recovery institutions and implementing programs. Experience shows that recovery can stumble if there is legislative confusion over institutional ownership and responsibility. Confusion can lead to institutional friction among line ministries, development agencies, reconstruction authorities, and nongovernmental implementing agencies. Institutional friction, in turn, risks aspects of the recovery being neglected or becoming the focus of too much attention.

Legislate Early Involvement of Agencies That Will Have Eventual Responsibility for Reconstructed Assets

Certain assets may have a history of interagency handover or interagency inheritance. Examples include schools that have been built, or livelihood policies that have been introduced by a development agency with the intention of subsequently transferring them to local government. Early involvement of the agencies that are to maintain responsibility for reconstructed assets will facilitate effective and efficient recovery.

Cross-Jurisdictional Assets

Assets that cut across local governments' jurisdictional boundaries are additional areas for which clear understanding of roles and responsibilities will assist recovery. Examples of such assets are highways, water, and irrigation systems. During recovery, economic and livelihood policies instituted by the central government but implemented by lower tiers of government and civil society require dialogue and coordination among the different partners. Advance legal clarity on the degree of policy and implementation authority at each level of national and local government helps avoid friction among levels of government.

Box 3.4 Setting up Legal Frameworks

Haiti, Earthquake, 2010

The 2010 Haitian earthquake destroyed and severely damaged many government buildings. The legal infrastructure of the country/region was heavily impacted. Legislative and judicial proceedings were disrupted, making it doubly difficult to institutionalize and clarify the mandate of relevant agencies. In such cases, special powers, such as executive authority, have been invoked in other countries as a means of providing short-term empowerment to the agencies.

Indonesia, Tsunami, 2004

Following the 2004 Indian Ocean tsunami, the Indonesian government established a regulatory framework for post-disaster responses. It identified the responsibilities of the central and local governments as well as the functions and duties of the national and regional disaster management agencies. The regulations outlined the disaster risk financing framework, which is a shared responsibility between the central and local governments. The framework stipulated the three phases of a disaster: emergency, recovery, and reconstruction.

Yemen, 1997 Civil Defense Law

In Yemen, the 1997 Civil Defense Law defined the responsibilities of the Civil Defense General Directorate with respect to disaster management. Later legislation created the Supreme Council of Civil Defense. Chaired by the Minister of Interior, the council is responsible for providing policy direction, approving plans for disaster prepared-ness and response, and defining the tasks and responsibilities of each ministry/agency, actors and stakeholders before and during any emergency.

Clear Legal Policies on Private Assets Simplify Recovery Process

Disasters can heavily impact privately owned assets such as houses and businesses. To enable the lead institution(s) to act effectively, advance legal clarification on the recovery of private sector assets is essential. Issues for consideration include the responsibility that recovery institution(s) may have to repair or replace private sector assets. The housing sector experiences many of these issues.

Res	Result 12. Institutions with Clear Purpose and Jurisdiction			
	Process	Output	Actors	
1	Governments need clear institutional mandates that specify the role of each agency, and clarify the responsibilities of the various stakeholders, in the recovery. Countries that face post-di- saster recovery often are not prepared for the scope of the task. First, there are the significant financial, infrastructural, and resource require- ments of recovery.	Appropriate attention is given to all lost/damaged assets; focus is kept on recovery	Lead Agency: National and local legislatures	

Staffing for Recovery

Some affected governments are unable to meet the increased professional and technical requirements for recovery in both the short and longer terms. These governments can solicit expertise from elsewhere to give direction to programmatic activities. It is critical that searching out and hiring these human resources be written into the institutional framework for recovery.

Immediate-Term Human Resource Needs

- Human resource professional, administrative, and specialist skills can be strengthened through targeted employment policies. As noted above, sometimes a new lead agency is formed. Other times, an existing institution is made responsible for recovery. In both cases, human resource capacity almost invariably needs to be strengthened by adding new personnel, often with specialized skills. One option is to draw expertise from other sources such as line departments, humanitarian response agencies, the domestic and international private sectors, civil society, and international agencies. Reporting lines can be transferred to the lead agency by secondment and other special arrangements (even if temporary).
- Significant benefits arise from forming recovery teams that are well connected to the wide variety of recovery recovery stakeholders. By recruiting experts from domestic and international agencies or experienced nongovernmental organizations, the lead agency can bring global good practices to its recovery effort.

Box 3.5 Surge Staffing Procedures

As part of disaster response, the United States has established surge-staffing procedures, which outline the short-term staff procurement procedures for affected departments.

Long-Term Human Resource Requirements

Long-term staffing should include input from successor agencies. Increasing the number of professional and technical experts to support recovery efforts is not sustainable beyond the initial years of post-disaster recovery. To facilitate the eventual handover of the recovery portfolio to the development agencies,⁷ the lead agency can recruit liaison officers and transition teams from these agencies early in the planning stage. These individuals then can participate from the beginning as planning partners of the recovery. Combining short-term and longer term human resource needs also can alert the lead agency to the capacities and requirements of the line ministries.

Res	Result 13. Ensuring Adequate Human Resources throughout Recovery Process		
	Process	Output	Actors
1	The agency chosen to lead the reconstruction needs to be strengthened with additional staff from the public, private, and civil society sectors.	Employ necessary profes- sional and technical human resources	Lead Agency: Designated recovery agency
	Generally, key skills are required for:		
	 Planning and programming Procurement, Contract management Financial management Hazard mitigation Risk inspection Technical/engineering Monitoring and evaluation Municipal management Social safeguards 		
	Gender inclusion.		

Ensuring Community Participation

Community Participation Is a Cornerstone of the Recovery Process

The principal resource available for recovery is the affected people themselves and their local knowledge and expertise. Affected people need to be included and consulted throughout the process in assessments, defining problems and needs, identifying solutions and implementing projects, and giving feedback. The leadership is responsible for ensuring this participation, establishing the necessary mechanisms and working closely with civil society and nongovernmental organizations to enable people to be heard.

Beneficiary participation also should enable those who are usually marginalized within their communities—women; the elderly; the disabled; and members of certain social classes, castes, or ethnic groups to influence decision-making.

Incorporating local knowledge and expertise into recovery and ensuring community ownership of it are effective means to ensure the long-term success of the recovery and to guarantee that it meets real needs and provide sustainable solutions.

Box 3.6 Engaging Communities and Using Local Labor

Yemen, Tropical Storm, 2008

After the 2008 tropical storm, Yemen created the Reconstruction and Recovery Fund (RRF). Its executive management was comprised of diverse technical, engineering, and legal experts from the private sector plus individuals who had experience working with the local authorities of Hadramout and Al-Mahara. The presence of these individuals also would facilitate the link between citizens and the fund.

Engineers and construction teams were all local hires because of their expertise and experience working with local materials and methods, including clay-based construction.

The provision of jobs for residents of the affected areas through the implementation of labor-intensive projects proved to be a success. This provision enabled local communities, particularly individuals who had been affected, to participate in the reconstruction of their homes as well as in the implementation of infrastructure projects. The use of local materials and local labor in reconstruction following local traditions encouraged local enterprises to engage in reconstruction programs which, in turn, stimulated the local economy.

Civil Society and Nongovernmental Organizations Can Ensure Community Participation

Civil society and nongovernmental organizations often have well-cultivated links to the affected communities so can play formal roles in ensuring community participation and managing implementation. Ensuring the participation of civil society and NGOs in defining and implementing the post-disaster recovery from the outset provides access to their knowledge and connections. As mentioned earlier, appointing respected civil society leaders to serve on policy and coordination mechanisms is essential for the success of recovery. These appointments also may be part of the ongoing efforts to ensure social and gender inclusion in the recovery process.

NGOs are instrumental in the implementation of projects. In many instances, government authorities can outsource projects to NGOs that are made up of members of the affected communities. Project agreements can be drawn up between the government and the NGO to ensure transparency and fairness during implementation.

Role of Private Sector

Public and Private Sectors Gain by Working Together for Recovery

The private sector can support disaster recovery in many ways. It pays a significant amount of the cost of recovery and reconstruction. It designs the structures and infrastructure that are built. It supplies the materials that enable reconstruction. Finally, the private sector performs the construction itself. If local, national, and regional economies are to grow and to be built back better after a disaster, the participation of the private sector in recovery planning and operations is paramount.

The private sector can play three roles in disaster recovery:

- 1. Purveyors of goods and services participating in an economic transaction
- 2. Local institutions that represent long term interests of the community
- 3. Charitable donors of goods, services, and expertise.

A formal relationship that links private entities to the official response and recovery institutions in the form of public-private partnerships (PPPs) is essential. PPPs must be fostered, and the relationships need to be built long before disasters strike.

The benefits of PPPs include:

- PPPs enhance both the government's and the private sector's ability to recover from financial losses; loss of market share; and damage to infrastructure, equipment, products, or business interruption by assembling resources and forces and making preparedness a win-win option.
- PPPs facilitate the government's job by making compliance with regulatory and safety requirements everybody's concern. PPPs also can increase oversight to prevent corruption, which remains a major risk that trigger disasters.
- PPPs reinforce social bonds among community members, local governments, and the business community.

Professional Associations Can Provide Expert Advice on Recovery Planning

Expert and industry associations, such as those for engineers, agriculturalists, and educators, can serve as focal points for expert advice on recovery and reconstruction planning. Professional associations also can provide valuable information on operational aspects of recovery. They often have informal (anecdotal) familiarity with contractors and their particular industries. The expert and industry associations can evaluate tenders and contracting bids, and act in other positions that require widespread industry knowledge. Regarding tenders, the associations can provide an increased level of transparency and fairness to the selection process. Both are particularly useful when the influx of donor money makes tender selection a contentious issue.

Res	Result 14. Recovery Program That Integrates Civil Society and Private Sector Participation			
	Process	Output	Actors	
1	Draw on the resources offered by civil society, the private sector, and expert associations to inform DRF policy formulation and implemen- tation.	Mechanisms to include civil society, private sector, and expert associations in recovery	Lead Agency: Designated recovery agency Others: Line ministries, local gov- ernment departments, civil society, NGOs, private sector entities	

Government Coordination and Local Implementation

It is necessary to define the recovery vision and policy at the highest levels of government to ensure acceptance and coherent application across the many simultaneous ongoing reconstruction projects (Module 2). A tiered implementation is recommended within the DRF process that balances national government policy setting with decentralized implementation. Program implementation is recommended to take place at the local level, closest to the affected communities and individuals.

It is the role of the lead agency to establish and oversee the coordination mechanisms that guarantee coherent policy application and effective implementation at the regional and local levels. The work of the implementing agency is overseen by the lead agency within the context of a coordination mechanism.

Box 3.7 Multiple-Level Coordination and Implementation Structure

Following Pakistan's 2005 earthquake, the lead reconstruction agency, Earthquake Reconstruction and Rehabilitation Authority (ERRA), combined central coordination alongside local implementation by creating a tiered coordination and implementation structure.

- The ERRA Council acted as the leadership, which provided strategic direction for policy formulation and ensured adequate funding. The council was coupled with the ERRA Board, which ensured implementation of approved policy decisions. The board also developed and implemented annual plans, programs, and projects.
- Similarly, at the provincial and state levels, the Provincial Steering Committee was partnered with the Provincial Earthquake Reconstruction and Rehabilitation Authority (PERRA). The State Steering Committee was coupled with the State Earthquake Reconstruction and Rehabilitation Authority (SERRA). At the district level, the District Reconstruction Advisory Committees provided work-plan oversight to the District Reconstruction Units (DRUs) within designed programmatic interventions.
- National government enabled local implementation by allocating independent budgets to PERRA, SERRA, and the DRUs. The independent budgets enabled the implementing organizations to create and manage their own work plans. Transferring ownership to the local levels helped ensure that projects were locally planned.

Lead Agency Ensures That All Recovery Stakeholders Are Part of Coordination Mechanism

Because NGOs and the private sector are vital implementing agencies, it is crucial that they be included in lead agency coordination mechanisms. Their inclusion helps to ensure that some level of policy coherence is maintained across the many reconstruction programs being implemented within the government and externally.

Res	Result 15 . Decentralized Implementation Guided by Centrally Established Policy and Coordination			
	Process	Output	Actors	
1	Recovery policy is set at the national level, but implementation will be carried out at local levels.	Clear structures for setting recovery policy and imple- mentation	Lead Agency: National planning agency, Designated recovery agency Others: Line ministries	

Roles of International Agencies and Development Partners

After a disaster, the government faces the tasks of, first, appointing or creating the lead recovery and reconstruction agency.⁸ Next, the government must ensure that the agency selected has the ability and capacity to coordinate with partners and international agencies. This coordination is particularly necessary when the latter are major donors and interested in being implementing partners in the recovery and reconstruction effort.

International agencies usually are quick to offer assistance after a disaster. However, their funding may have requirements and conditions. One requirement common to many donors is that the recipient government must provide evidence of strong financial tracking and reporting mechanisms. The disaster may have damaged these aid-tracking mechanisms. Nevertheless, donors have obligations to report back to their own constituents on the good use of their contributions for disaster recovery. Thus, international organizations may be reluctant to contribute directly to the government's recovery budget. Instead, the donors may choose to manage their own recovery funding alongside the national system.⁹

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 agency does not cede control of the recovery program to international agencies and development partners.

By clarifying from the outset the role of international agencies and development partners, the government can identify avenues for their participation in the recovery. The government then can establish clear guide-lines on their roles, responsibilities, and mandates.

Res	Result 16. Well-Managed Integration of International Agencies and Development Partners			
	Process	Output	Actors	
1	Clarify the role of international agencies and development partners.	Institutionalizing role of inter- national agencies and devel- opment partners; establish- ment of donor coordination forums	Lead Agency: Designated recovery agency	

Module 3 Checklist

This checklist covers the different steps required to create effective institutional arrangements for recovery. The list is not comprehensive, but provides an overview of the primary steps to be followed.

National Planning Agency

- Decide on appropriate institutional arrangements.
- □ Provide legal mandate for recovery which clarifies institutional roles and responsibilities.
- Designate lead recovery agency.
- □ Appoint an effective recovery leader.

Lead Recovery Agency

- **□** Ensure continuity between humanitarian and recovery work.
- □ Clarify role of international organizations and development partners.
- □ Coordinate recovery efforts across sectors with multiple stakeholders.
- □ Include civil society, private sector, communities and NGOs in the recovery process.
- □ Identify and ensure that appropriate human resources are available throughout the recovery.

Endnotes

- 1 M. Arnold and C. Burton, "Protecting and Empowering Vulnerable Groups in Disaster Recovery," World Reconstruction Conference Proceedings, World Bank, Washington, DC, 2011, 210–40.
- 2 See Pakistan Case Study, DRF guide, vol. 2, World Bank, Washington, DC, forthcoming.
- 3 Ideally, the selection of the lead agency and other institutional arrangements to prepare for a future disaster will have been made in advance. See Module 6, Strengthening Recovery Systems in National and Local Government Systems.
- 4 In Pakistan, the Earthquake Reconstruction and Rehabilitation Authority (ERRA) was established as a time-bound central authority under the Prime Minister's Secretariat. Pakistan Case Study, DRF guide, vol. 2, World Bank, Washington, DC, forthcoming.
- 5 For details, refer to section on Monitoring and Evaluation.
- 6 See Indonesia, Pakistan, and Yemen case studies, DRF guide, vol. 2, World Bank, Washington, DC, forthcoming.
- 7 Typically, line ministries and development agencies.
- 8 To see the three options for how to select a lead DRR agency, see section entitled, "Selecting the Appropriate Lead Institution."
- 9 See section on Financing for Recovery.



MODULE 4. FINANCING FOR RECOVERY

In post-disaster recovery, there are four major financing challenges. They are to quickly quantify the economic costs of the disaster, develop recovery and recovery budgets, identify sources of financing, and set up the mechanisms to manage and track funds.

Good financial practice across post-disaster experience shares the common characteristics of rapid disbursement, coordination of resources, and flexible sources of funding.

Rapid Disbursement. Meeting the recovery objectives demands quick response. Actions must occur under significant time pressures and must be completed within the set timeframes.¹ Compared to normal projects, the necessity for speed mandates short timelines for project preparation, approval, and procurement. Special dispensations or accelerated processes may be applied to disburse the funds available for recovery as quickly (yet transparently) as possible.

Coordination of Resources. Often, numerous government and nongovernmental actors engage in the recovery efforts. Their number poses significant coordination challenges for the lead agency. Having a variety of stakeholders and donors contributing to the same objectives requires the use of different types of coordination mechanisms to marry policy to funding and implementation. A range

of such mechanisms is especially necessary when many funds will be managed not by the government (on-budget) but by the funding sources (off-budget).

Flexible Funding Sources. In post-disaster environments, conditions change so rapidly that unacceptable delays may occur if budgeting revisions have to wait until the normal budget cycle. The government may have established a **contingency fund** to respond to the immediacy of a disaster. Such funds are characterized by flexibility to respond appropriately, especially in the immediate aftermath of the disaster. Pooled funds from donors that

Box 4.1 Calculating Public and Private Sector Reconstruction Costs in Yemen

The total value of the disaster impact caused by the October 2008 storm and floods in Yemen was estimated at US\$1,638 million. This amount is equivalent to 6 percent of Yemen's GDP. Of this amount, private sector costs amounted to US\$402 million.

Super typhoon Haiyan in 2013 caused USD \$12.9 billion in damages in the Philippines, which is estimated to be 0.9% of the country's GDP. Damage to infrastructure was USD \$218.18 million and outright losses totaled USD \$59.09 million.

are administered by a trustee also are characterized by their flexibility to finance recovery needs that may be unattractive to the bilateral donors or do not fit within the government's budget.

Financial considerations of recovery start with budgeting within the pre-disaster and macroeconomic context. Depending on the scale of the disaster and the capacity of a national economy, the government may either rely largely on national resources, or appeal to external sources for funding. The latter option is useful particularly when the government already has cooperation agreements with donors and/or multilateral agencies. Figure 4.1 details the elements of recovery financing from the variety of funding source possibilities—both domestic and external. The lead agency should ensure that all of these funds are allocated in accordance with the national recovery priorities, whether or not the funds are channeled on or off the national budgetary system.



Figure 4.1 Global View of Post-Disaster Financing

Figure 4.2 Illustrates the key elements of post-disaster recovery financing covered in the DRF guide, incorporating mechanisms for both national and international resources.

Figure 4.2 Key Elements of Recovery Financing



Post-Disaster Budget Review

Post Disaster Budget Review

Natural Disasters Impact Public Finance

Disasters force reallocation of tight government budgets and a search for supplementary revenue. At the same time, disasters can reduce government revenue by disrupting economic activity. Effects include lowering productivity, increasing inflation, reducing purchasing power, and possibly lowering trade or imports and exports. All of these effects impact direct and indirect tax revenues.

Ongoing Post-Disaster Budget Review

The initial budget review should focus on channeling urgent resources for the humanitarian and relief efforts. Subsequent reviews can be based on the recommendations of the PDNA or similar rapid assessment. These findings involve detailed sequencing, prioritizing, and financing and implementing the recovery and reconstruction process. Even during the disaster recovery framework implementation phase, the lead agency needs to analyze the budgets for variances from actual performance.

Private Funds Gap Analysis

The first of two challenges of post-disaster budgeting is to capture the overlap between public and private financing. Figure 4.3 highlights the sectors in which overlap exists. The second challenge is to allocate public resources for key private goods. Housing is one example. Disaster-affected people may not have the resources necessary to rebuild, which is critical for restoring normalcy, and there may be a gap in private funds.



Figure 4.3 Overlap between Public and Private Funding

Res	Result 17. Adequate Financing for Recovery			
	Process	Output	Actors	
1	National and subnational governments will review the existing budget allocations to real- locate financing initially to humanitarian relief and recovery. Government has the primary responsibility to respond to the needs of the post-disaster context. Governments respond to disaster by re-budgeting and signaling recov- ery priorities. Multilateral institutions, bilateral donors, NGOs, and nonstate organizations provide resources. Recovery budgets may need to be drawn up from scratch to operate outside the regular national or subnational budget so that they can be imple- mented rapidly. Government makes the choice on activities to be financed on or off budget.	Revised budgetary allocations focusing initially on post- disaster response; later on recovery	Lead Agency: Finance Ministry Others: National planning agency, lead recovery agency, line ministries, local government departments, national technical agencies	

Disaster Assessments for Resource Mobilization

The damages to infrastructure and assets are valued, first, in physical terms (number, extension of area or surface, as applicable) (Module 1). Second, damages are assigned monetary value, expressed as the replacement costs, according to the market prices prevailing just before and after the disaster. These costs are the baseline cost. The reason is that the calculation of recovery costs would have to account for additional costs. They are post-disaster price alterations, improvements associated with risk reduction, and the concept of build back better introduced by the recovery framework. Additional economic losses calculated refer to changes in economic flows arising from the disaster. Changes in flows continue until the achievement of full economic recovery, in some cases requiring several years, up to a decade or more.²

Resource Mobilization

The challenge of post-disaster recovery is to mobilize additional resources. To the extent possible, recovery should not be at the expense of normal, ongoing development processes. Depending on the nature and scale of the disaster, recovery funding can come from domestic or external resources.

Domestic Funding

Domestic resources generated by disaster-affected governments are:

- Reallocation among the budget items from "less" to "more" disaster-hit sectors
- Issuing sovereign reconstruction or development bonds
- Levying tax or surcharge for recovery
- Introducing policy incentives for the private sector to share recovery costs
- Voluntary civil society and private philanthropies' contributions
- Insurance.

Most important, a huge amount of recovery is supported by the people themselves. The public sector's share in recovery can vary widely. It depends on the nature and scale of disaster damage and relative balance of public and private sector asset ownership in the affected areas. In most cases, the biggest

contribution to recovery financing comes from the citizens within the country and abroad. These sources of funding, among them remittances, are becoming increasingly important in recovery programmes.

Box 4.2 Samples of Domestic Funding

Mozambique, Flooding, 2000-2013

In Mozambique, the Ministry of Finance uses a provision that withholds 10 percent of each sector and local government budget in reserve for unforeseen expenditures, such as disasters. If unused, these funds are dispersed during the last financial quarter of the fiscal year. In addition, the central government allocates \$3.5-4.0 million a year to fund the expected costs of the first 72 hours of a disaster.

Philippines, Typhoon Yolanda, 2013

In the Philippines, the national government assumed responsibility for funding the majority of recovery within its own budget. Disbursements were made from the national government to local government units (LGUs) through the Internal Revenue Allotment (IRA) mechanism. This mechanism focuses its funding on development. The limited funds of the National Disaster Risk Reduction and Management Fund were not adequate to meet recovery needs of LGUs.

Lao PDR, Typhoons and Tropical Storms 2009, 2011, 2013

In Laos, funding streams for disaster response and recovery include the National Disaster Fund, National Contingency Fund, and State Accumulation Fund. The National Disaster Fund is used for a variety of activities ranging from dissemination of strategies, plans, and laws; and media promotion to damage and loss assessments; victim relief; and economic/social infrastructure recovery. The National Contingency allocates some LAK 100 billion (US\$12.5 million) annually to provincial government designed recovery plans. The State Accumulation Fund derives its funding from an allocation of 3 percent of total government budget annually, and requires national government approval before disbursement.

External/International Sources of Funding

External resources for post-disaster recovery can be sourced from multilateral development banks, regional development banks, bilateral development partners, international NGOs, private philanthropies and charities, remittances and, most recently, social media.

Frequent methods used to access external or international funds are international appeals and donor conferences.

International Appeals. National, regional, and international relief systems are able to mobilize and respond to large-scale disasters that require a system-wide response to humanitarian crises by launching appeals. A renewed appeal is usually launched after the the first appeal that covers recovery needs in detail.

Donor Conferences. An international donors' conference may be organized as soon as possible by the government or international community, preferably within the first three months following a large-scale disaster or complex emergency. Holding a donor conference is an effective and coherent way of sourcing funding for the post-disaster activities from governments. Donors commit resources for humanitarian needs as well as long-term recovery and reconstruction in keeping with their own strategic priorities.

International Financial Institutions. International financial institutions (IFIs), such as the World Bank and regional development banks (including the Inter-American Development Bank and the Asian

Box 4.3 Successful Donor Conference for Post-Earthquake Pakistan

The success of the 2005 Pakistan earthquake Donor Conference was enabled by an early and well-crafted implementation strategy that calmed frequent donor concerns about financial transparency and sustainable recovery.

Four aspects of the government's presentation at the Donor Conference were:

- **Implementation plan.** Based on the PDNA in which the government identified the sectors that required recovery.
- Implementation arrangements. Using the PDNA, which suggested the establishment of federal- and district-level organizations for implementation, the government outlined its strategy for implementing recovery.
- **Coordination arrangements.** Given the scale of recovery required, care was taken to address how recovery would be sensitive to coordination requirements. Good coordination was of particular importance to donors, who typically face challenges in coordinating with governments during recovery.
- Incorporation of DRR in recovery. Disaster risk reduction was established early as one of the key guiding principles in recovery. The recovery planning presented at the Donor Conference was organized around this principle.

Development Bank), increasingly have been engaged in providing lending and nonlending services to developing countries for post-disaster recovery. The financial assistance, generally provided as soft loans, is used to rebuild physical assets, including private housing. Nonlending assistance from IFIs includes damage and loss assessments, acting in an advisory role, and other forms of technical assistance.

Joint assessments have become an important mechanism for engaging with other donors and ensuring that borrower needs are met without overlaps. In almost all major disasters in the recent past, IFIs have been one of the most important sources of financial assistance for recovery.³

Coordination and Allocation of Financial Resources

Managing the inflows of resources and spending them effectively are challenging in a post-disaster environment. The actual allocation of resources occurs through a budgetary process. Figure 4.4 highlights the different timeframes for resource allocation. Typically, reconstruction expenditures will be heavy in the medium to long terms as destroyed or damaged infrastructure is replaced.



Figure 4.4 Timeframe for Use of Allocated Resources

Source: Adapted from ASEAN, "Advancing Disaster Risk Financing and Insurance in ASEAN Member States: Framework and Options for Implementation," Association of Southeast Asian Nations, Jakarta, 2012.

Funds from the private sector and nongovernmental organizations outside the government budget are critical to recovery. In many instances, government funding is not sufficient. The programmatic approach can help coordinate funding sources, ensure communication among different sources of funds, and ensure that monies spent do not duplicate efforts. For example, private sector funds may be allocated to a specific sector or area. Funds coming from nongovernmental organizations could be allocated to social needs.

Public Financial Management Systems

An important step toward fulfilling recovery objectives is setting up financial systems that allocate and disburse funds from one level of government to another; and/or communities or systems that manage external resources.

In large-scale disasters, external resource flows usually are significant. Therefore, recovery financing likely will be managed through both the government's budget (on-budget) and off-budget funding.

Res	Result 18. Functioning Financial Systems for Recovery		
	Process	Output	Actors
1	The government is advised to obtain the highest possible level of involvement and endorsement for establishing project-level financial systems as early as possible. Compre- hensive financial planning and establishment of financial structures to manage the inflow of external resources immediately after a disaster can encourage international involvement and confidence in the recovery plan. ⁴	Financial system endorsed by the highest political level able to absorb inflows	Lead Agency: Ministry of Finance with highest level of political involvement
2	The government will need to transfer funding or cash to (a) subnational entities; and/or (b) nongovernmental organizations, communities, households, and individuals. Decentralized implementation speeds up recovery and is more likely to correspond to the actual needs of the affected communities.	Establish procedures for shar- ing assessment data with implementing agencies; iden- tify means for monitoring and auditing transfers and use of funds	Lead Agency: Ministry of Finance/lead recovery agency/ line ministries

Whether a share of external resources is channeled through the government's budget systems is likely to depend on a number of factors. To maximize the impact of domestic and external resources, the international community increasingly has advocated the use of budget systems and other public financial management (PFM) systems. The same principles of aid effectiveness apply in a recovery context. The key to PFM arrangements is government and donor flexibility. The reason is that, even though core fiduciary principles apply, recovery financing has proven to be fundamentally different from the implementation of regular development financing.

Efforts to support and strengthen the national PFM system may take into consideration the following:

- Capacity of institutions and budget systems, and opportunities to strengthen them
- Scale of international aid and coordination of aid
- Scale of aid on-budget vs. off-budget prior to the disaster

Box 4.4 Donor Assistance: On-Budget Arrangement

Following floods and cyclones in Mozambique in 2000 and 2009, the public sector financial management system successfully handled donor funds with due accountability and transparency without establishing a donor trust fund. To manage recovery from the floods and cyclones of 2000 and 2001, the government set in motion a post-flood recovery program with the support of external donors and managed largely through the national budget system. This program avoided multiple complex arrangements while strengthening national accountability and transparency mechanisms.

Funds were channeled through government budgets rather than trust funds, giving the government full responsibility for accountability and supervision. Having funds directed through the national system meant that the recovery program would be fully integrated with the public sector financial management system.

- Number of institutional levels involved in PFM cycle
- Financial arrangements for emergency relief and long-term recovery
- Nature of emergency procedures and implementation arrangements (including procurement and logistics)
- Fiduciary integrity and anticorruption.

Multi-Donor Trust Funds (MDTFs)

In many countries affected by large-scale disasters, Multi-Donor Trust Funds (MDTFs) have been set up to channel donor resources in a coordinated way and in accordance with national priorities. The MDTF provides a convenient way of pooling donor resources and avoids setting up multiple bank accounts and programs.

Expenditures from the MDTFs are initiated, planned, and implemented primarily by governments. Allocations of the funds are endorsed by

a steering committee with government, donor, and civil society membership. The role of the fund's trustee is to ensure that monies are disbursed, accounted for, and spent in accordance with objectives, measurable outputs, and transparent procedures. The trust fund earns interest as it awaits disbursement. The Asian Development Bank (ADB), United Nations Development Programme (UNDP), and World Bank have acted as both trustee and administrator of such pooled funds. This process can reduce fragmentation of aid by creating a forum for policy dialogue and aid coordination between donors and the government.

Res	Result 19. Strengthened Public Financial Management		
	Process	Output	Actors
1	A government is encouraged to strengthen and/or establish effective PFM modalities These modalities would need to harmonize with local capacities and fiduciary risk. In accordance with BBB principles, a focus on national ownership and capacity development should be built into the recovery process.	Policy that strengthens and establishes effective modali- ties in PFM	Lead Agency: Ministry of Finance/ national audit authority
2	Establishing a MDTF can be an important means to manage coordination, risk, and information. The trust fund enables donors to collectively address key recovery priorities.	Model to manage resources coming from bilateral and multilateral donors	Lead Agency: National government Support: Development banks and UN

Auditing, Monitoring and Oversight

The monitoring system that is most appropriate depends on the magnitude of the disaster, number of actors engaged in recovery spending, guality of their reporting, and existing capacity of the national agency responsible for it. The key benchmarks for the financial Monitoring and Evaluation (M&E) system are the production of timely and comprehensive estimates of:

- Funds allocated and spent covering all sources: domestic, international, public, and private
- Recovery progress •
- Economic and social impacts.

Auditing and monitoring oversight is designed at three levels. At the highest level is the overall recovery program monitoring. Program-level monitoring builds on sector-level monitoring, which consolidates the reporting of each sector. At the lowest level is the individual projects monitoring. The auditing and monitoring system should be designed to integrate oversight at all three levels. Special additional systems may be required to monitor inflows, use, and impact of recovery financing.

The credibility of the government's recovery budget is based on delivering the resources promised for recovery and using them for their intended purposes within a set timeframe. The accountability of the recovery plan to the affected population and to the financing 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 much more defined with a set end. The scope of an internal audit is broader and more open-ended.⁵ External audits focus after the fact on a distinct event (a set of financial statements) and ask the guestion, "What, if anything, went wrong in managing recovery expenditures?" In contrast, internal audits focus on an ongoing process and assess risks and controls to answer the question, "What could go wrong in managing recovery financing at various levels?"

A government must ensure that resources are spent for their intended purposes. Contributors to the recovery financing likely will require assurance that resources are allocated efficiently and that specific sectors and subsectors are fully financed. Therefore, tracking recovery aid is very important. Aid tracking is complex because of the various sources of funding as well as various channels through which funds are allocated. However, it is extremely important to set up a tracking system very early to ensure that funds are spent for the indented purposes. The tracking system should capture aid flows at the individual sector as well as project level. An effective aid tracking system should incorporate tracking multiple streams of funding, including public sources, donor funds (on and off budget), private sector contributions, and NGO sources.

Res	Result 20. Adequate Monitoring and Oversight of Expenditures			
	Process	Output	Actors	
1	The government needs to establish aid-tracking mechanisms that help to coordinate and allo- cate resources under a central programmatic framework.	Financial oversight mecha- nisms that enhance the confi- dence that recovery funds are	Lead Agency: Lead recovery agency/ Ministry of Finance/ na-	
2	Government will ensure that projects have effective internal and external audits.		tional audit authority	

Module 4 Checklist

This checklist covers finance issues from budget review and resource mobilization to good oversight of fund disbursements. The list is not comprehensive, but covers the key actions to be taken with respect to mobilizing and managing resources.

Ministry of Finance / Lead Recovery Agency.

- □ Conduct funding gap analysis and budget review.
- □ Identify domestic sources of funding.
- □ Identify external sources of funding.
- □ Organize international appeal or donor conference to access international funding.
- Define mechanism to manage inflow of funds. Specifically financial systems that disburse funds between levels of government, or directly to communities or systems that manage external resources.
- □ Coordinate and allocate funds.
- □ Set up system for aid tracking.
- □ Strengthen public financial management system.
- □ Engage external third-party auditing services.

Endnotes

- 1 For details on how to conduct a PDNA or similar assessment, see Post-Disaster Needs Assessment Guide, vol. A, EU/UN/ WB, 2013.
- 2 http://sheltercentre.org/sites/default/files/transitional_settlement_and_reconstruction_after_natural_disasters_0.pdf.
- 3 For more details on overall monitoring, see Module 5, "Implementation Arrangements and Recovery Management," in this DRF guide.
- 4 M. Locatelli, "Good Internal Control and Auditor Independence," The CPA Journal, 2002.



MODULE 5. IMPLEMENTATION ARRANGEMENTS AND RECOVERY MANAGEMENT

The recovery policy framework, institutions, and financing are discussed in earlier chapters. However, the issues and options related to them are of little relevance unless recovery programs are implemented quickly, and visibly improve the lives of disaster-affected populations.

Coordination Mechanisms

In the context of implementing a recovery program, coordination refers to applying various tools to ensure coherent support for recovery policies and programs. Coordination also includes assigning different areas of recovery to the governmental or nongovernmental agencies in their areas of expertise.

Coordination brings together a larger number of partners and stakeholders to support the recovery program. The growth in numbers results in resource pooling, new initiatives and innovations, and improvement in quality and speed of implementation. Involvement of variety of actors in the implementation process makes recovery more transparent, and participatory. One coordination approach involves harnessing the ongoing cluster groups of humanitarian organizations (Module 3). Their convening power can continue the coordination into the recovery phase of monitoring achievements and ongoing projects.

Coordination can take place both vertically and horizontally. When the implementing agency interacts with the national government and local administration, it is a case of vertical coordination. When the agency starts working with the private sector, non governmental organizations (NGOs), and civil society organizations (CSOs) to allocate areas of responsibilities and maximize the use of resources in the course of implementation, it is a case of horizontal coordination.

Several types of coordination mechanisms can be set up, depending on the type of coordination and stakeholders. A coordination mechanism at each level of policy-making, planning, and implementation is helpful in developing consensus and resolving conflicts and disputes. Some coordination mechanisms that are functioning or can be set up to support recovery implementation are:¹

• Task Force/Empowered Committee. Consisting of senior politicians, administrators, and professional experts, the task force can be set up at a high level in the government to develop a recovery policy/program.

- **Donor Coordination.** Coordination can be accomplished by the lead agency assigning a donor lead responsibility for specific sectors or projects.
- NGOs' Coordination Committee. The government can set up the committee at the subnational level to assist the NGOs with their participation in the recovery program. In this forum, NGOs meet the government officials and resolve all the program issues. The committee also provides NGOs with the necessary support and authorization to implement.
- Local Level Project Management Committee. This committee can consist of local government officials, NGOs, and representatives of affected communities. A number of local issues related to recovery can be discussed at this level.

Standard Implementation Procedures

Existing project approval and procurement, reporting, and staffing procedures in the country may need to be simplified to meet the pressing demands of the recovery process. Often recovery projects are stalled due to lengthy bureaucratic procedures for project approval and procurement. Even if fast-track approval processes exist, at times responsible officers are reluctant to use them [why?]. The authority given to the lead recovery agency by the government can play a critical role in promoting the use of simplified procedures and processes across all sector and entities for more rapid implementation.

Establish Reconstruction Standards

In Module 2, the key policy imperatives for disaster recovery were explained in detail. They are:

- 1. Building Back Better
- 2. Converting adversity into opportunity
- 3. Pro-poor recovery.

As the government drafts its recovery framework, it needs to formulate the guiding principles for recovery based on these three key policy imperatives. As the recovery moves into the implementation phase, the guiding principles need to be translated into practical recovery and reconstruction standards. Local stakeholders from both the government and civil society, including NGOs and the private sector, can work together to detail these standards.

Reconstruction Standards Can Cover Recovery Sectors and Implementation Mechanisms

Reconstruction standards are specific to the sector and the type of natural disaster. Moreover, these standards must be detailed well ahead of actual implementation. For example, after an earthquake, the reconstruction must conform to appropriate seismic safety, quality, technological, and environmental standards. In another example, reconstruction of schools could include the standard that all schools must be rebuilt to function as shelters during a disaster. Reconstruction standards also could ensure that first consideration is given to local resourcing of materials and technical expertise.

Ensuring compliance with reconstruction standards during the implementation phase is key to resilient recovery. To ensure compliance, construction monitoring teams could be established by the lead agency to monitor technical aspects of both the inputs and outputs of reconstruction. In addition to alerting the relevant authorities of any missteps or lack of adherence to standards by the implementers, the lead agency also should support implementation entities to correct their procedures.

Res	Result 21. Reconstruction Standards Applied to Relevant Projects			
	Process	Output	Actors	
1	The government needs to set and implement reconstruction standards that adhere to the key policy imperatives for recovery.	Recovery projects incorpo- rate resilience against future disasters	Lead Agency: Lead recovery agency/ line ministries	
			Other: Local governments/ experts in reconstruction industry	

Decentralized Implementation

Policy and coordination for recovery can be overseen by the lead agency, but responsibility for implementation is best positioned at the local level (Module 3).² Centralizing implementation within a single agency can alienate local governments and other agencies that expect to control some aspects of recovery and reconstruction. As much as possible, decisions for implementation must be made by those responsible for them. Local decision-making empowers the implementing agencies and creates greater ownership of the decisions among affected communities.

Local implementation also helps build community ownership of the recovery process. Involving people and communities on the ground will empower them and provide them with the opportunity to find local solutions to local problems. Additionally, local implementation could build, if necessary, the capacity of implementing agencies to manage small to large-scale projects.

Result 22. A Decentralized Implementation Process			
	Process	Output	Actors
1	Local communities and nongovernmental organizations manage project implementation to ensure relevance to the needs of the people affected.	Community-owned projects that meet real needs	Lead Agency: Local governments/non- governmental imple- menting agencies/private sector

Monitoring and Evaluation

Effective M&E systems enable the progress of recovery to be assessed, ensure compliance with sectoral recovery policies and strategies, and provide early warning for corrective action. Ongoing M&E is critical to identify mid-course corrections in the implementation and adjust the strategy, particularly in response to community feedback about project design and results.

M&E reviews provide:

- A holistic assessment of recovery framework implementation
- A fresh view of the recovery framework implementation
- Potentials for improvement
- Actionable, realistic, results-oriented, and concrete recommendations
- A learning opportunity for all involved.

In addition, M&E provides substantive inputs into the periodic evaluations that donors require to continue funding projects.

Establishing an M&E system involves defining **what** to monitor and evaluate (activities and outcomes), **when** to monitor and evaluate (timing and frequency), **how** to monitor and evaluate (tools and indicators), **who** will monitor and evaluate, and how to use the results. An effective M&E system for recovery should be able to:

- Track physical progress of reconstruction activities
- Track results for other recovery activities outside scope of reconstruction
- Provide regular and comprehensive information on allocation and disbursement of funds (public and private)
- Provide data for evaluating economic and social impacts of recovery programs
- Inform outcome-based mid-term review of the recovery implementation.³

Ongoing Monitoring Necessary

Monitoring is a continuous activity that indicates whether activities are on track. Monitoring both results and activities is recommended. Results monitoring refers to monitoring recovery objectives and priorities. Ideally, results monitoring should be done quarterly and be conducted or guided by the main implementing agency.

Results Monitoring plus Reporting and Activity Monitoring Create Good Data

Monitoring results ideally should go hand in hand with reporting and activity monitoring. The combination of the three establishes a good database and indicates whether planned activities and programs can be executed as planned. Results monitoring may be done by the lead recovery agency. Activity monitoring preferably should be done by all agencies for their respective sectors and programs and be consolidated by the lead recovery agency.

Results Framework Implemented Best through Results Monitoring System

The results framework should be implemented through a systematic Results Monitoring System (RMS). The RMS specifies the monitoring and evaluation plans, data collection instruments, and indicator value-determination methodologies for all outputs and outcomes. Once fully developed, the RMS also will provide an overall medium-term M&E plan. This plan specifies the frequency, requirements, and means for monitoring, evaluating, and reporting, both at the broader level and for each of the selected outcomes.

Ten Steps to Build and Sustain Results-Based M&E Systems

Commonly used results-based M&E systems can be built and sustained by following the 10 steps below. With some modifications, these steps can be applied to post-disaster recovery programs to create effective M&E systems.

- 1. Conduct a readiness assessment
- 2. Agree on outcomes to monitor and evaluate
- 3. Select key indicators to monitor outcomes
- 4. Identify baseline data on indicators: ask "Where are we today?"
- 5. Plan for improvements: select results targets
- 6. Monitor results
- 7. Conduct evaluations
- 8. Report findings
- 9. Use findings
- 10. Sustain the M&E system within the organization.

Dedicated management information systems (MIS) are required to build a results-based M&E system. MIS is the digital system to store all M&E information and collate results based on the different inputs.

Box 5.1 Myanmar Community Involved in First Social Impact Assessment of Recovery

Carried out in Myanmar in 2008 following a powerful cyclone, the Post-Nargis Joint Assessment was the first time that an assessment of the social impacts of disaster was included as part of the formal damage and loss assessment.

The Tripartite Core Group consisted of the Association of Southeast Asian Nations, the Government of the Union of Myanmar, and the United States. After the disaster, this group set up a monitoring system, which included ongoing monitoring of the social impacts of the cyclone. The monitoring had three foci: aid effectiveness (including needs and shortfalls, targeting and decision-making, aid equity, and complaints), socioeconomic impacts (including impacts on farmers, fishers, and casual laborers, indebtedness, migration, and displacement), and impacts on social relations (including social capital and cohesion, group relations, and relations among villagers and leaders).

Reliable statistics and community-level information in Myanmar were scarce. A local NGO with good local knowledge and networks was engaged to conduct the research. It involved in-depth interviews, focus group discussions, and participant observation. The research took place in three rounds: roughly 6 months, 1 year, and 2 years after the cyclone. This research identified key issues that would not have emerged through the standard methodologies. These key issues included aid shortfalls, aid equity, and complaint mechanisms, along with the provision of some inappropriate livelihoods aid.

Res	ult 23. Efficient Central Oversight Mechanism That Informs Mid-Term Review Process				
	Process	Output	Actors		
1	Establishing dedicated monitoring body and indicators as early as possible can help create clear understanding of monitoring objectives among all recovery stakeholders. Early involve- ment of state auditors and leaders from affect- ed communities in defining appropriate indi- cators will facilitate a smoother, more realistic monitoring process.	Evaluation framework established early in recovery process enables mid-course corrections and early partner buy-in	Lead Agency: Monitoring and coordination wings of recovery agency/ auditors from subnational governments/ affected community leaders		
2	M&E system should be used for out- come-based mid-term review of recovery framework implementation.	Mid-term reviews of recovery framework implementation	Lead Agency: Lead recovery agency Other: Line ministries/local governments/ communities/ NGOs		

Posult 22 Efficient Central Oversight Mechanism That Informs Mid Term

Procurement

Rapid Procurement Systems

Rapid procurement of goods and services can be a crucial element for an efficient and successful recovery. However, procurement in post-disaster settings can be haphazard, leading to gaps in implementation and potential abuse of procedures.⁴ Several types of procurement systems will facilitate the purchase of goods and services during recovery. Two are pre-arranged procurement and fast-track procurement.

Pre-arranged Procurement

Pre-arranged procurement pre-establishes a list of qualified contractors. This list can be categorized by type of expertise and competencies. Having a prequalifying system in place expedites issuing contracts and evaluating tender responses. A pre-qualifying system also eliminates inexperienced contractors, who can significantly underbid more experienced competition, but who lack the expertise required to successfully implement the reconstruction project.

Fast-Track Procurement

Fast-tracking procurement means using simplified, agreed tender and purchasing processes to quickly get goods and services to the areas in which they are needed. To further expedite procurement, a single source for the purchase of specific goods and services could be pre-determined.

Box 5.2 Fast-Track Procurement in Mozambique

Mozambique

During emergencies, the National Institute for Disaster Management (INGC) in Mozambique is able to suspend duties and taxes placed on the purchase of emergency supplies. After the emergency, the INGC is obligated to reconcile these exemptions with the fiscal authorities.

Pakistan

Pakistan was able to streamline its procurements through the services of the engineering profession's statutory body, Pakistan Engineering Council (PEC). PEC set up a pre-arranged system of procurement for emergences with a pre-approved list of contractors for reconstruction. The list enabled more rapid issuing of contracts, pre-determined standards for evaluating tender responses, and provided logical consistency in responses for why particular firms were awarded reconstruction contracts. In general, this pre-arranged structure ensured transparency at the start of the procurement process.

Lao PDR

Lao PDR has developed an emergency road repair fast-track financing mechanism to ensure timely facilitation of urgent road infrastructure repairs. The Minister of Finance and 17 provincial governors created this mechanism through an agreement enabling governors to authorize engagement of road contractors for post-disaster rehabilitation works without prior central government approval.

Fast-tracked procurement systems can be used by both the private sector and nongovernmental entities. To facilitate oversight and monitoring, it is helpful that all stakeholders that procure goods and services share some of the same procedures. As part of the third-party audit mentioned in the transparency section of Module 4, procurement needs to be scrutinized closely.

Res	Result 24. Fast, Efficient, and Transparent Procurement			
	Process	Output	Actors	
1	Adopt procurement procedures that facilitate the purchase of goods and services, but do not compromise transparency and equitable processes.	Faster procurement with more reliable contractors	Lead Agency: All government agencies and partners that procure goods and contractor services in affected areas under normal devel- opment circumstances; compiled by lead recovery agency	

Communications Strategy for Recovery

Throughout the recovery process, it is in the government's best interest to maintain ongoing dialogue and share information with all other stakeholders and partners in the recovery. A well-defined internal and public communications strategy recognizes the different types of stakeholders and identifies the most effective means of communicating with them.

Internal Communication among Recovery Partners

Internal communication includes all stakeholders directly involved in the recovery process. This communication can take many forms. Examples are a dedicated internal information-sharing website that includes access to the M& E database, peer dialogues among government agencies, focus group discussions with communities, or policy dialogues with donors. Such information-sharing can contribute to the transparency of recovery, build credibility and consensus on recovery goals, and identify coverage gaps and project overlaps.

For example, information flows between sectors and line ministries can result in fewer coverage gaps and project overlaps among multisectoral programs. The government can schedule monthly decision meetings with international partners in which the recovery objectives of the government, private sector, and civil society are communicated. Such meetings will conserve the time of senior government officials, enabling them to stay focused on meeting their respective recovery milestones and objectives. Speaking with and mapping plans with planners, implementers, and community groups will strengthen transparency, minimize duplication of effort, highlight gaps in assistance, and build consensus for achieving common recovery goals.

Internal communication creates a space for exchange and feedback among all involved. This communic	ca-
tion also can serve as one mechanism by which to redress grievances.	

Kes	Result 25. Effective Internal Communication among Recovery Partners		
	Process	Output	Actors
1	The government ensures effective flows of information between sectors and line ministries that improve overall project coordination.	Information easily shared between sectors and ministries	Lead Agency: Communications and co- ordination wings of lead recovery agency
2	Good internal communication between central government and affected communities can have a measurable impact on the latter's ability to recover.	Ongoing consultations between central government and communities	Lead Agency: Communications wing of lead recovery agency

Pocult 25. Effective Internal Communication among Decevery Partners

Effective Public Communication

An effective public communications strategy can raise awareness of the recovery effort—policies, plans, and projects—among the general public, both national and international, particularly in donor countries. The strategy should define the key communications for broadcast, print, and social media. These messages are intended to inform public expectations about the scope and timeframe of the recovery.

In addition, by recognizing visible signs of early physical recovery and announcing longer term goals, an effective public communication strategy can keep the entire recovery community and general public galvanized for subsequent phases of recovery and reconstruction. Public communication initiatives can consist of:

- Using time markers (such as 100th day post-disaster; 6-month anniversary; 1-year anniversary) to show visible evidence and images of progress on websites of the different recovery institutional stakeholders
- Facilitating access for the media, if an issue, to do stories from the affected areas
- Organizing press conferences highlighting results from updated evaluations or feedback from field visits
- Create visual or text content that tells the story of the different stages of the recovery process.

Res	Result 26. Effective Public Communication			
	Process	Output	Actors	
1	The government drafts a public communication strategy that includes carrying out an effec- tive campaign that raises awareness with the general public of the recovery program and process.	Public communication cam- paign enables all actors to be aware of changes in recovery program	Lead Agency: Communications section of lead recovery agency with support from key recovery partners in private sector, civil society, and donor community	
2	Government ensures public communication strategy includes initiatives to inform public expectations for recovery.	Communicate clear and realistic goals for recovery, minimizing unrealistic expectations	Lead Agency: Communications section of lead recovery agency to organize outreach and media coverage	

Promoting Transparency in Recovery

One of the challenges in implementing a recovery program is to **control corruption** and **increase transparency**. These two goals require instituting an audit system. The system encompasses public auditing of procurement and disbursements, carrying out a **technical audit** of the works carried out, and conducting a **social audit** of the benefits delivered. While, in most countries, a financial audit of accounts and expenditures is a well-established system, technical and social audits are relatively new, evolving concepts. Social auditing is a process through which a recovery and reconstruction program is able to monitor its social, economic, and environmental benefits by involving all the stakeholders: NGOs, homeowners, donors, and the implementing agency.

Box 5.3 Using New Technologies to Enhance Transparency in the Philippines

Following Typhoon Yolanda in 2013, the Philippines leveraged several social media tools and knowledge-sharing platforms to strengthen the transparency of its recovery efforts for all stakeholders, most importantly, the general public.

- The Office of the Presidential Assistant for Rehabilitation and Recovery (OPARR) developed the web tool, EMPATHY, to monitor live progress of activities related to Yolanda recovery. The EMPATHY electronic infrastructure transmits information to the Office of the President via the Web-Based Emergency Operations Center (WebEOC).
- Foreign Aid Transparency Hub (FAiTH) is an online portal administered by the Department of Budget and Management. FAiTH provides information on disaster assistance pledged or given by countries and international organizations; as well as donations received by the Commission on Filipinos Overseas' (CFO), Lingkod sa Kapwa Pilipino program (LINKAPIL); and in the future, donations received by Philippine embassies abroad.
- Open Reconstruction is a website that enables all levels of government units to submit their reconstruction project requests, and enables the public to track approved projects' progress. This website gives the public access to important post-disaster information: project requests by affected government units, financing by the national government, and statistics for both.

Res	Result 27. Transparency Resulting in Confidence among All Recovery Stakeholders			
	Process	Output	Actors	
1	Adopting parallel systems of monitoring and evaluation—internal and external—can im- prove project transparency. Stakeholders are able to cross-check reports with multiple sourc- es of information, identify key problem areas, and possibly suggest alternative strategies to resolve problems. Strengthened transparency increases stakeholders' confidence in the recov- ery program.	More reliable results informa- tion available; partners work together to produce informa- tion and analyze results	Lead Agency: Monitoring wing of lead recovery agency/support from Ministry of Finance and key donors	

Checklist Module 5

This checklist covers the different steps required to create effective institutional arrangements for recovery. The list is not comprehensive, but provides an overview of the primary steps to be followed.

Lead Recovery Agency

- □ Set up and run different coordination mechanisms. Coordinate responsibility for recovery across the national government, local government, donor, civil society, and community levels.
- **L** Establish standard procedures for project approval, procurement, reporting, and contracts.
- Define reconstruction standards.
- □ Set up rapid procurement procedures.
- □ Support decentralized implementation of the recovery activities.
- □ Establish good internal communication among recovery partners. Discourage recovery actors from working in isolation.
- □ Raise awareness of recovery progress through effective public communication. Set clear and realistic goals to minimize unrealistic expectations, and provide a grievance redress to communities.
- □ Ensure transparency in all activities linked to the recovery program.
- □ Undertake monitoring and evaluation of the recovery projects.
- □ Propose mid-course corrections for improving recovery activities.

Endnotes

- 1 The coordination mechanisms are adapted from the draft National Disaster Recovery Framework, India, 2015.
- 2 T. Courchene, J. Martinez-Vazquez, C.E. McLure, Jr., and S.B. Webb, "Principles of Decentralization", in Achievements and Challenges of Fiscal Decentralization: Lessons from Mexico, Washington, DC: World Bank, 2000, 85, http://www1. worldbank.org/publicsector/LearningProgram/Decentralization/achievementsandchallengesTOC.pdf.
- 3 UNDP (United Nations Development Programme), Handbook on Planning, Monitoring and Evaluating for Development Results, NY: UNDP: 2009, http://web.undp.org/evaluation/handbook/documents/english/pme-handbook.pdf.
- 4 For the staffing needs, see section entitled "Staffing for Reconstruction".



MODULE 6. STRENGTHENING RECOVERY SYSTEMS IN NATIONAL AND LOCAL GOVERNMENTS

Strengthening recovery systems refers to enhancing governmental capacity to help a country and its people recover from disasters. In addition to strengthening recovery systems, national governments need to incorporate disaster risk management (DRM) in their development planning. Stengthening recovery systems requires defining institutional and financial systems before a disaster happens. Strengthening recovery systems will improve the links among readiness, recovery, and development processes; and ensure that all investment and development in a country is not wiped out when a disaster strikes.

Module 6 examines three specific areas in which governments can strengthen their recovery systems: assessments, recovery frameworks, and financial arrangements.

Develop Capacity to Implement Disaster Assessments

Before a disaster occurs, the government can identify a standard assessment tool to be used in case of a disaster. The tool could be a PDNA or similar assessment. By settling on the particular assessment and training people to use it in advance, when a disaster strikes, governments will be ready to immediately carry out assessments to establish reliable and comparable baseline data. Additionally, an agreed assessment tool would enable the production of data drawn from previous recovery experiences.

Prior agreement on the assessment tool also will improve their efficiency, accuracy, and ground applicability. One way these improvements will be achieved is by pre-designating the institution(s) or agency(ies) responsible for maintaining PDNA preparedness and conducting the assessments. This designated entity could be responsible for training through national and regional support centers. The training programs could simulate actual field conditions and provide examples of good practice and lessons learned related to assessments. Training also could be used as an opportunity to develop rapid assessment methodologies to speed up PDNAs. The time saved will leave more time to formulate recovery strategies during a disaster.

Res	Result 28. Assessment Tool (PDNA or Similar Tool) Defined Prior to a Disaster			
	Process	Output	Actors	
1	The government develops and standardizes an acceptable post-disaster assessment methodol- ogy (PDNA or similar tool) in advance.	Quantitative and qualitative baseline for damage and needs across sectors and administrative units	Lead Agency: National/Subnational focal point/line ministries/ local government depart- ments	
2	Government can strengthen capacity of nation- al and local government staff, private sector, academia, and civil society to conduct disaster assessments.	Strengthened capacity to conduct disaster assessments	Lead Agency: National/Subnational focal point/line ministries	
3	Government promotes national or regional centers of excellence for conducting disaster assessments.	Strengthened capacity of all levels and sectors to conduct disaster assessments	Lead Agency: National/Subnational focal point/line ministries	

Box 6.1 Post-Disaster Needs Assessment System and Recovery Planning in the Kyrgyz Republic

Despite a high frequency of natural disasters and emergency situations, the Kyrgyz Republic had no official procedures to assess disaster damage, loss, and recovery needs. Post-disaster recovery planning was not based on systematic needs assessments, with longer term disaster risk reduction (DRR) measures incorporated. The World Bank supported the country in institutionalizing post-disaster assessment and recovery planning.

Working with the National Platform for Disaster Risk Reduction, relevant line ministries and local governments, the government articulated a National Action Plan. It identified the actions required to improve the country's needs assessment structure and methodology and recovery planning standards and provisions. Training workshops, guidance manuals, and similar capacity measures were conducted to build expertise in needs assessment. The process was endorsed by and incorporated in the functioning of the highest levels of disaster management systems of the country. This institutionalization of a key aspect of recovery planning offered an avenue to incorporate DRR measures into reconstruction policies. Building Back Better (BBB) was prioritized in the training of needs assessment staff. The importance of BBB as an investment in future resilience—not just as an additional present cost—was underscored.

Preparing Recovery Frameworks Prior to a Disaster Improves Resilience

Putting the recovery framework in place prior to a disaster increases the likelihood that the gains from the recovery process will carry over into sustainable development. The framework will help bring consensus on issues that can be pre-defined among the multiple stakeholders involved in disaster response, freeing the lead agency to focus on implementation. Two areas that could be clarified prior to the disaster are (1) roles and responsibilities of all potential stakeholders in a recovery and (2) definition of coordination mechanisms. Previous modules showed that establishing roles and responsibilities and coordination mechanisms can be complex and time consuming. By having a draft organizational chart in place, implementers spend time on negotiating these issues.

Shared standards for reconstruction include those for construction and building codes. Many of these standards could be pre-defined and, in many instances, predefinition could be achieved prior to a disaster (Module 5). Standardizing certain implementation procedures and monitoring reports before a disaster also means that the lead agency and line ministries do not lose time on administrative matters during the recovery process.

Most important, by standardizing reporting tools, whether they are related to budgeting or monitoring and evaluation, ongoing advance training could be organized for people responsible for these areas. This training will enable them to be familiar with the tools ahead of the disaster, again leading to time saved and rapidity in setting up a disaster recovery framework.

Res	Result 29. Draft Disaster Recovery Framework Prior to a Disaster				
	Process	Output	Actors		
1	Government implements, reforms, and improves institutional and legislative recovery arrangements in advance of disasters.	National and decentralized multisectoral action plans	Lead Agency: National/Subnational focal point		
			Other: Line ministries/ local gov- ernment departments/ national technical agen- cies/ UN agencies		
2	Government establishes clear roles and responsibilities for all actors in a recovery setting. Stakeholders include national and local governments, private sector, academia, and civil society organizations, and communities.	National and decentralized inclusive multisectoral action plans	Lead Agency: National/Subnational focal point Other: Line ministries/ local gov- ernment departments		
3	Government strengthens capacity for recovery planning and monitoring at all levels (national, local, community); makes capacity building activities more open and available to all actors.	Recovery framework and policies at institutional and legislative levels/results moni- toring and evaluation plan for recovery program	Lead Agency: National/Subnational focal point Other: Line ministries/ local gov- ernment departments		
4	Government institutes special procedures for fast-track project procurement and implementation.	Fast-track project procure- ment and implementation procedures	Lead Agency: National/ Subnational governments		

Predictable Financial Financing

Governments need to explore practical ways to set aside funds for disaster recovery in their fiscal strategies to reduce the budget shock of natural disasters. When countries lack the financial capacity to respond immediately and effectively to a disaster, the human costs increase rapidly. Long-term development prospects suffer as the government diverts public funding from social and economic development programs to fill the recovery gaps. Reconstruction may be delayed or not take place at all due to a lack of resources.

Governments can take steps to reduce the negative financial effects of disasters in a way that protects both people and assets. Over the past two decades, policy makers increasingly began to recognize the benefits of pre-planning for the financial management of disasters.

Disaster risk finance helps countries better manage these shocks. Countries can increase their financial resilience against natural disasters by implementing sustainable and cost-effective financial protection strategies against climate and disaster risks. The objective is to ensure that national and local governments, businesses, and households can identify their risks from, and meet the costs of, disasters while minimizing the threats to development, fiscal stability, or wellbeing. Financial protection complements risk reduction and building resilience, and can mobilize investments in them.

Disaster risk finance strategies for governments (figure 6.1) look comprehensively at contingent liabilities or potential assets that are vulnerable to natural disasters. The strategies then combine different financial instruments to protect against possible losses in events of different frequency and severity. These diverse financial instruments can support governmental efforts to invest in enabling efficient risk markets, leveraging private sector capital and expertise through public private-partnerships, and promoting domestic disaster risk insurance markets.



Figure 6.1 Risk Layering of Disaster Risk Financing Options

Source: World Bank, GFDRR Disaster Risk Finance and Insurance Program, Washington, DC, 2015.

Developing a disaster financial protection strategy requires effective leadership by a country's Ministry of Finance. As a first step, the ministry should prioritize its key policy objectives and, ideally, identify in advance its post-disaster spending priorities. Next, officials would have to consider possible solutions and decide on the country's own ideal combination of financial tools.¹

International Financial Institutions Contingency Funding

International financial institutions (IFIs) can contribute significantly both technically and financially toward creating contingency disaster risk funding mechanisms in less developed countries. In more developed or transitional economies, IFIs can help set up advanced risk transfer mechanisms. The scope is huge for enhanced development cooperation and aid harmonization across IFIs and donors in the area of disaster risk financing.
Contingency Budgeting

As part of disaster risk finance strategies, when governments are identifying financial instruments to protect against losses, contingency funding mechanisms are an important one. A contingency instrument² could be the establishment of a tax or surcharge to be placed into a fund that can be drawn on when a disaster occurs. Another example is to put unused funds at the end of a budgetary year into a special budget specifically for disaster recovery. While the sources of the funds could differ, the primary aim is to have them in place before the disaster for a more rapid recovery.

Financial Management Mechanisms

There are two levels of financial mechanisms that could be established before a disaster. The first is to build the lead agency's capacity to receive large donor contributions. This mechanism consists of establishing draft agreements with potential donor governments and setting up mechanisms to receive and manage contributions. The second financial mechanism is internal to the country. It is the aid-tracking mechanism that enables the lead agency to manage, disburse, and account for funds with local implementers.

Disaster Risk Insurance

Disaster risk insurance aims to increase the financial response capacity of national and subnational governments to secure cost-effective access to adequate funding for emergency response, reconstruction, and recovery.³

Res	Result 30. Predictable Financial Management for Resilient Recovery			
	Process	Output	Actors	
1	Government develops disaster risk financing strategies that identify public and private finan- cial tools to deploy in the event of a disaster. Government adopts prior budget management and post-disaster budget execution mecha- nisms for natural disasters.	Framework for disaster risk financing.	Lead Agency: Ministry of finance Other: Line ministries/ local government departments	
2	Government uses comprehensive risk assess- ments to aid in budgetary planning and estab- lishment of contingency financing mechanisms in the case of a disaster.	Physical and quality control standards for reconstruction program inform budgetary planning	Lead Agency: National planning agency Other: Line ministries/ local government departments	
3	Government establishes agreements and mech- anisms to ensure coordination of donor recov- ery financing with government recovery plans.	Recovery action plan with detailed financing and coor- dination mechanism section	Lead Agency: National planning a gency/ designated recovery agency	

It includes agricultural insurance, property catastrophe risk insurance, and social protection.

Endnotes

- 1 Disaster Risk Finance to Build Financial Protection, GFDRR, World Bank, 2015.
- 2 Some are discussed in Module 4.
- 3 For additional details, see GFDRR's Disaster Risk Financing and Insurance (DRFI) Program, https://www.gfdrr.org/disaster-risk-financing-and-insurance.



COMMON BEST PRACTICES AND LESSONS IDENTIFIED IN COUNTRY CASE STUDIES

Every disaster is both an opportunity to salvage positive outcomes from a negative event and a source of guidance regarding possible responses to future disasters.

Not all countries recover from disasters in the same manner or to the same degree. Countries employ different policies, institutional arrangements, financing mechanisms, and implementation practices in their recoveries. Consequently, definitions, standards and results for what constitutes efficient, effective, and resilient recovery vary widely across countries.

Some of the key lessons and good practices emerging from the case studies conducted for this DRF guide can be applied only case by case. However, a number of general takeaways and commonalities can be drawn from these distinct recovery efforts. This chapter identifies lessons that are common to the various country case studies under this initiative.

Recap of Country Case Studies under the Recovery Framework Guide Initiative

The case studies conducted under the Recovery Guide Initiative were designed to collect and analyze information on:

- 1. Disaster recovery standards and principles adapted by countries for their specific disasters
- 2. Means adopted by countries to maximize the efficiency, fairness, and resilience of their recovery efforts.
- 3. Policies, institutions, and capacities put in place by countries to implement and monitor disaster recovery.
- 4. Means adopted by countries to translate the gains of resilient recovery plans into longer term risk reduction and resilient development.¹

Lessons Learned Provide Options for Policy Action on Recovery

The inability to fully capitalize on the opportunities provided by recovery to put in place disaster risk reduction (DRR) has left many countries more vulnerable to future shocks. In many cases, the inability to implement DRR during recovery has exacerbated existing developmental deficits due to technically inadequate and non-resilient reconstruction of infrastructure and other assets.²

Poorly planned disaster recovery does not meet social expectations, puts governance at risk, and could expose affected states and stakeholders to political instability. The analysis of the country cases in the DRF guide reveals that it is in the best interest of countries and stakeholder groups to be prepared to recover from disasters. The lessons gleaned from these case studies provide a roadmap for translating and institutionalizing these past experiences into future policy options. These lessons, in turn, can inform preparatory work to help guide future recovery efforts that also reduce disaster risk. Disaster-prone countries may need to adapt some of these lessons to fit their distinct national priorities and resource constraints.

Institutionalized Task-Specific Structures for Recovery.

- While all of the country cases studied have a track record of exposure to disaster risk, very few had institutionalized task-specific structures for recovery prior to the event.
- Laos, Mozambique, Turkey, and Yemen maintained pre-existing disaster management and recovery entities.
- Chile, Indonesia, the Maldives, Pakistan, Senegal, and Sri Lanka built such entities only in the wake of major disasters.
- Haiti maintained no such state structures prior to the 2010 earthquake, while China has traditionally relied on varying arrangements for local, provincial and central government disaster recovery in various past disasters.

Key Lessons from the Recovery Framework Case Studies

A priori institutionalization can help ensure effective disaster recovery. The necessity to be prepared for disaster recovery is a central lesson that permeates across all studies in this DRF. Being ready for a disaster helps maximize the chances of effective recovery.³ Identifying preexisting risks and vulnerabilities helps countries to put in place policies, standards, and institutional arrangements for managing recovery before disaster strikes.

The effectiveness and role of institutions tasked with disaster recovery planning and management are maximized if such entities are established prior to a major event. Moreover, through

institutionalizing recovery, countries and stakeholders will be able to maintain continuity from the humanitarian relief phase to reconstruction to longer term sustainable development across a range of possible post-disaster activities.

Efforts made in advance can formalize and predict at least some of the strategic and resource commitments that may be needed for recovery planning, implementation, and performance management. Planning for recovery can also mitigate against recurring challenges in sustaining national ownership and development cooperation, inherent in maintaining traction and momentum on recovery.⁴

Dedicated institutions with a legal mandate and wide credibility are usually a necessary prerequisite to successful recovery. Creating institutions to plan for or manage disasters is insufficient if these entities have no legal mandate to take the lead in responding to a major event. Credibility is critical also to manage conditions competing for a priority response in an environment in which resource scarcity and prioritization must be taken into account. The creation of specific institutions with coordinating humanitarian response, recovery, and reconstruction backed by strong vertical and horizontal political support is one crucial means of mitigating disaster. Because the leadership is clear, the mandated institution or institutions are able to focus on implementing the multiple, often competing, recovery objectives while creating an environment conducive to enable donors and other implementers to carry out their roles.⁵

Setting up Dedicated Recovery Institutions with a Legal Mandate and Credibility

- In 2014, after experiencing recurring floods, the government of Mozambique ratified the country's Disaster Management Law, with specific provisions for recovery.
- The 2005 earthquake in Pakistan illustrated both the need to maintain one dedicated disaster management institution—ERRA—and the legal structure to empower effective responses.
- Flooding in 2009 and tropical storms in 2011 mainstreamed disaster risk management into Laos' 7th Socio-Economic Development Plan 2011-2015 and led to the appointment of minister level representatives to the National Disaster Prevention and Control Committee (NDPCC) responsible inter alia for recovery. This has elevated the stature of the country's institutional apparatus for disaster recovery

Managing National Budgets and Multi-Donor Trust Funds.

- In the cases of Chile in 2010, China, Laos in 2011, Mozambique in 2013, and Yemen in 2008, budget allocation and reallocation provided immediate availability of resources to begin recovery in all sectors.
- Indonesia's experience with disaster recovery over the 2004-2010 period was to use a relatively balanced mixed budgeting, linking central government, NGO and international aid funds.
- Disaster events in Haiti, the Maldives, Pakistan, and Turkey were followed by responses that were heavily reliant on foreign donors, the World Bank and other institutions.
- The absence of effective financial oversight in Haiti may have resulted in duplication of effort and wastage of aid resources geared toward recovery.

Effective management of national budgeting and donor/multi-donor trust funds is critical to maintaining credibility with citizens and donors. Countries recovering from disaster will face very different resource constraints. When it comes to funding disaster relief and recovery and the ratio of national funds to foreign aid and donor funds, each country will vary. Whenever possible, relying on dedicated national funds over external aid is more sustainable in the long run.

However, in resource-scarce and fiscally constrained country cases, affected states would be well served by being institutionally ready to effectively manage external aid flows. In dealing with both national and foreign aid funds, countries are advised to maintain checks and balances to ensure the accurate and accountable use of all funds tied to recovery. To this end, ideally, the lead recovery agency or organization, the executive branch, and

the national legislative structures all would reinforce one another to ensure the effective management of all recovery funds.

Maintain operational transparency and accountability in any disaster response effort. Beyond creating effective institutions and effectively managing resources, disaster-affected countries would be

Maintaining Operational Transparency and Accountability in Disaster Response.

- In China, supervisory groups leading recovery efforts monitor and disclose project development and information on the receipt and use of funds.
- Chile's Presidential Compliance Management Unit is intended to both measure progress and manage compliance actions on recovery.
- For three years following the 2004 Tsunami, the Maldives adopted a participatory and partner-inclusive approach for assessing and reporting progress toward recovery.

wise to maintain maximum transparency. In other words, these countries are advised to report on the real world implementation of planned state responses to any disaster. Communicating transparently manages national and subnational expectations, supports effective strategic communication, sustains political stability, and reduces barriers to secure external aid and assistance should they be deemed in the national interest.

Ensuring Multi-Agency Inclusion while Avoiding Duplication.

- After the 2008 earthquake, China's Wenchuan Earthquake Restoration and Reconstruction Coordination Group was established to coordinate and communicate between government agencies at national and local levels.
- In Pakistan, the establishment of ERRA institutionalized multi-tier collaboration at the local, technical, and ministerial levels to engender ownership across a wide range of stakeholders.
- In Haiti, after 2010, no single participatory planning process existed at a national level, so NGOs and other executing agencies sought input from beneficiaries at the project level in order to meet urgent humanitarian needs

Ensure multi-agency and multi-tier inclusion while avoiding duplication of effort. Unifying recovery policy and implementation under one umbrella could generate optimal results. However a unified approach to disaster recovery should not come at the expense of maximizing the efforts of the other organizations and entities that are supporting the overall recovery effort.

These organizations may be stratified both horizontally and vertically, belong to ministries that do or do not have a history of interagency cooperation, and maintain a broad mix of discreet institutional priorities. These organizations also could exist both within and beyond the public sector. Examples of the latter case are NGOs, civil society groups, and private sector actors. Inclusion and coordination are favorable, but neither

should impede the overall recovery effort. The lead recovery agency should have the authority to put in place mechanisms to avoid duplication of effort and wasting scarce resources.

Implementation responsibilities should be delegated to subnational, or district and municipal levels as needed. An effective disaster response effort cannot be driven by central government priorities and focus alone. Affected states should take necessary action as close as possible to the impacted location to tailor the overall response to best meet the recovery objectives. Depending on the national and subnational country circumscriptions, recovery can be assisted by forming local, district or provincial reconstruction committees; and expanding the network of community-based organizations (CBOs). Different countries have grappled with very different levels of administrative and government centralization and decentralization. Thus, some countries may be better positioned to move quickly to enact local action in response to a major event.

Responsibilities Delegated to Sub-National Levels.

- Since 2010, Chile has developed a mixed approach of central financing and reliance on established assistance practices that asked provinces and municipalities to participate in recovery partnership that included local government, the private sector, and civil society groups.
- After the 2010 earthquake and in the absence of a robust central government, municipalities in Haiti often collaborated with NGOs and faith-based organizations on the ground while receiving resources on an ad hoc basis.
- In Pakistan, after the 2005 earthquake, the ERRA's tiered system provided individual programs at the local level with independent decision-making over which initiatives to implement.

Institutionalizing PDNA's.

- Many developing countries now have a history conducting PDNAs, including Haiti, Pakistan, Indonesia, Laos, the Maldives, Senegal, Sri Lanka, Turkey, and Yemen.
- Most countries that conduct PDNA do so intermittently and many do not conduct them in the wake of every major disaster event.

Institutionalize post-disaster needs assessment (PDNA) for future funding, coordination, tracking, and evaluation. Many countries affected by disasters have little to no experience conducting PDNAs. However, any set of assessments of real-world socioeconomic, demographic, infrastructural, governance, or service provision challenges identified after a disaster provide a de facto baseline.

Detailed assessments help inform recovery policies. The assessments then can be used as a vulnerability mapping exercise to assist future reconstruction projects as well as longer term developmental planning. The assessments may have uncovered key lessons on national resource shortfalls and estimates of levels of external assistance that may be required to respond effectively to a future large-scale event.

Transitioning from Disaster Recovery to Development.

• Because no cross-sectoral recovery framework was developed in Haiti in 2010, no schedule of recovery activities was defined within or across sectors, leading to uncertainty regarding the completion of recovery activities.

Set clear guidelines and milestones for transitioning from disaster recovery and reconstruction to a post-disaster development response. National agencies tasked with responding to a disaster event are essential. Nevertheless, clear and specific guidelines must be written into the legal mandate by which these agencies must transition out of the overall recovery effort in the post-disaster phase.

Doing so may require a clear transitional strategy and sunset clauses triggered by pre-determined milestones, institutional design, or both. In the former case, a pre-determined milestone could mean the achievement of a major recovery target set by a national government. In the latter case, the institution or agency in question may be authorized to provide only the initial impetus for the recovery. After that point, other state or subnational institutions, such as relevant line ministries, would take over.

Linking Disaster Recovery to Poverty Alleviation and Longer-term Development.

- As part of Building Back better, the 2005 earthquake recovery in Pakistan was taken as an opportunity to incorporate improvements in the educational sector and health care provision.
- In 2010, the earthquake in Haiti was seen as an opportunity to develop the country into what was labeled the "New Haiti" by the government. However it became apparent for aid agencies and the Haitian government that there was a gap between the initial phase of recovery and sustainable development.

Link post-disaster recovery to poverty alleviation and long-term development objectives. Governments should take advantage of recovery plans to include in them their national poverty alleviation and long-term development objectives. On one hand, doing so spans moving from emergency humanitarian relief to long-term sustainable development. On the other hand, including long-term development goals in the recovery plan means that a focus on livelihood generation, particularly for vulnerable groups, is a key means of sustaining the local economy. Injecting cash into the economy via cash grants

is a tried means of supporting livelihoods. Finally, a focus on improved access to services and service delivery could go hand in hand with the reconstruction of resilient infrastructure. The recovery plan could give sectors such as education, health, and water and sanitation attention equal to that given to transportation and housing reconstruction.

Endnotes

- 1 See DRF guide, vol. 2, Case Studies Preamble. "Resilient" includes the concept of "sustainable." See Glossary.
- 2 Drawn from work/case studies associated with the DRF guide.
- 3 See Glossary for a definition of "preparedness."
- 4 Refer to the section on Institutionalization of Recovery in National and Local Governance Systems.
- 5 Refer to the section on Institutionalization of Recovery in National and Local Governance Systems.



ANNEX 1: INTEGRATED RESULTS FRAMEWORK FOR RECOVERY PLANNING

The Integrated Results Framework for Recovery Planning aggregates and encapsulates the key results and outputs by each aspect of recovery framework. This results framework is a useful tool that can be utilized for monitoring the process of recovery planning in sequential or thematic manner. This tool also provides a quick look at the key results of successful recovery planning at relevant stages of progression to ensure timely actions.

Conducting Post-Disaster Damage and Needs Assessment

Results	Outputs
Broad and Consistent Policy Framework for Recovery Planning through the PDNA	Preliminary assessment reports Compilation and transmittal of damage and loss data to a central node Credible Disaster damage and needs assessment Quantitative and qualitative baseline for damage, loss, and needs across sectors and administrative divisions Results monitoring and evaluation plan for recovery program

Policy- and Strategy Setting for Recovery

Results	Outputs
A Recovery Vision Acceptable to All Stakeholders	Articulation of a recovery vision Setting up community meetings to build consensus for the recovery vision
All Stakeholders	Working out the sectoral, geographic, and functional details of recovery

Results	Outputs	
Provision of an Enabling Policy Framework to Achieve a Recovery Vision	Policy framework and guiding principles for recovery Consistent and equitable application of key cross-cutting operating principles Identification of primary sectors for inclusion in the recov- ery program	
Application of Policy Principles for Mutually Reinforcing Recovery Outcomes across Sectors	Programmatic recovery framework	
Ensure Equitable and Demand-Responsive Recovery across Affected Communities	Development of criteria for intersectoral prioritization and their programming and sequencing for recovery Objective, criteria-based resource allocation; annual ratio- nalization of recovery budget	
Sector-Level Recovery Programs are Developed in a Consultative and Inclusive Manner	Process to map key stakeholders Diverse consultation modalities Forums for wider consultative groups	

Institutional Framework for Recovery

Results	Outputs	
Continuity between Relief and Recovery	Maintenance of institutional knowledge from humanitarian response to recovery	
Assessment of Human Resource Capacity and Specialist Skills Required	Appropriate capacity assessments are conducted	
Mandate and Operational Modalities for Lead Recovery Agency	The most relevant institutional framework is chosen and developed to be central body behind which donors and partners align financing and efforts	
An Empowered Recovery Institution with Effective Leadership	Choosing the appropriate leader for an empowered recovery institution	
Institutions with Clear Purpose and Jurisdiction	Appropriate attention is given to all lost/damaged assets; focus is kept on recovery	
Ensuring Adequate Human Resources through- out Recovery Process	Employ necessary professional and technical human re- sources	
Recovery Program That Integrates Civil Society and Private Sector Participation	Mechanisms to include civil society, private sector, and expert associations in recovery	
Decentralized Implementation Guided by Centrally Established Policy and Coordination	Clear structures for setting recovery policy and implementation	
Well-Managed Integration of International Agencies and Development Partners	Institutionalizing role of international agencies and devel- opment partners; establishment of donor coordination forums	

Financing for Recovery

Results	Outputs
Adequate Financing for Recovery	Revised budgetary allocations focusing initially on post-disaster response and later on recovery
Functioning Financial Systems for Recovery	Financial system endorsed by the highest political level able to absorb inflows.
	Policy that strengthens and establishes effective modalities in PFM.
Strengthened Public Financial Management	Model to manage resources coming from bilateral and multilateral donors.
Adequate Monitoring & Evaluation	Establish procedures for sharing assessment data with implementing agencies. Identify means for monitoring and auditing transfers and use of funds.
Adequate Monitoring & Evaluation	Financial oversight mechanisms that enhance the confidence that recovery funds are being spent for the intended purposes.

Implementation Arrangements and Recovery Management

Results	Outputs	
Reconstruction standards applied to relevant projects	Recovery projects incorporate resilience to future disas- ters	
A Decentralized Implementation Process	Community-owned projects that meet real needs	
Efficient Central Oversight Mechanism That	Evaluation framework established early in recovery process, allowing for mid-course corrections and early partner buy-in	
Informs Mid-Term Review Process	Mid-term reviews of the recovery framework implemen- tation	
Fast, Efficient, and Transparent Procurement	Faster procurement with more reliable contractors	
Effective Internal Communication Between	Information easily shared between sectors and ministries	
Recovery Partners	Ongoing consultations between central government and communities.	
	Public communication campaign enables all actors to be aware of changes in the recovery program.	
Effective Public Communication	Communicate clear and realistic goals for recovery, mini- mizing unrealistic expectations.	
Transparency Resulting in Confidence Among all Recovery Stakeholders	More reliable results information available. Partners work together to produce information and analyze results.	



ANNEX 2: SECTOR RECOVERY PLANNING FROM THE NATIONAL DISASTER RECOVERY FRAMEWORK, INDIA

Below are select generalized steps and guidelines for various sector recovery plans detailed in the draft of the "National Disaster Recovery Framework, India". These key steps for medium-term recovery planning are applicable following completion of needs assessments and institutional framework design. Guidelines, are considerations to be kept in mind over the course of recovery implementation, and serve as a potential criteria to assess the success of recovery goals. Shelter, Education, and Water and Sanitation Recovery Plans are provided below as examples to illustrate the variance in steps and guidelines based on the different sector context. It is important that a recovery plan develops an appropriate list of steps and guidelines for each of the priority recovery sectors.

Shelter Recovery Planning

A reconstruction strategy for permanent shelter must be based on the Needs Assessment findings on shelter damage, capacity and needs. It must account for the availability of land, land tenure, building materials, provision of civic and community infrastructure, and risk reduction measures. Key steps and guidelines for reconstruction by sector, using the examples from the National Disaster Recovery Framework, India are described in the box below:

KEY STEPS IN MEDIUM-TERM RECOVERY SHELTER PLANNING

- i. A detailed Needs Assessment must be conducted to inform the shelter reconstruction strategy.
- ii. In cases of relocation, a viable site must be secured based on its hazard risk assessment, soil quality, hydrology, topography, geology, land security rights and environmental impact of construction on the site.
- iii. Provide financial assistance to beneficiaries for house construction.
- iv. **Provide technical assistance** to guide communities to select appropriate building material, optimally utilise available resources, to design culturally sensitive, disaster resilient and appropriate settlement plans and shelters that minimise construction's environmental impact.
- v. Train local masons and artisans in multi-hazard resistant and sustainable building techniques.

KEY STEPS IN MEDIUM-TERM RECOVERY SHELTER PLANNING (cont.)

- vi. **Promote and build special needs capacity of communities** for building shelter and provide community- based shelter support to people with special needs.
- vii. **Provide a range of shelter options** to suit the diverse needs that arise due to the scale and pattern of damage, rural and urban settings, large extended families, single-headed households, the lone elderly, safe and unsafe locations and on-site construction or relocation.
- viii. Provide all houses with sanitation facility, water supply and electricity supply, ideally through sustainable energy sources.
- ix. **Provide additional financial assistance** to beneficiaries for the associated additional costs to support incorporation of Disaster Risk Reduction features.
- x. Identify and provide access to alternative, affordable and environmentally sustainable building technologies and materials for repair and reconstruction.
- xi. **Promote local production of environmentally friendly materials** to provide new generators of local employment and livelihoods, and reduce the negative environmental impacts associated with construction. If done appropriately, these measures can reduce overall construction costs.
- xii. Support tax deduction on building materials, freezing costs and material banks for shelter reconstruction.
- xiii. **Promote Technology Demonstration Projects** as an effective mean to show the communities the advantages of using appropriate technology construction and means of incorporating disaster resilient features in a building.
- xiv. **Create a shelter planning hub** per two or three local community-level units that is managed by an engineer and two social facilitators with the following responsibilities:
 - To organize training programs for local community-level engineers and masons
 - To act as the bridge between the district officials and the beneficiaries
 - To monitor the reconstruction program and manage the flow of information.
- xv. **Set up a Support Unit** for Space division multiple access (SDMA) in districts as required managed by the District Project Officer with the following responsibilities:
 - To develop and maintain the database and flow of information at the district level
 - To support the district administration in the project management, which includes reporting, communication and grievance redress.

KEY STEPS IN MEDIUM-TERM RECOVERY SHELTER PLANNING (cont.)

- xvi. **Appoint adequate site engineers,** social workers, master craftsmen, construction supervisors at the local community level.
- xvii. Coordinate with implementing partners, assess capacities of local building material producers & markets.
- xviii.Identify national building regulations in recovery shelter and review building codes and enforcement.
- xix. **Set shelter reconstruction standards** in accordance to National and State building codes, previous recovery programs and Sphere Standards (Refer 'Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response').
- xx. Prepare local community level plans in consultation with the community.

GUIDELINES IN MEDIUM-TERM RECOVERY SHELTER PLANNING

Site Selection

- Communities must be involved in risk mapping, decision-making concerning rebuilding in-situ or relocation.
- The trade-off between livelihoods and relocation to a safer site must be balanced carefully.
- Access to appropriate livelihood opportunities, adequate medical and public health services, safe and affordable food, drinking water, affordable basic utility services must be ensured.
- Impact of new settlement construction on surroundings must be evaluated before construction.
- The distance between relocated settlements and former homes should be minimized to allow communities to maintain social networks and livelihood.

Settlement Planning

- Consideration must be given to original community settlement patterns and proximity to communities' livelihood options.
- Settlements should be protected from immediate hazards.
- Pre-disaster built environments must be rehabilitated or reconstructed, in cases where it is possible.
- An integrated approach in design and implementation must be adopted in reconstruction. Shelter recovery designs should link with other basic survival needs such as: water and sanitation, health and livelihood. Implementation should converge central with state government programs to create an overall sustainable habitat development.

House Design

- Communities' cultural, social and livelihood needs must be reflected.
- Women participation in design stages must be encouraged.
- Design must allow for future incremental growth for adapting to increase in family sizes and changing needs.
- Communities should be able to introduce their design features in the chosen design.
- Social mobilisation must be prioritised to ensure complete community ownership, cultural appropriateness and an understanding of structurally safe multi-hazard resistant technical features.

Building Materials

- Locally available materials that are cost-effective and environmentally friendly must be used.
- Good quality building materials should be selected.
- Recycling and productive use of construction materials extracted from the debris or rubble after the disaster must be taken into consideration.
- Local production of sustainable building materials should not be overlooked.

Construction Technologies

- Sustainable construction technologies must be promoted which are climate, culturally and socially appropriate, affordable, use local materials or encourage local production of sustainable materials that minimise constructions' negative environmental impact.
- Disaster resilient technology must be adopted. All construction should follow a resilient building code standard, regardless of whether the local building bylaws incorporate them or not.
- Compliance of housing construction with Local, State and National building codes must be ensured.

Education Recovery Planning

Following a disaster event, children in large numbers are excluded from schooling and many do not get an opportunity to return. Further, past experiences have shown that the education sector is among the hardest hit along with other sectors post-disaster. Most schools lack minimum standards and measures to protect students and teachers from any natural or human made hazard. Recovery activities in education revolve around a child's right to uninterrupted continuous education, right for safe environment and DRR.

KEY STEPS IN MEDIUM-TERM RECOVERY IN EDUCATION

- i. **Carry out repairs, maintenance and upgrading of damaged schools** to at least pre-disaster levels, and utilize Building Back Better improvements based on sound risk assessment wherever possible.
- ii. **Provide support in rebuilding damaged infrastructure** at all levels: schools, colleges, and technical institutes through grants, soft loans, and/or public private partnerships (PPP).
- iii. Facilitate capacity building programs for safer school design and construction targeted at academia, professional associations, line department, and licensing bodies. Ensure that architect, engineers and builders correctly apply appropriate codes and construction techniques.
- iv. Ensure incorporation of Hyogo Framework for Action (HFA) guidelines into safe school construction standards.
- v. Ensure provision of water supply and sanitation facilities in all schools.
- vi. Relocate schools in highly-hazard prone areas to safer sites.
- vii. **Conduct risk assessments** (hazard, vulnerability, and capacity) to inform long-term action.
- viii. Provide financial assistance/grant aid to reconstruct and rehabilitate public schools.
- ix. Provide soft-term credit for reconstruction of damaged private schools, where appropriate.
- x. Visit children's homes to **bring back the drop outs** and **provide additional coaching** to affected students.
- xi. **Reschedule any standardized or level qualification examination dates** to affected students so that they have the opportunity to advance with their national cohort level.
- xii. Identify, assess, and monitor disaster risks in the education sector.
- xiii. Build a culture of safety through Disaster Risk Reduction (DRR) education.
- xiv. Reduce the underlying risk factors to identified risks in the education sector.
- xv. **Impart training and mock drills** to school children, teachers, university students etc., in emergency evacuation, emergency first aid and handling fire safety equipment.
- xvi. Build capacity of affected people through community-based education in emergencies and DRR.

GUIDELINES FOR RECOVERY IN EDUCATION

- Specifications of school reconstruction should comply with national, state, and local building codes.
- Involve key and relevant partners, which can provide a positive synergy to recovery in education.
- New school buildings constructed must be multi-hazard resistant and comply with structural specifications

KEY STEPS IN MEDIUM-TERM RECOVERY IN WATER AND SANITATION

- i. **Carry out repair, maintenance and upgrading of damaged systems** to at least pre-disaster levels, and utilize Building Back Better improvements based on sound risk assessment wherever possible.
- ii. **Provide appropriate drainage facilities** so that dwelling areas and water distribution points are kept free of standing wastewater, and that storm water drains are kept clear
- iii. Use sustainable construction materials and technologies appropriate to the local context.
- iv. **Involve affected groups** in decision making as a component of Disaster Risk Reduction.
- v. **Form Water and Sanitation (WATSAN) committees** with at least 50% representation by women to ensure representation of women's concerns, proper management, and to promote sustainability of the facility.
- vi. **Promote hygiene education** through awareness building and training campaigns in communities, universities, and schools.
- vii. **Strengthen WATSAN Committees' capacity to handle** operation, maintenance, and management of water supply and sanitation systems.

GUIDELINES FOR RECOVERY IN WATER AND SANITATION

- Food security, malnutrition, health status and special needs of communities need to be taken considered while planning interventions.
- Protect toilets and sewers from flooding in order to avoid structural damage and leakage.
- Prevent contamination of water sources by wastewater from washing and bathing areas.
- Plan, build, and maintain water point drainage to ensure that mosquitoes do not breed in areas close to dwellings.
- Seek an equitable participation of women and men in planning, decision-making, and local management to help ensure that the entire affected population has safe and easy access to water supply and sanitation services.

GLOSSARY

ADAPTATION:

The adjustment in natural or human systems in response to actual or expected climatic or other stimuli or their effects, which moderates harm or exploits beneficial opportunities.

AUDIT:

An official examination and verification of accounts and records to analyze the legality and regularity of project expenditures and income, in accordance with laws, regulations, and contracts, such as loan contracts and accounting rules. Also may analyze the efficient and effective use of funds.

BASELINE DATA:

Initial information collected during an assessment, including facts, numbers, and descriptions. This information will permit comparison with the situation that existed before the disaster and measurement of the impact of the project implemented.

BASIC NEEDS:

The items that people need to survive. They can include safe access to essential goods and services such as food, water, shelter, clothing, healthcare, sanitation, and education.

BUILD BACK BETTER (BBB):

Approach to reconstruction to reduce vulnerability and improve living conditions, while promoting a more effective and sustainable reconstruction. BBB uses the opportunity of having to rebuild to examine the suitability of reconstructing in the same location and making a home warmer, drier, and cheaper to run.

BUILDING CODE:

A set of ordinances or regulations and associated standards intended to control aspects of the design, constructions, materials, alteration and occupancy of structures that are necessary to ensure human safety and welfare, including resistance to collapse and damage.

CASH TRANSFERS:

Direct payments or vouchers to provide resources to affected populations.

CAPACITY:

The combination of all physical, institutional, social, and/ or economic strengths, attributes, and resources available within a community, society, or organization that can be used to achieve agreed goals. Also includes collective attributes such as leadership and management.

CAPACITY BUILDING:

process by which individuals, groups, and organizations build their knowledge, abilities, relationships, and values to solve problems and achieve development objectives. The impacts of capacity building thus may be seen at different scales——individual, households, communities, and governments.

CLIMATE CHANGE RESILIENCE:

The ability to resist, absorb, adapt to, and recover from meteorological changes attributed directly or indirectly to human activities that alter the composition of the global atmosphere or the natural climate variability. See also "Resilience."

COMMUNITY:

A social group of any size whose members reside in a specific locality, share government, and often have a common cultural and historical heritage.

COMMUNITY CONTRACTING:

Procurement by or on behalf of a community. While there are many different models of community contracting, a common feature is that they seek to give the community degrees of control over investment and implementation, to encourage ownership and sustainability.

COMPLEMENTARITIES:

Complementarities refer to a situation where two or more factors increase each other's effects on performance.

CONSEQUENCES:

Outcomes of an event, such as a landslide hazard. Depend on the exposure and vulnerability of the elements at risk, such as human beings, houses, and infrastructure.

CORRUPTION:

Misuse of an entrusted position for private gain by using bribery, extortion, fraud, deception, collusion, and moneylaundering. Includes gains accruing to a person's family members, political party, or institution in which the person has an interest.

DIRECT COSTS (OR DAMAGE):

Reconstruction costs incurred by total or partial destruction of physical assets existing in the affected area. Damage occurs during and immediately after the disaster and is measured in physical units. Its monetary value is expressed in terms of replacement costs according to prices prevailing just before the event.

DISASTER:

A situation or event that overwhelms local capacity, necessitating a request to a national or an international level for external assistance; an unforeseen and often sudden event that causes great damage, destruction, and human suffering.

DISASTER RISK MANAGEMENT (DRM):

Systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies, and improved coping capacities to lessen the adverse impacts of hazards and the possibility of disaster.

DISASTER RISK REDUCTION (DRR):

Concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters. Results of DRR include reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness.

EARLY WARNING SYSTEM:

The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities, and organizations threatened by a hazard to prepare and to act appropriately; and in sufficient time to reduce the possibility of harm to or loss of life or livelihoods, injury, damage to property, and damage to the environment. A people-centered early warning system comprises four key elements. They are (a) knowing the risks; (b) monitoring, analyzing, and forecasting the hazards; (c) communicating or disseminating alerts and warnings; and (d) developing the local capacities to respond to the warnings. The term "endto-end warning systems" is used to emphasize that warning systems need to span all steps from detecting hazards to the community's response.

EFFICIENT RECOVERY:

Stabilizing lives and livelihoods to return to normal; and rapidly restoring critical social, physical, and productive infrastructure and service delivery.

EFFECTIVE RECOVERY:

Achieving the intended outcomes of medium- to long-term recovery such as the rehabilitation and reconstruction of damaged infrastructure and the re-creation of sustainable livelihoods and income-generating opportunities.

EMPOWERMENT:

Authority given to an institution, organization, or individual to determine policy and make decisions.

ENABLING ENVIRONMENT:

The rules and regulations, both national and local, which provide a supportive environment for a specific activity, such as community participation or DRM, to take place.

EQUITY:

Quality of being impartial and "fair" in the distribution of development benefits and costs and the provision of access of opportunities for all.

EX-POST MEASURES:

Actions taken after a disaster has occurred to seek to mitigate or repair all damages caused by the disaster.

EXPOSURE:

People, property, systems, or other elements present in hazard zones that thereby are subject to potential losses.

EXTENSIVE RISK:

Widespread risk associated with the exposure of dispersed populations to repeated or persistent hazard conditions of low or moderate intensity, often of a localized nature. Such persisting exposure can have debilitating cumulative disaster impacts. This type of risk is a characteristic primarily of rural areas and urban margins. See also "Risk" and "Intensive risk."

FLOOD:

General and temporary condition of partial or complete inundation of normally dry land areas from (a) the overflow of inland or tidal waters, (b) the unusual and rapid accumulation or runoff of surface waters from any source, or (c) mudflows or the sudden collapse inland of shoreline.

FLOOD FORECASTING:

Use of real-time precipitation and streamflow data in rainfallrunoff and streamflow routing models to forecast flow rates and water levels from a few hours to days ahead, depending on the size of the watershed or river basin.

FORECAST:

Definite statement or statistical estimate of the likely occurrence of a future event or conditions for a specific area.

FUNGIBILITY:

Property of a good or a commodity whose individual units are capable of mutual substitution.

GREEN GROWTH:

Growth that is efficient in its use of natural resources; clean in that it minimizes pollution and environmental impacts; and resilient in that it takes into account natural hazards and the role of environmental management and natural capital in preventing physical disasters.

HAZARD:

Natural process or phenomenon or human activity that has the potential to cause property damage, loss of livelihoods and services, social and economic disruption, and/or environmental degradation.

HOUSING:

Immediate physical environment, including inside and outside of buildings, in which families and households live and so serves as a shelter.

HOUSING-SECTOR ASSESSMENT:

Assessment that collects data including demographic, housing types, housing tenure status, settlement patterns before and after the disaster, government interventions in the housing sector, infrastructure access, construction capacity, and market capacity to provide materials and labor for reconstruction.

HUMANITARIAN RELIEF:

Process that seeks to lead to sustainable development opportunities by generating self-sustaining processes for postdisaster recovery. Humanitarian relief encompasses livelihoods, shelter, governance, environment, and social dimensions, including the reintegration of displaced populations. It also addresses the underlying risks that contributed to the crisis.

INFRASTRUCTURE:

Systems and networks by which public services are delivered. These services include water supply and sanitation, energy, and other utility networks, and transportation networks for all forms of travel.

INTENSIVE RISK:

Risk associated with the exposure of large concentrations of people and economic activities to intense hazard events that can lead to potentially catastrophic disaster impacts involving high mortality and asset loss. A characteristic primarily of large cities or densely populated areas that not only are exposed to intense hazards but also have high levels of vulnerability to them. See also "Risk" and "Extensive risk."

KEY PERFORMANCE INDICATORS (KPIS):

Quantitative and qualitative measures of project outputs and outcomes used to evaluate the progress of success of the project.

LIVELIHOODS:

The ways in which people earn access to the resources that they need, individually and communally, including food, water, clothing, and shelter.

LOSSES:

Include the decline in output in productive sectors and the lower revenues and higher operational costs in the provision of services. Also considered losses are the unexpected expenditures to meet emergency needs. Losses are expressed in current values.

LOSS ASSESSMENT:

An assessment that analyzes the changes in economic flows that occur after a disaster and over time, valued at current prices.

MITIGATE/MITIGATION:

The use of reasonable care and diligence to minimize damage; to take protective action to avoid additional injury or loss; to lessen or limit the adverse impact of hazards and disasters.

MONITORING:

Ongoing task of collecting and reviewing program-related information that pertains to the program's goals, objectives, and activities.

NEEDS ASSESSMENT:

Process for estimating (usually based on a damage assessment) the financial, technical, and human resources needed to implement the agreed program of recovery, reconstruction, and risk management.

NODE:

The central Location for staff and materials during a disaster event.

NONSTRUCTURAL MEASURE:

Any measure not involving physical construction that uses knowledge, practice or agreement to reduce risks and impacts, particularly through policies and laws, public awareness-raising, training, and education. See also "Structural measures."

OFF-BUDGET FINANCING:

Could not be managed directly by the national government or is not comprised in its budget.

ON-BUDGET FINANCING:

Within the national government's control, including Own Source Revenue (OSR) as well as external funding and loans.

PARTNERS:

Donor community or any group or individual taking part and sharing the responsibility of the reconstruction and recovery process. In contrast, see "Stakeholders.

PHYSICAL PLANNING:

Design exercise based on a land use plan to propose optimal infrastructure for public services, transport, economic activities, recreation, and environmental protection for a settlement or area. A physical plan can have rural and urban components.

POLICY:

Principle or protocol to guide decisions and achieve rational outcomes.

POST-DISASTER NEEDS ASSESSMENT (PDNA):

A multisectoral assessment that measures the impact of disasters on the society, economy, and environment of the disaster-affected area.

PREPAREDNESS:

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

PREVENTION:

To avoid and minimize the adverse impact of related environmental, technological, and biological disasters by raising public awareness and providing education related to disaster risk reduction, changing attitudes and behavior.

PRIOR MEASURES (EX-ANTE):

Actions taken in advance of a disaster in the expectation that they will either prevent or significantly reduce the impacts of a possible disaster.

PROJECT OUTPUTS:

Results of a project that are measurable at the immediate point of project completion.

PRELIMINARY ASSESSMENT:

Assessment that provides immediate information on needs, possible interventions, and resource requirements. May be conducted as a multisectoral assessment or in a single sector or location.

RECONSTRUCTION:

Focuses primarily on the construction or replacement of damaged physical structures, and the restoration of local services and infrastructure.

RECOVERY:

Decisions and actions taken after a disaster to restore or improve the pre-disaster living conditions of the affected communities while encouraging and facilitating necessary adjustments to reduce disaster risk. Focuses not only on physical reconstruction but also on revitalization of the economy and the restoration of social and cultural life.

RECOVERY FRAMEWORK:

Pragmatic, sequenced, prioritized, programmatic, yet living (and flexible) action plan that ensures resilient recovery after a disaster.

RELIEF:

Provision of assistance or intervention immediately after a disaster to meet the life preservation and basic subsistence needs of the persons affected.

RELOCATION:

Process whereby a community's housing assets and public infrastructure are rebuilt in another location.

RESIDUAL RISK:

The risk that remains in unmanaged form, even when effective disaster risk reduction measures are in place, and for which emergency response and recovery capacities must be maintained. The presence of residual risk implies a continuing need to develop and support effective capacities for emergency services, preparedness, response, and recovery together with socioeconomic policies such as safety nets and risk transfer mechanisms.

RESILIENCE:

The ability of a system, community, or society exposed to hazards to resist, absorb, accommodate, and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential structures and functions. Resilience is determined by the degree to which the community has the necessary resources and is capable of organizing itself both prior to and during times of need.

RESILIENT RECOVERY:

Builds resilience during recovery and promotes resilience in regular development. Resilient recovery is a means to sustainable development. See also "Resilience," "Recovery," "Disaster risk management," and "Disaster risk reduction."

RESPONSE:

The provision of emergency services and public assistance during or immediately after a disaster to save lives, reduce health impacts, ensure public safety, and meet the basic subsistence needs of the people affected. See also "Humanitarian relief."

RIGHT-SITING:

Facilities are rebuilt in areas that are less prone to disasters and accessible to the community.

RIGHT-SIZING:

Rebuilding facilities such that they adequately respond to the existing demand; for example, if classes are crowded, more classes could be built.

RISK:

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

RISK TRANSFER:

Process of formally or informally shifting the financial consequences of particular risks from one party to another. In this transaction, one party (household, community, enterprise, or state authority) will obtain post-disaster resources from another party in exchange for ongoing or compensatory social or financial benefits.

SCOPING:

Investigation or discussion to determine the effect that a proposed policy or project would have on a community or the environment.

STAKEHOLDERS:

Groups who have any direct or indirect interest in the recovery interventions, or who can affect or be affected by the implementation and outcomes. Term includes groups undertaking, managing, reporting on, affected by, promoting, and funding the interventions. Stakeholders include vulnerable segments of the population, local governments that are in direct dialogue with communities.

STRUCTURAL MEASURE:

Any physical construction to reduce or avoid possible impacts of hazards, or application of engineering techniques to achieve hazard-resistance and resilience in structures or systems. See also "Nonstructural measures."

SUBSIDIARITY:

Principle by which matters ought to be handled by the smallest, lowest or least centralized competent authority.

SUSTAINABLE DEVELOPMENT:

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. This 1987 Brundtland Commission definition does not address questions regarding the meaning of the word "development" and the social, economic, and environmental processes involved. Disaster risk is associated with unsustainable elements of development such as environmental degradation. Conversely, disaster risk reduction can contribute to sustainable development by reducing losses and improving development practices.

TARGETING:

Identification and recruitment by local communities, government, or external agencies of potential assistance recipients.

VULNERABILITY:

Characteristics and circumstances of a community, system, or asset that make it susceptible to the damaging effects of a hazard.

VULNERABLE GROUPS:

Groups or members of groups who are particularly exposed to the impacts of hazards. Examples are displaced persons, women, the elderly, the disabled, orphans, and any group subject to discrimination.

WATERSHED:

Area of land from which all of the water under it or on it drains to the same place, which may be a river, lake, reservoir, estuary, wetland, sea, or ocean.

Note: Definitions in the glossary, where applicable, are based on the 2009 UNISDR Terminology on Disaster Risk Reduction.

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