







ASEAN Disaster Recovery Reference Guide



FOREWORD

The ASEAN region is one of the most dynamic and fastest growing regions in the world, with a combined GDP of US\$ 2.57 trillion. The region has witnessed some of the most devastating disaster events in recent years including the Indian Ocean Tsunami, 2004; Yogyakarta Earthquake, 2006; Cyclone Nargis, 2008; Thailand Floods, 2011; Cyclone Haiyan, 2013 and Bagan Earthquake, 2016. Despite such adversities, the spirit to make ASEAN a dynamic, resilient and cohesive regional association through the ASEAN Socio-Cultural Community is stronger than ever before. The ASEAN Member States are committed to implement the ASEAN Agreement on Disaster Management and Emergency Response (AADMER), with the vision of building disaster resilient nations and safer communities.

Since the adoption of the AADMER work programme in July 2005, the ASEAN Member States have established strong regional cooperation to minimize disaster losses and respond collectively to disasters in the region. Priorities under the second phase of the AADMER work programme (2013-15) have contributed to the enhancement of an ASEAN mechanism for joint response, enabling policies and enhancing capacities to respond to disasters and help communities recover. These commitments are also embraced in the recently signed ASEAN Declaration at the ASEAN Summit in Vientiane on ONE ASEAN, ONE RESPONSE: ASEAN Responding to Disasters as One in The Region and Outside The Region.

Within the framework of the AADMER, the recovery component aims to prepare Member States for recovery by proactive planning and capacity building for more effective and resilient recovery. As a first step, the Governments of Myanmar and Indonesia as the co-chairs of ASEAN Committee on Disaster Management (ACDM) Working Group on Recovery; together with the Governments of Brunei Darussalam, Thailand, Lao PDR and the Philippines; and with support from the ASEAN Secretariat, the AHA Center and the United Nations Development Programme

(UNDP), developed the **ASEAN Disaster Recovery Reference Guide (ADRRG)**. The guide was developed through extensive consultations with key stakeholder agencies working on recovery in the ASEAN region.

Preparedness for Recovery is now a widely accepted concept that helps countries to plan ahead of the disaster so that recovery and reconstruction assistance is predictable and can be implemented without delay when needed. The ASEAN member states have adequate experience in disaster response and recovery. These experiences can be used to standardize procedures and arrangements for management of recovery. The ADRRG uses the experiences and best practices of recovery from the ASEAN countries to provide guidance on five key components: 1) Policies and Planning for Recovery; 2) Establishing the Institutional Framework for Recovery; 3) Post Disaster Assessments; 4) Resource Mobilisation and Financial Management for Recovery; and 5) Implementation, Coordination, Communications and Monitoring for Recovery. The reference guide aims to "improve the social and economic outcomes of disaster recovery programmes in the Member States". In particular, it emphasizes that preparedness for recovery is an opportunity to build disaster resilience and contribute to sustainable development.

The ADRRG was endorsed by the ASEAN Committee on Disaster Management in April 2016 and contributes to Priority Area 7 on Recovery under the current AADMER work programme (2016-2020).

On behalf of the ACDM Working Group on Recovery, we would like to thank the United Nations Development Programme for its technical assistance and generous support to develop the ADRRG and the case studies to promote resilient recovery of communities in the region.

TABLE OF CONTENTS

Forew	vord	3
A Gui	de to Recovery Planning and Preparedness	7
Disast	er losses and risk reduction in ASEAN	8
ASEA	N Commitment to Disaster Risk Reduction	10
Under	rstanding Resilient Recovery	12
A com	nmon vision of well-managed recovery in ASEAN	15
Prepa	redness for Recovery	17
1.	Policies and Planning for Recovery	19
	1.1 Develop Recovery Policies1.2 Identify Recovery Outcomes1.3 Prepare Recovery Programmes	19 19 21
2.	Establishing the Institutional Framework for Recovery	23
	2.1 Organise the Institutional Arrangements for Recovery2.2 Decentralize Recovery	23 31
3.	Post Disaster Assessments	39
	3.1 Understand Assessments3.2 Prepare for assessments3.3 Conduct Assessments	39 42 44
4.	Resource Mobilisation and Financial Management for Recovery	49
	 4.1 Define the Recovery Financing Approach 4.2 Mobilise Funding Sources for Recovery 4.3 Prepare Financial Arrangements for Recovery 4.4 Manage Finances during Implementation 4.5 Promote Aid Effectiveness 	49 49 56 58 59

5.	Implementation, Coordination, Communications and Monitoring for Recovery	61
	5.1 Implement Recovery	61
	5.2 Participation and Self-Recovery as central tenets of Implementation	62
	5.3 Coordinate Recovery	63
	5.4 Communications and Information Management	67
	5.5 Monitoring Recovery	68
	5.6 Evaluate Recovery Projects and Programmes	69
	5.7 Establish high standards for Accountability and Transparency	73
Anne	xes	
Aı	nnex I: AADMER Work Programme, 2010-2015 on Recovery	79
Aı	nnex II: Concept Note Six: ASEAN Disaster Recovery Toolbox	81
Aı	nnex III: National Disaster Recovery Frameworks: Indonesia, Laos PDR and Myanmar	83
Aı	nnex IV: ASEAN Member States Institutional Arrangements for Recovery	88
Aı	nnex V: Characteristics of Good Recovery with Performance Indicators	90
Aı	nnex VI Special Focus: Relocation and Access to Land in Post disaster Recovery	92
Gloss	ary	96
Acror	nyms and abbreviations	102
Biblio	graphy	104



A GUIDE TO RECOVERY PLANNING AND PREPAREDNESS

The ASEAN Disaster Recovery Reference Guide (the Guide) aims to help the ASEAN Member States prepare for recovery; and deliver timely, efficient and effective recovery programmes.

The goal of the Guide is to improve the social and economic outcomes of disaster recovery programmes in the Member States. In particular, it aims to ensure that recovery improves disaster resilience and contributes to sustainable development.

The Guide helps governments to prepare for disaster recovery by explaining the provisions that should be in place beforehand including those related to legislation, policies, financial arrangements, implementation, monitoring and so on. These arrangements can be adapted to the specific post disaster recovery context, recognizing that disasters differ in scale and impact.

Preparedness for recovery means that stakeholders can collaborate to prepare recovery approaches that can be applied effectively when a disaster occurs. Preparation also provides an opportunity to incorporate replicable good practices from the other ASEAN Member States.

Together, preparation, execution, and monitoring have great potential to produce more efficient recovery operations and more resilient recovery outcomes.

How the Guide serves the Member States

The Guide provides a framework for the Member States to strengthen their recovery planning and management capacities before a disaster occurs.

The Guide:

- **Explains** key elements of disaster recovery arrangements;
- Identifies the types of interventions needed for participatory and sustainable recovery;

- Proposes key principles and approaches for effective disaster recovery including reducing future risks; and
- Showcases examples of recovery practices from the ASEAN region that could be replicated and scaled up.

The Guide can be used by the ASEAN Member States individually to:

- Improve readiness for disaster recovery;
- Increase the efficiency of recovery implementation; and
- Identify capacity gaps and needs for institutional strengthening.

Effective and efficient recovery is also a regional concern. The Guide will contribute to continuous improvement of recovery programmes in the ASEAN region. ASEAN Member States can use the Guide collectively to:

- Establish a shared vision of "good recovery" and a commitment to continuous improvement of recovery practices;
- Define benchmarks and indicators that can be used to monitor and improve recovery performance regionally;
- Encourage further sharing of lessons learned and good recovery practices; and
- Identify and reinforce critical recovery management capacities through training at the regional level.

Future updates to the Guide

The publication of the Guide represents an important step in an ongoing process to confront the risks associated with disasters and climate change and to ensure that each ASEAN Member State prepares for disasters and manages recovery well.

It also represents a commitment among the Member States to continue the quest to become a resilient region, with the capability of organizing recovery programmes that reduce risk and advance regional development goals.

This commitment will be exercised through the preparation and sharing of case studies, and updates to the Guide as more recovery experience—including more experience with recovery readiness—is gained.

DISASTER LOSSES AND RISK REDUCTION IN ASEAN

The ASEAN Member States are exposed to a wide range of natural hazards. Earthquakes, floods, tropical cyclones (typhoons), and drought all affect the region. More than 100 million people in the ASEAN countries have been affected by disasters since 2000.¹

Natural hazards and their effects are transboundary by nature, which puts the ASEAN region in a unique position to confront the development challenges presented by these phenomena. For instance, the Pacific "Ring of Fire" is one of the most seismically active zones in the world, crossing national boundaries and threatening huge numbers of people in countries across the ASEAN region. The Great Sumatran Fault crosses 12 countries from Southeast Asia to East Africa. It generated a 9.3 magnitude earthquake and the Indian Ocean tsunami that killed over 230,000 people in 2004.²

Typhoons and floods too can produce physical and economic impacts across borders. In 2014, Typhoon Kalmaeki affected Viet Nam, the Philippines, and China. The Mekong River, the longest in Southeast Asia, flows through several countries including Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam, and has the potential to cause floods in more than one country at a time. In 1996, flooding of the Mekong River damaged about 28,000 hectares of cropped land in Lao PDR and caused considerable damage to its agriculture, irrigation system, and other infrastructure. In Cambodia, more than 450,000

hectares were affected, while the flood caused heavy casualties in the lower Delta area in Viet Nam.³

Even droughts have a cross-border impact. In the same Mekong Delta, water levels in the lower Mekong are now at their lowest since records began, as a consequence of the El Niño phenomenon in 2015-16.⁴ The countries along the lower course account for 13 per cent of the global rice output and around 25 per cent of the world's freshwater fish comes from the river. The severe drought is damaging agricultural production and undermining food security. Additionally, haze from El Niño-related forest fires in Sumatra and Kalimantan in Indonesia has caused health concerns in Malaysia, Singapore, Brunei, Thailand, Viet Nam, Cambodia, and the Philippines. The Government of Indonesia estimates a cost of US\$47 billion to mitigate the haze.⁵

Disasters affect regional economic growth and make commitments to poverty reduction and shared prosperity harder to fulfil. Annual Expected Losses (AEL) from disasters in the region exceed US\$4.4 billion, greater than 0.2 per cent of the regional gross domestic product. AELs for Myanmar, the Philippines, Viet Nam, Lao PDR, and Cambodia are particularly high, at 0.7 per cent or more of GDP. The region's AEL represents nearly three per cent of actual world losses for the 2003-2012 period.⁶

The exposure and vulnerability levels of Member States vary considerably.⁷ Yet, all are committed to disaster risk reduction and have invested heavily in risk assessment, preparedness, and mitigation.

Figure I, compares Annual Expected Losses (AELs) in US dollars and as a share of GNP for ASEAN countries. Even when the absolute value of AELs is low, the impact relative to GDP can be significant due to variations in the size of ASEAN economies.

World Bank, 2012, Advancing Disaster Risk Financing and Insurance in ASEAN Member States: Framework and Options for Implementation, Volume 1. Main report. Washington, DC. https://openknowledge.worldbank.org/handle/10986/12627

² UNDP, Disaster Risk Reduction. http://www.asia-pacific.undp.org/content/rbap/en/home/ourwork/climate-and-disaster-resilience/disaster-risk-reduction/

³ FAO, 2005, Options for flood management and mitigation. http://www.fao.org/docrep/004/ac146e/AC146E01.htm

⁴ Raconteur, May 2016, El Niño adds to Asia's climate fears. http://raconteur.net/magazine/el-nino-adds-to-asias-climate-fears

⁵ Chan, Francis. The Straits Times. Retrieved 11 October 2015. <u>*\$47b? Indonesia counts costs of haze"http://www.straitstimes.com/asia/47b-indonesia-counts-costs-of-haze</u>

⁶ Ibid.

⁷ ISDR, 2014, Global Assessment Report. http://www.preventionweb.net/english/hyogo/gar/2013/en/home/index.html

1.0% 1,800 Annual expected 0.9% 1,600 economic losses % of 0.8% 1,400 national GDP [Left axis] 0.7% Annual expected % of national GDP 1,200 economic losses in US\$ million 0.6% 1,000 million [Right axis] 0.5% 800 0.4% 600 0.3% 400 0.2% 200 0.1% 0.0% 0 Viet Harr Trailand

Figure 1: Annual Expected Losses in US dollars and as a Share of GNP for ASEAN Countries

Source: World Bank, 2012, Advancing Disaster Risk Financing and Insurance in ASEAN Member States: Framework and Options for Implementation, Volume 1.

Post disaster recovery creates valuable opportunities to address the risks and strengthen resilience; to improve the quality of life of affected populations and communities; and to use rehabilitation and reconstruction investments to promote strategic national development goals. Various policy initiatives are now underway to support these efforts, as described in the following section: Policies and Planning for Recovery.

ASEAN COMMITMENT TO DISASTER RISK REDUCTION

ASEAN Member States have been working together to address the serious consequences of natural disasters on the economic and social development of ASEAN countries since 1976 when the "ASEAN Declaration on Mutual Assistance on Natural Disasters" was signed.

Since then, cooperation on disaster response and disaster risk management (DRM) continued to grow, reaching a significant milestone when the **ASEAN Agreement on Disaster Management and Emergency Response (AADMER)** was ratified by all Member States and entered into force on 24 December 2009.8

The AADMER is a proactive regional framework for cooperation, coordination, technical assistance, and resource mobilisation in all aspects of disaster management. It also affirmed ASEAN's commitment to the Hyogo Framework for Action (HFA) and was the first legally-binding HFA-related instrument in the world.

The AADMER document states:

The Parties shall, jointly or individually, develop strategies and implement programmes for rehabilitation as a result of a disaster [and] promote bilateral, regional and international cooperation for rehabilitation as a result of a disaster.9

The AADMER Work Programme 2010-2015 translated AADMER's spirit and intent into concrete actions and initiatives. This document, together with the Strategy and Priorities for AADMER Work Programme 2013–2015, provides the policy framework for the ASEAN Disaster Recovery Reference Guide.¹⁰

The AADMER Work Programme states that it:

Aims to . . . develop technical and organisational capacities of Member States to lead, coordinate, and manage post disaster recovery process through proactive recovery planning for early and long-term recovery, competency building in damage and loss assessment, strengthen mobilising resources, and fostering partnerships .

The AADMER Work Programme outlines a detailed roadmap with four strategic components;

- Risk assessment, early warning, and monitoring,
- Prevention and mitigation;
- Preparedness and response; and
- Recovery.

Recovery in the AADMER Work Programme

The recovery component of the AADMER Work Programme calls for the Member States to:

- Conduct damage and loss assessments within one month after a disaster occurs;
- Develop an effective recovery action plan for rehabilitation and reconstruction within three months after a disaster occurs;
- Mobilise resources from local, regional and the international community to support implementation of the recovery process;
- Coordinate and implement activities within the targeted time frame as stated in the recovery plan; and
- Develop a transition plan and link the post disaster recovery process with sustainable development one year before the end of the recovery period.

The Recovery component of the AADMER Work Programme promotes pro-active planning for early and long-term recovery before a disaster occurs. It also encourages the Member States to effectively lead, manage and coordinate their respective recovery processes and transition smoothly to sustainable development.

⁸ ASEAN Agreement on Disaster Management and Emergency Response. http://www.asean.org/?static_post=asean-agreement-on-disaster-management-and-emergency-response-aadmer-work-programme-2010-2015-4th-reprint

⁹ ASEAN Agreement on Disaster Management and Emergency Response, Part VI. Rehabilitation, Article 17. http://asean.org/?static_post=asean-agreement-on-disaster-management-and-emergency-response-vientiane-26-july-2005-3

¹⁰ Concept Note 6, "ASEAN Disaster Recovery Toolbox," from the Strategy and Priorities for AADMER Work Programme 2013–2015, Annex I. http://www.asean.org/storage/images/2013/socio_cultural/Strategy%20and%20Priorities%20for%20AADMER%20Work%20Programme%20 Phase%202%20(Final).pdf

Global Agreements on Disaster Risk Reduction

The ASEAN Disaster Recovery Reference Guide is also an affirmation of the commitments made by the ASEAN Member States to the Hyogo Framework for Action and its successor, the Sendai Framework for Disaster Risk Reduction 2015-2030.

The Hyogo Framework for Action 2005-2015: The HFA outlined five priorities for action, and offered guiding principles and practical means for achieving disaster resilience for nations and communities. Its goal was to reduce disaster losses substantially and build resilience by 2015.

However, recovery is mentioned only in Indicator 4.5 of the framework: "Disaster risk reduction measures are integrated into post- disaster recovery and rehabilitation processes," and in Indicator 5.3: "Financial reserves and contingency mechanisms are in place to support effective response and recovery when required." Nearly all regions had relatively low scores on these recovery-related indicators, and ASEAN was no exception.¹²

The Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR), signed in March 2015, has four priorities of which one focuses specifically on recovery. Priority 4 of SFDRR aims at "Enhancing disaster preparedness for effective response and to 'Build Back Better' in recovery, rehabilitation, and reconstruction." With this, the SFDRR puts more emphasis on the imperative to reduce risk in recovery and encourages governments to operationalize the concept of "Build Back Better."

The SFDRR also urges States, regional and international organisations, and other relevant stakeholders to

take action to accomplish the agreement's goals. Some of the proposed actions most relevant to the Guide include:

- Adopting public policies and procedures that establish or strengthen coordination and funding mechanisms for relief assistance and for planning and preparing post disaster recovery and reconstruction;
- Promoting regular disaster preparedness, response, and recovery exercises to ensure rapid and effective response to disasters and related displacement;
- Promoting the incorporation of disaster risk management into post disaster recovery and rehabilitation processes, and facilitating the link between relief, rehabilitation, and development;
- Using recovery to develop capacities that reduce disaster risk in the short, medium and long-term, including through land use planning, structural standards improvement, and the sharing of expertise, knowledge, post disaster reviews and lessons learned;
- Integrating post disaster reconstruction and temporary settlements for persons displaced by disasters into the economic and socially sustainable development of affected areas; and
- Developing guidance for preparedness for disaster reconstruction, such as on land use planning and structural standards improvement; learning from the recovery and reconstruction programmes since the adoption of the HFA; and exchanging experiences, knowledge, and lessons learned.

Indicators for monitoring the Sendai priorities are being developed. Under SFDRR, ASEAN countries have an opportunity to renew their commitment as a region to monitor and report progress on DRR—including recovery activities.

¹¹ UNISDR (2005) Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters. http://www.unisdr.org/we/inform/publications/1037

 $^{12 \}quad \text{ISDR, 2014, Global Assessment Reports. } \underline{\text{http://www.preventionweb.net/english/hyogo/gar/2013/en/home/index.html}$

Sendai Framework for Disaster Risk Reduction 2015-2030. http://www.unisdr.org/we/inform/publications/43291

UNDERSTANDING RESILIENT RECOVERY

Defining Disaster Recovery

The foremost responsibility of governments in disaster recovery is to help people recover their assets and livelihoods. Unlike rehabilitation and reconstruction that refer to the physical aspect of recovery alone, the term recovery is broader and captures the complex range of physical, social, economic, and environmental dimensions of this process.¹⁴ However, there are still some differences in the way various agencies view the concept of recovery. The definitions below intend to clarify the concept of recovery, and how it is broader than rehabilitation and reconstruction.

The UN International Strategy for Disaster Reduction (UNISDR) defines recovery as:

Decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk.

The United Nations Development Programme (UNDP) defines recovery as:

Recovery is about shifting focus from saving lives to restoring livelihoods, effectively preventing the recurrence of disasters and hamessing conditions for future development. The ensuing transition process [entails] restoring trust and confidence as much as regaining human and physical developing capital. Managing recovery [requires] building national capacities, restoring coping mechanisms, empowering communities, and determining root causes and vulnerabilities [that] make societies disaster-prone. ¹⁵

The Government of Indonesia in its national policy defines rehabilitation and reconstruction as:

Rehabilitation is the restoration and recovery of all aspects of public services or the communities to an acceptable degree in a post disaster area with the primary goal of normalizing or realizing an adequate level of operation of the government and community life in the area.

Reconstruction is the rebuilding of all infrastructures and facilities, and the institutions in the disaster-affected areas, both at the government and community sides, with a view of revitalizing the economic, social and cultural lives of the communities, as well as reinforcing law and order and promoting community's participation in all aspects of the society in post disaster areas.¹⁶

The Philippines Disaster Risk Reduction and Management Act of 2010 defines recovery as:

The restoration and improvement where appropriate, of facilities, livelihood and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors, in accordance with the principles of "build back better."

Defining Resilience

Risk is a function of hazards, vulnerability, and capability, particularly coping and adaptive capacity. Effective disaster risk reduction depends on understanding the risks to which a population is exposed, the damage and other effects that it could produce, the costs associated with these effects, and communicating this information to those who can take action. Predisaster preparation and analysis of risk information provide more time to consider multiple risks and the interactions between them.

¹⁴ Additional definitions of terms used in the Guide are found in Annex V.

¹⁵ UNDP, 2011, Methodological Guide for Post disaster Recovery Planning Processes: Guidelines and Actions for National, Regional and Local Governments. http://www.preventionweb.net/files/32306_32306guametodolgicaparaprocesosdepl.pdf

¹⁶ Government of Indonesia, National Disaster Management Agency (BNPB), 2010, General Guidelines for the Conduct of Post disaster Rehabilitation and Reconstruction. Head of BNPB Regulation Number 17.

The UN International Strategy for Disaster Reduction (UNISDR) defines resilience as:

The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.¹⁷

Different kinds of disasters (geological, hydrometeorological, etc.) elicit different impacts. Floods may cause more damage to farming than housing and infrastructure. Cyclones tend to affect nearly all sectors, especially if they are severe. Earthquakes are likely to damage the built environment but leave agriculture relatively untouched. Disaster contexts are also a factor in both impact and response (urban/rural; low/high income; the level of public security, decentralization, connectivity, etc.) These differing effects and contexts require differentiated approaches to recovery. But in all cases, opportunities for risk reduction are present.

Early, medium and long-term recovery

There is enough evidence and experience to indicate that response and recovery are not linear processes, in that they do not follow from one to the other. Rather, recovery begins on the day of the disaster. It often starts with early recovery activities. ¹⁸ Early recovery activities address immediate needs for stabilizing communities before medium and long-term recovery activities commence. Each country decides the duration for early recovery based on the local context. Early recovery can start from the day of the disaster and continue until I six, I2 or I8 months depending on the scale of the disaster. The Government of Indonesia has designated --- the early recovery phase from two to I8 months and long-term recovery upto three years.

Early recovery entails the restoration of basic functions, services, and capacities.

UNDP defines early recovery as:

Early recovery is a multidimensional process guided by development principles that begins in a humanitarian setting, and seeks to build on humanitarian programmes and catalyse sustainable development opportunities. It aims to generate and/or reinforce nationally owned processes for post-crisis recovery that are resilient and sustainable. It encompasses livelihoods, transitional shelter, governance, security and rule of law, environment and other socio-economic dimensions, including the reintegration of displaced populations. It strengthens human security and aims to begin addressing the underlying causes of the crisis.¹⁹

Early recovery includes the following:

- Restoring essential ("lifeline") services, including critical infrastructure and communications;
- Providing additional support to critical governance functions of coordination and information management;
- Sharing information regularly with organisations working on recovery;
- Mobilising resources for recovery;
- Providing temporary or transitional housing;
- Debris clearing activities;
- Conducting damage and needs assessment; and
- Providing emergency employment through cashfor-work programmes.

The scope and duration of early, medium and long-term recovery are different. Similarly, planning and management approaches to early and long-term recovery differ. Early recovery activities establish patterns that can affect the nature, scope, and cost of longer-term recovery interventions, and therefore must be planned with their impact on longer-term recovery in mind. **Medium-term recovery** activities can be undertaken from twelve months to two years, and long-term recovery can even take from two to five years or a decade in very large scale disasters. However as mentioned above, each country determines the various phases of recovery based on their country context.

¹⁷ United Nation's Office for Disaster Risk Reduction, 2009. Terminology on DRR. https://www.unisdr.org/we/inform/terminology#letter-r

¹⁸ The distinction between long-term and short-term recovery may be less applicable for slow-onset disasters such as droughts; howeer, the objectives of both (e.g. providing temporary housing if households are forced to migrate) remain relevant.

¹⁹ UNDP, 2008, Guidance Note on Early Recovery https://docs.unocha.org/sites/dms/Documents/Guidance%20note%20on%20Early%20 Recovery.pdf

This Guide provides a framework for governments to plan, finance, implement and monitor long-term recovery activities. **Long-term recovery** involves actions that lead to the restoration of normal life, and of the social and economic functioning of the affected community. Planning and management of them are a government responsibility, it may be supported by others. Long-term recovery includes:

- Developing enabling policies and plans to guide recovery;
- Establishing an institutional framework to organize and manage recovery;
- Ensuring that there are adequate resources available or mobilising resources to carry out recovery activities;
- Redeveloping and revitalizing disaster-affected areas:
- Rebuilding and/or relocating damaged or destroyed infrastructure and buildings;
- Partnering with relevant organisations for multisectoral recovery including restoring and reviving health, education, transport, agriculture, livelihoods, etc.
- Restoring negative impacts on natural ecosystems and the environment;
- Establishing monitoring mechanisms to ensure that recovery is transparent, accountable and inclusive; and
- Improving community capacity including those of women, the elderly, persons with disabilities, vulnerable and marginalised groups to reduce disaster risks and manage future disaster events.

Resilient Recovery is Everyone's Responsibility

The primary responsibility for *organizing* recovery lies with the government, but responsibility for *implementation* is widespread. While the lead agency

for disaster risk reduction is the National Disaster Management Organisation (NDMO) – except in Myanmar and the Philippines – the lead agency for recovery is often the ministry of planning or the ministry of finance. In some countries, a special agency is set up for recovery. Recovery planning and implementation require a different dispensation and therefore can have separate institutional arrangements to disaster risk reduction. The NDMO, key sector ministries and local governments impacted by the disaster play a pivotal role in the recovery process.

In implementing recovery, governments can marshal required capacities by inviting the participation of international and national NGOs, donors, the private sector and others. These external actors may engage in the recovery process either by way of providing resources, technical advice, and capacity building or implementing recovery projects. Many of these actors bring valuable experience and knowledge, and governments may consider partnering with them for a comprehensive and holistic recovery. These include bilateral, multilateral, and international agencies; Non-Governmental Organisations (NGOs); academic and technical institutions; the private sector and business community; religious institutions; Civil Society Organisation (CSOs); Community-based Organisations (CBOs) and private individuals.

It is also important to recognise that the community itself can play an important role in recovery. Instead of viewing those affected as victims, recovery can provide an opportunity for engagement and empowerment of the affected communities. Involving the community, including women and vulnerable groups, in their own recovery can have knock-on benefits for development and progress.

A COMMON VISION OF WELL-MANAGED RECOVERY IN ASEAN

So far, most countries are investing primarily in disaster preparedness, which is vital. There is now an increased realisation that preparedness for recovery is equally important as many gains of preparedness and response can be lost if recovery is not undertaken in a timely and efficient manner.

Evidence from disaster recovery processes from around the world suggest that steps can be taken to prepare for recovery, even before a disaster occurs. A Recovery Framework helps to identify requirements for implementing recovery programmes, as explained in Box 1.

In this guide, the terms 'Recovery Framework' and 'Recovery Programme' are used differently. The Recovery Framework is the overarching document that guides the recovery process. Recovery programmes are a part of the Recovery Framework.

A post disaster Recovery Framework provides the basis for a Recovery Programme. The scope, details and elements of the Recovery Framework should be contextualised. It is advisable that a Recovery Framework is developed especially after large-scale disasters, to support a Recovery Programme that is multi sectoral and requires multiple actors to be engaged. Three ASEAN Member States have developed Recovery Frameworks: Indonesia, Lao PDR and Myanmar (please see Annex III for the summary frameworks).

The ASEAN Member States are committed to carrying out good quality recovery programmes; i.e., recovery programmes that meet or exceed their objectives, contribute to the country's larger development goals and are delivered cost-effectively and promptly.

Box I: Defining "Recovery Framework"

A Recovery Framework helps governments to articulate a vision for recovery; defining a strategy; prioritizing actions; 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 long-term disaster vulnerability through coherent programmes that bridge the current gap between recovery and development.

Source: World Bank, EU and UNDP, March 2015, Guide to Developing Disaster Recovery Frameworks

The overarching goal of a recovery programme should be to restore and revive the affected communities. A recovery programme should have defined objectives with specific interventions for each sector. Each objective and intervention must specify timelines, financial resources, and a robust monitoring and evaluation system. Throughout the duration of the management and oversight of the Recovery Programme, it is critical to ensure that implementation is on track and that the programmes are delivered in a transparent manner.

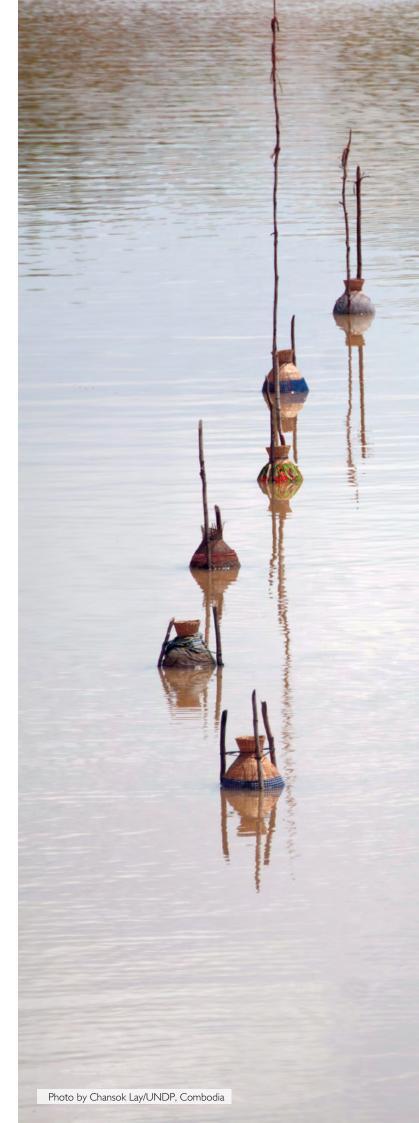
Disaster recovery provides a unique opportunity for risk reduction: there is greater awareness of the underlying risks, resources are available or can be mobilised and, recovery is considered a political priority. In addition, conditions are right for ensuring that recovery activities include risk reduction so that the impact of future disasters on lives, livelihoods, environment, health, etc., can be minimized. However, this can only happen if the government and partners who are engaged in the recovery, have the foresight and awareness to include risk reduction into recovery programmes.

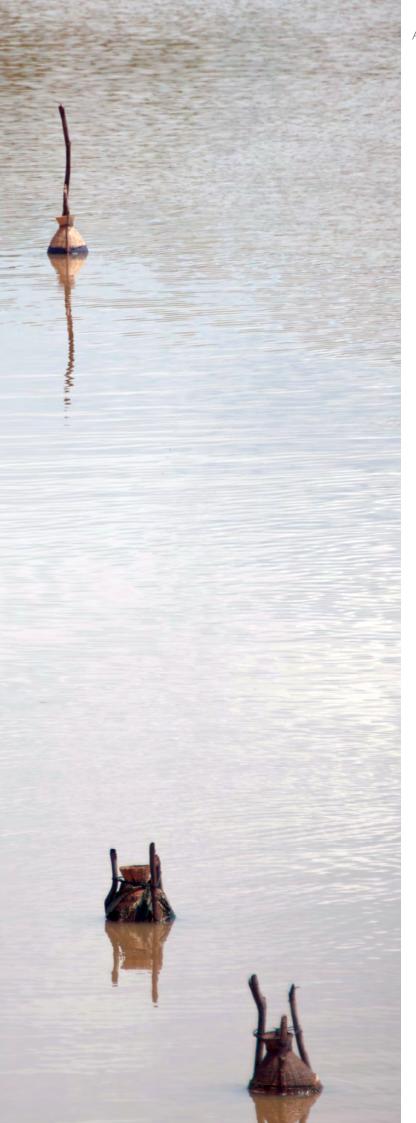
Each recovery programme is unique and provides important lessons for improvements in recovery practice. Lessons learnt, and good practices in recovery are helping the ASEAN Member States to continuously improve their recovery performance. Within the region, there is an opportunity to learn from each other, especially as many countries face similar hazard risks.

In view of the above, in preparing this Guide, there was consensus among key stakeholders on five intentions or principles that all recovery programmes should aspire to achieve:

- I. Governments and citizens should be ready for recovery
- 2. Recovery programmes should be planned strategically and managed efficiently
- 3. Key stakeholders including the affected population must participate in the recovery process
- 4. Recovery should use the opportunity for risk reduction and resilience building
- 5. Countries should strive for continuous improvement of recovery practices.

These are further elaborated in Annex V: Principles for Good Recovery with Performance Indicators, illustrating proposed monitoring indicators tied to the features of good recovery programmes.





PREPAREDNESS FOR RECOVERY

In recent years, governments and other actors have greatly improved preparedness for emergency response and relief, resulting in a remarkable reduction in the loss of life from natural hazards. A similar approach prepares countries for recovery, by designing tools and procedures to manage predictable activities and assigning roles and responsibilities in advance.

The key areas for preparedness in recovery are presented in the following five chapters:

- I. Policies and Planning for Recovery;
- 2. Establishing the Institutional Framework for Recovery;
- 3. Post disaster Assessment;
- 4. Resource mobilization and financial management for Recovery; and
- 5. Implementation, Coordination, Communications, and Monitoring for Recovery.

Each chapter includes examples of recovery practices in the ASEAN Member States and provides guidance on the types of decisions that can be made ex-ante, leading over time to more efficient, effective and resilient recovery. These brief examples taken from case studies are intended to spur the documentation of more good practices in recovery from the ASEAN region, which will be featured on the website of the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) (ww.ahacentre.org).



PLANNING FOR RECOVERY

Identifying recovery outcomes, developing recovery policies and preparing the recovery programme are fundamental elements for preparedness for recovery. In this chapter, policy and planning for recovery answers the following key questions:

- 1. What are the key elements of a recovery policy?
- 2. What obligations do governments have to recovery?
- 3. How can existing or new policies help recovery?
- 4. What are the key elements of a Recovery Plan? (vision, principles, key sectors of recovery; criteria for prioritization, sector recovery plans etc.)

I.I Develop Recovery Policies

A. Overall and sector recovery policies

A National Recovery Policy is a statement of intent by the government in disaster recovery and establishes the scope of government assistance. Such a policy can be modified in the context of specific disasters. In addition, sectors may have specific recovery policies or development policies that include provisions for disaster recovery. Aligning the over-arching and sector recovery policies brings strategic coherence to the recovery framework and programme. For long-term recovery, sector recovery policies should be based on sector development policies.

B. Build on existing policies

In the absence of a national recovery or sector recovery policy, sector development policies could be modified to include provisions for disaster recovery. Another option is to develop *ad hoc* policies which may become benchmarks for future recovery. Disaster Risk Management (DRM) laws and regulations and key sector policy frameworks provide a good basis for developing policies for recovery planning and implementation.

All the ASEAN Member States have DRM laws that mandate the preparation of DRM regulations, policies and strategies. National and local plans generally cover disaster risk mitigation, preparedness, response, rehabilitation, and recovery. Some laws also require the preparation of sector recovery plans, following – or in advance of – disasters.

However, most of the DRM strategies and plans are focused on ex-ante preparations for disaster risk reduction, preparedness, and response. For instance, in Myanmar, the DRM regulations are in the form of Standing Orders that are operational and focus principally on response. Therefore it may be necessary to review the existing DRM legislations and add specific guidance on recovery.

The recovery policy outlines the recovery outcomes, recovery vision, defines the extent of the government's responsibility in recovery and identifies the recovery priorities. These aspects of the recovery policy are elaborated below.

1.2 Identify Recovery Outcomes

A Recovery Framework prepared before a disaster provides the reference for developing a post disaster Recovery Framework and the Recovery Programme. Irrespective of the scale of the disaster, it is always the government that has the responsibility to lead, manage and coordinate disaster response and recovery. However, in the event of a major disaster, several stakeholders engage in response and recovery activities. In such a situation, there are likely to be multiple sector recovery plans.

The principles of good recovery show that a recovery programme must be coherent and coordinated. A post disaster recovery framework brings together sector plans and stakeholders so that a shared vision for the recovery programme can be established. This also helps to identify specific recovery outcomes for a time-bound recovery programme.

A. Establish a vision for recovery with strategic objectives and outcomes

Based on the principles for good recovery, a vision for recovery can be broadly outlined even before an actual disaster. The post disaster Recovery Framework must include the specific vision and strategic objectives of the recovery programme. In a large-scale disaster, a recovery programme will engage a significant number of stakeholders for a considerable period. Therefore, the outcomes of the recovery programme should contribute to the development priorities of the disaster-affected country. The involvement and leadership of the Ministry of Planning in post disaster assessments and developing a recovery framework helps to bring about this linkage and also to prioritise recovery for long-term development gains.

B. Define the extent of the government's responsibilities

Governments have certain obligations and responsibilities in disaster recovery. A Recovery Policy developed beforehand can help to establish which responsibilities governments will assume. In the case of recovery, Figure 2, below shows the

types of recovery interventions that are most likely required after a disaster.

In most cases, the government's responsibility includes financing the reconstruction of damaged public buildings and public infrastructure which have a social purpose (cell A). Governments need to take more complex decisions regarding replacements of private goods and services that serve a social purpose, such as private schools and hospitals (cell B).

Usually, governments finance the reconstruction of houses of low-income households and recovery of Small and Medium Enterprises (SMEs), small farms, etc. since these groups tend to be most vulnerable and lack alternate coping mechanisms (cell C). Governments should use the opportunity of disaster recovery to build the capacities of poor and vulnerable communities and introduce risk reduction strategies so that they can withstand future disasters.

The government is unlikely to take on the responsibility to replace private assets that serve a private purpose, such as housing and commercial buildings), especially those belonging to higher-income owners (cell D).

Figure 2: Reconstruction Obligations by Type of Purpose and Liability

	Social Purpose	Private Purpose
Public Liability	 CELL A Public infrastructure, e.g., roads, electricity, telecommunications Public buildings e.g. government offices, official residences, public libraries and museums, cultural heritage sites Public schools and hospitals 	 CELL C Low-income and underinsured housing Social protection programmes Restoration of smallholder agriculture Small and medium enterprises and other livelihoods support Replacement of livestock and household effects Interest on borrowing
Private Liability	CELL BPrivate schools and hospitalsPrivately built infrastructure	CELL DHousingCommercial buildingsIndustrial operations

C. Identify recovery priorities and fund priority needs

It is advisable that after a major disaster, an assessment of the damage, loss and recovery needs is undertaken. Such assessments help to identify the short, medium, and long-term recovery priorities and needs. The assessments also help to prioritize the resources required for recovery across sectors and geographical areas within an identified time span. The post disaster Recovery Framework and Recovery Programme should be based on a systematic assessment of recovery needs and priorities. The Post Disaster Needs Assessment (PDNA), a tool for assessing the impact of the disaster is discussed in detail in chapter three.

1.3 Prepare Recovery Programmes

It is critical that after a needs assessment is undertaken. a detailed recovery programme is formulated with objectives, activities and budget. The structure of the Recovery Programme can be defined beforehand. Establishing recovery goals, in consultation with stakeholders, is the essential starting point for a good recovery programme.²¹ This step not only engages stakeholders and aligns their actions, but it also helps establish reasonable expectations, motivates selfrecovery in the affected population, and helps address the needs of vulnerable groups. The principles for the Recovery Programme should include cross-cutting issues such as disaster risk reduction, social protection, gender and social inclusion, and environmental management. The Recovery Programme should bring together all sector and local recovery plans prepared by ministries and local governments.



Indonesia has the second highest level of disaster risk globally from extreme weather and geophysical events according to the Natural Disasters Risk Index.²² Considering its high level of vulnerability and using recovery as an opportunity to reduce risk, Indonesia is one of the few countries which has developed *Guidelines for formulation of Post Disaster Rehabilitation and Reconstruction Plan*.

The Guidelines articulate the legal and institutional arrangements, the role of lead agencies, timelines for recovery, the recovery planning process, funding sources and monitoring and evaluation mechanisms required for recovery. The National Agency for Disaster Management (Badan Nasional

Penanggulangan Bencana or BNPB) is mandated to formulate a recovery policy and coordinate the implementation of the recovery programme. There is a provision to constitute an ad hoc coordinating agency for recovery, whenever needed, to assist the BNPB. The Post- Disaster Needs Assessment and the formulation of an Action Plan for Rehabilitation and Reconstruction are key elements of the recovery planning process, involving local government and other key stakeholders.

Indonesia has managed a few recovery and reconstruction programmes using this framework, which includes post-tsunami Mentawai recovery, the post-Mount Merapi eruption in DI Yogyakarta and the Central Java recovery programmes. The recovery and reconstruction programmes were managed successfully and provided lessons for improvement.

²¹ International Recovery Platform, "Guidance Note on Recovery: Pre-Disaster Recovery Planning," http://www.unisdr.org/files/31963_predisasterrecoveryweb.pdf;

²² World Risk Report 2015. http://www.worldriskreport.org/fileadmin/WRB/PDFs_und_Tabellen/WRR_2015_engl_online.pdf



2 ESTABLISHING THE INSTITUTIONAL FRAMEWORK FOR RECOVERY

The institutional framework for recovery defines the roles and responsibilities of the government and recovery actors and provides for their collaboration. It also establishes the legal basis for the actions of all actors and the rules under which they operate.

In this chapter, establishing the institutional framework for recovery requires decisions on the following key questions:

- Who is responsible for carrying out recovery activities?
- What are the roles and responsibilities of recovery actors (national government, local government, line ministries, national and international NGOs, the private sector, communities and others)
- How will the work of recovery actors be coordinated?

Many aspects of the institutional framework can be defined in advance, as inputs to the country's Recovery Framework.

2.1 Organise the Institutional **Arrangements for Recovery**

The Recovery Framework should define the Institutional arrangements for Recovery which defines the roles and responsibilities of the Government in management and implementation of recovery activities.

A. Designate a lead recovery agency

The President or Prime Minister's Office is responsible for designating a Lead Recovery Agency and appointing the leadership team. Designating a Lead Recovery Agency is an important task that could be done before a disaster.

Criteria for designating the lead recovery agency

The Lead Recovery Agency must have political support, autonomy, authority and technical capacity. 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 organisations; and (e) overarching coordination, monitoring, oversight, and control frameworks in operation among a country's agencies, line ministries, local governments, and civil society. 23

Organisational models for recovery agency

Given the complex set of considerations shown above, the structures of lead recovery agencies vary considerably. However, the most common organisational models can be categorized as shown in Table 1.

Table 1: Organisational Models for Recovery Agency

Recommendations **Strengths** Weaknesses Option 1. Dedicated recovery agency executes recovery Examples: Executing Agency for Rehabilitation and Reconstruction (BRR), Indonesia²⁴ Highly focused as primary purpose Risks alienating line ministries and Hand-pick leadership team and is recovery duplicating their efforts select senior staff with authority to Tends to be more independent or • Time is spent clarifying roles and engage line ministries responsibilities Develop Terms of References and autonomous Potential disconnect between Standard Operating Procedures Perceived to be more politically recovery and national to clarify functions, roles, and neutral Greater accountability as development strategies responsibilities Expensive: requires premises, Model recovery agency on similar procurement and resource allocation is centralized facilities, systems, and staff agencies established post disaster, Can function in either a Although time-bound, may be emulating good practices centralized or decentralized hard to close and exit Document experience gained and If shut down after each disaster, lessons learnt before closing the Likely to have greater flexibility in recovery experience may be lost agency hiring staff Use sunset clause to close and Easier to arrange and monitor exit financial commitments of Develop an exit strategy that international donors helps staff get absorbed by other Lowers coordination costs government bodies as far as internally and with external possible partners Easier transition to new administration if elections are

Option 2. Temporary lead recovery agency coordinates government agency execution Examples: Office of the Presidential Assistant for Rehabilitation and Recovery (OPARR), Philippines and National Committee for Disaster Prevention and Control (NCDPC), Lao PDR

- Can be mobilised quickly if top officials are drawn from the government
- Top officials may be more familiar with government procedures
- Likely to improve coordination with existing sector activities and policies
- If a country is decentralized or deconcentrated (i.e. ministries operate regionally), coordination responsibility can shift to lower levels
- Likely to maintain alignment between recovery and sector development strategies and mainstream disaster risk reduction into development

- May lack authority and have difficulty in collaboration
- Likely to be over-burdened, since responsible to carry out recovery in addition to regular programmes
- Sufficient expertise may not exist in the assigned ministry especially if functioning at the local level
- Existing government systems for financing and monitoring may be unable to meet the additional recovery programme demands
- Possible that international agencies may not finance normal government functions
- Draft in advance Terms of References and Standard Operating Procedures on the functions and capacity requirements for a temporary recovery agency
- Regularly train line ministries on readiness for recovery and maintain a roster of trained staff
- Where possible, second staff with experience of working in recovery operations to the recovery agency
- Seconded staff resume their previous positions on closing

²⁴ The Executing Agency for Rehabilitation and Reconstruction (BRR) of Aceh–Nias, 2009, Ten Management Lessons for Host Governments Coordinating Post disaster Reconstruction. http://www.recoveryplatform.org/assets/publication/BRR%2010%20Management%20Lessons%20 for%20Host%20Governments.pdf

Strengths Weaknesses Recommendations Option 3. Governmental agencies collaborate to execute recovery using normal procedures Examples: National Economic and Development Authority (NEDA) Philippines Good option for small-scale May lack authority and have Draft in advance Terms of disasters or where local difficulty in collaboration References and Standard Operating Procedures on governments are capable of Likely to be over-burdened, since the functions and capacity managing recovery responsible to carry out recovery Places sector responsibility within in addition to regular programmes requirements for a temporary ministries where there are sector Sufficient expertise may not exist recovery agency expertise and policy responsibility Regularly train line ministries in the assigned ministry especially Coordination takes place through if functioning at the local level on readiness for recovery and existing structures such as the Existing government systems for maintain a roster of trained staff Cabinet financing and monitoring may be Where possible, second staff with If a country is decentralized or unable to meet the additional experience of working in recovery deconcentrated, coordination recovery programme demands operations to the recovery agency responsibility can shift to lower levels Possible that international Seconded staff resume their Likely to maintain alignment agencies may not finance normal previous positions on closing between recovery and sector government functions development strategies and

B. Strong leadership team for recovery

mainstream disaster risk reduction

into development

According to the Executing Agency for Rehabilitation and Reconstruction (BRR), in Indonesia, a strong, experienced leadership team helps the Lead Recovery Agency gain support from other government agencies, the donor community, and stakeholders in general.²⁵ This is especially the case if the recovery agency is new, the staff's reputation and professional networks will help it gain credibility with more experienced government and international agencies.

The leadership team may be composed of public officials or persons drawn from the private sector depending on the agency's structure and technical and managerial requirements. Team members should have executive experience, ability to work effectively together, and the stamina to maintain a sense of urgency throughout the recovery process. They also need to demonstrate political impartiality, trustworthiness, and knowledge of local conditions.

Technical capacity at national and local levels

There is a need for professional and technical expertise at the national and local levels to steer all government capacities and resources for recovery planning and implementation. Such expertise should be institutionalised in all key sectors for implementing recovery. Experience suggests that it would be beneficial to have staff designated in each ministry to lead recovery. Typically, each sector requires a range of technical experts which includes engineers, architects and town planners, community organizers. In addition to experts required for implementation of recovery in all sectors, the government will require personnel for management of finances allocated for resources. This person must have the technical skills and expertise required to support sector recovery. Governments can undertake training activities to build capacities and skills of government staff.

²⁵ The Executing Agency for Rehabilitation and Reconstruction (BRR) of Aceh Nias, 2009, Ten Management Lessons for Host Governments Coordinating Post disaster Reconstruction, http://www.recoveryplatform.org/assets/publication/BRR%2010%20Management%20Lessons%20 for%20Host%20Governments.pdf

Several international agencies in the ASEAN region, including UNDP, the Asian Disaster Preparedness Centre (ADPC), the Asian Disaster Reduction Centre (ADRC), the International Recovery Platform, have training and capacity building programmes and tools for recovery preparedness. The ASEAN Member States can draw upon these global tools and good practices and partner with them. ²⁶

C. Establish a legal framework for recovery

A legal framework for recovery combines (I) legal instruments and procedures in use in normal times, and (2) instruments and procedures established specifically for recovery. The legal framework for relief in most countries is more clearly defined than the framework for recovery. Through its International Disaster Response Laws, Rules and Principles (IDRL) Programme, the International Federation of the Red Cross and Red Crescent Societies (IFRC) has analysed the legal frameworks of some ASEAN Member States. The approach taken in the IDRL Guidelines could be applied to strengthen the regulation of recovery in ASEAN countries. ²⁸

The legal framework for recovery includes:

- Disaster Management Law and regulations;
- Laws and regulations that govern public expenditure, land use, social protection, and disaster-affected sectors (transport, education, health, etc.);
- New or strengthened enforcement mechanisms (for instance, to enforce no-build zones); and
- Modifications to or suspensions of normal rules and procedures.

Modifications may be called for in regulations related to:

- · Approval and management of expenditures;
- Transparency and competition in procurement;
- Planning and environmental review of projects;
- Incorporating disaster risk reduction; and
- Land use policies.

Often, legal or regulatory requirements can cause procedural delays for implementing recovery activities which need to be delivered promptly. If modifying or suspending normal procedures creates risks, mitigation measures for these risks should be identified before rule changes are promulgated. Instead of suspending or weakening rules related to disaster risk reduction to facilitate reconstruction, efforts should be made to address bottlenecks in the DRM system.

Annex IV highlights the DRM focal agencies, DRM laws, and plans in the 10 ASEAN Member States. Box 2, briefly explains the readiness for recovery in the DRM laws in three ASEAN Member States: The Philippines, Indonesia, and Myanmar.

Box 2: Readiness for Recovery in ASEAN DRM Laws

Philippines: The Philippine Disaster Risk Reduction and Management Act of 2010 adopts a proactive disaster risk reduction and management (DRRM) approach.²⁹ It directs various government agencies to develop and implement the National Disaster Risk Reduction and Management Plan (NDRRMP) and to integrate DRRM into relevant plans such as the National Philippine Development Plan (PDP), as well as local land use and development plans. There is significant text on pre-disaster activities, which emphasizes traditional disaster preparedness. Indonesia: Indonesia's Law Number 24 of 2007 concerning disaster management assigns the responsibility to agencies to conduct disaster management planning exercises before a disaster and to prepare pre-disaster management plans

²⁶ Another resource is the Training Manual developed by the Tsunami Global Lessons Learned Project. http://reliefweb.int/report/world/launch-disaster-recovery-toolkit-developed-tsunami-global-lessons-learned-project.

²⁷ See UNDP and IFRC, 2014, Effective Law and Regulation for Disaster Risk Reduction: A Multi-Country Report. http://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/effective-law---regulation-for-disaster-risk-reduction.html

²⁸ IFRC. International disaster response laws, rules and principals. http://www.ifrc.org/en/what-we-do/disaster-law/about-disaster-law/international-disaster-response-laws-rules-and-principles/

²⁹ National Disaster Risk Reduction and Management Councils, 2010, Disaster Risk Reduction and Management Act of 2010, http://www.ndrmc.gov.ph/attachments/article/45/Republic_Act_10121.pdf

at the national, regional, and regency/city level.³⁰ The disaster management fund can be used for a range of activities related to pre-disaster management planning, including integration of development planning, preparation of risk analysis, implementation and enforcement of spatial structure plans, and preparation of technical standards for disaster management, among other activities.

Myanmar: The "Standing Order for Natural Disaster Management in Myanmar" is issued with the aim of ensuring that once disaster strikes, emergency relief, and rehabilitation work is carried out according to the prepared plan and that the people are mobilized at the national level for participation in such efforts. Myanmar's 2009 Standing Orders include a provision for the respective Natural Disaster Management Committees in ministries and departments, states and divisions, townships, ward/village and at the grassroots level to prepare and issue their own action plans and standing orders for all stages of DRM, including rehabilitation.³¹ It directs these entities to prepare "practical and comprehensive action plans" although the content of these plans is not stipulated. The need for simulation activities is explicitly mentioned.

D. Identify recovery stakeholders

Recovery stakeholders include the government, national and international agencies, civil society, and the private sector. Some of these stakeholders are key to the planning and implementation of recovery while some may not directly participate in the recovery process but can influence the process of recovery.

Key stakeholders may have been involved in previous recovery programmes or are active in the development of the disaster-affected area. The stakeholders will be known to the local government. The proper engagement of stakeholders in planning can help a recovery programme. Examples of recovery stakeholders are listed in Table 2.

Table 2: Examples of Recovery Stakeholders

Stakeholders	Examples
Key stakeholders in Recovery (roles are described in Table 3)	 Central and local government agencies Affected population Civil society organisations and community-based organisations Non-government organisations (local, national) International non-government organisation United Nations agencies Bilateral donors Multilateral financial institutions Private sector
Examples of other stakeholders	 Non-affected population in affected area Property owners Political actors (political parties, candidates, opponents of elected officials, etc.) Civil society/taxpayers outside affected area

³⁰ Government of Indonesia, 2007, Law of the Republic of Indonesia Number 24 Of 2007 Concerning Disaster Management, https://www.ifrc.org/docs/IDRL/956EN.pdf

Government of Myanmar, 2009, Standing Order on Natural Disaster Management in Myanmar http://www.recoveryplatform.org/assets/publication/SO%20Printing%20new.pdf

A stakeholder analysis can be used to identify and assess the importance of key people, groups of people, or organisations that may significantly influence the success of an activity or project. Several useful tools are available for stakeholder analysis developed by the World Bank.³²

E. Clarify roles and responsibilities of recovery stakeholders

The Recovery Framework must specify the roles of the key stakeholders in recovery. The government's organisational model for recovery will establish the roles of government agencies, and define what government will do directly (through various forms of direct execution) and indirectly (by providing resources to other organisations). It is also important to agree on the roles and responsibilities of other stakeholders. Table 3, highlights common nongovernment stakeholders and their contribution to recovery.

Table 3: Non-Government Recovery Stakeholders and their Contributions to Recovery

Recovery partners	Description	Contribution to recovery
Affected population	The affected population are those that have been affected by the disaster in some manner i.e. loss of family members, loss of livelihoods, loss of homes and assets, etc. These include the most vulnerable and marginalized groups such as women, children, the elderly, people with disabilities, ethnic minorities, etc.	 Help in planning and designing interventions that are appropriate for the affected communities. Help in implementing interventions through community engagement. Help in monitoring progress of interventions by providing feedback.
Civil society organisations (CSO) and community- based organisations (CBO)	This includes a wide range of non-government organisations which may be cultural, political, scientific, religious, philanthropic, etc. such as people's organisations, professional associations, labour unions, research institutes and universities, foundations, and social movements.	 Can be key partners for implementing the recovery programme at the local government and community levels since they have existing organisational structures that can be used for organizing recovery. Have knowledge of local communities that can be useful for various purposes including supporting assessments and beneficiary registration or enumeration. As they continue to operate even after the completion of a recovery programme, they can contribute to long-term resilience building.
Non-government Organisations (NGOs)	This includes a broad range of not-for-profit organisations engaged in humanitarian, advocacy or development work. Many are supported by international NGO's and donor agencies to carry out a range of projects which may or may not be planned or coordinated with the government.	 Can provide technical expertise. Can be key partners for implementing the recovery programme at the local government and community levels since they have existing organisational structures that can be used for organizing recovery. May have access to external resources through networks or associations.

³² See World Bank, 2013, Social Accountability E-Guide: A Step-by-Step Approach to Integrating Social Accountability into Projects https://saeguide.worldbank.org/ and World Bank, 2007, Tools for Institutional, Political, and Social Analysis of Policy Reform: A Sourcebook for Development Practitioners. See Chapter 7: Tools for Macro-Level Analysis, Stakeholder Analysis, p. 127. https://openknowledge.worldbank.org/handle/10986/6652

Recovery partners	Description	Contribution to recovery
International non- governmental organisations (INGOs)	This includes a broad range of international not-for-profit organisations engaged in humanitarian, advocacy or development work. They provide expertise and investments on the ground through projects, which may or may not be planned or coordinated with the government.	 Can provide technical expertise and knowledge based on the experience of working in similar situations in other countries. Can mobilise resources for projects. Can assist the government with administrative responsibilities such as procurement and management of trust funds.
United Nations agencies	This includes a large number of UN agencies working on development and disaster risk management.	 Provide strategic support to national and local governments to plan and implement the recovery programme. Bring international knowledge and experience and provide technical advice and expertise as required. Can mobilise resources or help governments mobilise resources for the recovery programme. Can assist the government with administrative responsibilities such as procurement and management of trust funds.
Bilateral donors	This includes international government agencies that provide financial assistance through grants for technical assistance for a range of development projects.	 Can re-programme already committed resources to meet recovery-related needs? Can provide additional resources.
Multilateral financial institutions (MFI)	This includes international lending organisations that provide financial assistance through both loans and grants.	 Provide strategic support to national and local governments to plan and implement the recovery programme. Can re-programme already committed resources and loan portfolios to meet recovery-related needs? Can provide new recovery loans or grants.
Private sector	This includes private business, firms, construction companies, industry associations, etc. See also Special Focus 2: Encouraging Private Sector Readiness for Recovery for details.	 Can provide inputs for public sector business continuity planning. Can provide assistance in the form of finance, labour, expertise, and materials.



Of the 14 countries impacted by the 2004 Indian Ocean tsunami, Indonesia was the worst affected, suffering a loss of 2.7 per cent GDP.³³ The province of Aceh, the fourth poorest in the country, became the second poorest after the tsunami. The devastation was massive, and a 30-year armed conflict in Aceh added to the existing challenges of recovery.³⁴

With the monumental task of coordinating multiple agencies engaged in recovery, the government set-up the Agency for the Reconstruction and Rehabilitation of Aceh and Nias (BRR). Over a five-year period, the role of the agency evolved from coordinator to executor, and it succeeded in reconstructing over 140,000 homes, building new schools and improving critical infrastructure. Those who had left returned to better homes and living conditions and the reconstruction activities are believed to have reduced poverty in Aceh to the pre-tsunami levels.³⁵

There are several reasons behind the success of the BRR that provide valuable insights for recovery agencies elsewhere.

- BRR was headquartered in Banda Aceh and not Jakarta, so it was located on the frontlines of recovery interventions. The agency logo depicted Aceh Province and the Nias Islands in green on a white background, which was unusual for a ministry. The work clothes of the staff were not the usual formal ministry wear. These steps were taken by BRR to gain the trust of the people.³⁶
- BRR was led by a highly qualified official, Dr. Kuntoro Mangkusubroto, who in turn also selected several highly qualified deputies from the

- private and public sectors for leadership positions in BRR, drawn both from Aceh and other provinces of Indonesia. BRR paid competitive salaries to its employees to ensure that the best and the brightest were not poached by international agencies and, more importantly, to break the culture of gift giving.³⁷
- Within the framework of the overall Master Plan for recovery, BRR had a highly flexible approach. Recognizing that recovery occurs in a dynamic context, BRR used off-budget funds modality i.e. external contributions, not in the regular budget, which is not constrained by rigid government regulations.
- BRR adopted a "zero" tolerance" approach to corruption. It authorized the World Bank to manage a financial system developed to track the progress of the recovery programme, that is recovery projects run by donors and the top 20 NGOs. In Aceh and Nias, the top 20 implementing agencies were responsible for 85 per cent of recovery projects by value. 38 BRR integrated the "Build Back Better" approach at every opportunity people were housed in modern and orderly settlements and the community was involved in planning, construction, and maintenance of their communities.
- BRR launched a gender policy that created an administrative mechanism for the National Land Office to provide land titles to widows and joint titling for married couples as well as co-resident siblings or other family members.³⁹ BRR had to tackle legal, financial and administrative issues in trying to implement the master plan. Despite the vast coverage, some population groups were left out and didn't recover.⁴⁰ However, given the scale of the disaster and the relatively short time frame for recovery, the BRR did a stellar job and was acknowledged by the World Bank as a model for international partnership.⁴¹

Republic of Indonesia, Master Plan for Rehabilitation and Reconstruction of the regions and communities of the province of Nanggroe Aceh Darussalam and the Islands of Nias, Republic of Indonesia, April, 2005, p. I-I

³⁴ Iqbal Faraby and Saifullah Abdulgani, BRR, Institution. Laying the Foundation of Good Government, p. 5

³⁵ The World Bank, Aceh Poverty Assessment 2008, The Impact Of The Conflict, The Tsunami And Reconstruction On Poverty In Aceh, January 2008, p. 8

³⁶ BRR, Story. The Feat of the Daunting Launch, p. 121

³⁷ The Tsunami Global Lessons Learned Project Steering Committee, The Tsunami Legacy Innovations, Breakthroughs and Change, 2009, p.13

³⁸ ADPC, Handbook for Disaster Recovery Practitioners. The Tsunami Global Lessons Learned Project - Steering Committee, 2015, p. 89

³⁹ Disaster as opportunity, Lilianne Fan, 2013. https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8693.pdf

The World Bank, Resilience and recovery ten years after the 2004 Indian Ocean tsunami: A summary of results from the STAR project, http://blogs.worldbank.org/impactevaluations/resilience-and-recovery-ten-years-after-2004-indian-ocean-tsunami-summary-results-star-project, 18 December 2014, (Accessed on 13.08.2015)

⁴¹ Ache and Nias one year after the tsunami, 2005. http://siteresources.worldbank.org/INTEASTASIAPACIFIC/Resources/1YR_tsunami_advance_release.pdf

2.2 Decentralize Recovery

Local authorities are responsible for the development and well-being of their administrative units. In playing a leading role in recovery, local governments can further enhance their own credibility and capacities by engaging and interacting with the community. The laws of some ASEAN Member States assign responsibility for managing recovery to local governments. Box 3, describes the role of select local governments in disaster risk management and recovery.

Box 3: Role of Local Governments in Disaster Risk Management and Recovery in select ASEAN Member States

Cambodia | Law On Disaster Management Article 19

It shall be considered as the responsibilities of the commune-sangkat, town, district-khan committees for disaster management if the disaster occurred within the administering territory of any commune-sangkat, town, district-khan. It shall be regarded as the responsibilities of the city-province committees for disaster management if the disaster has affected more than one town, district-khan or occurred in town, district-khan of the city-province.

Indonesia | Law of the Republic of Indonesia, Number 24 of 2007 concerning Disaster Management BNPB, Perka No. 17/2011, Article 21

Disaster Management Local Agency shall have the tasks of 12 a. stipulating guidelines and directions in accordance with local government and Disaster Management National Agency policies on disaster management that include disaster prevention, emergency response, rehabilitation, and reconstruction in a fair and equitable manner.

Myanmar | Natural Disaster Management Law (The Pyidaungsu Hluttaw Law No. 21, 2013)

Local Body means any Natural Disaster Management Body of the Region or State, Self-administered Division or Self-administered Zone, District, Township, and Ward or Village Tract. The Region or State Government shall . . . form Natural Disaster Management Bodies comprising suitable persons and assign duties and powers thereof. The duties and powers of the National Disaster Management Bodies of the Region or State [include] implementing natural disaster management expeditiously under the guidance of the National Committee in coordination with the relevant government departments and Organisations, internal and external well-wishers, social organisations and other non-government organisations.

The Philippines | National Disaster Risk Reduction and Management Plan Implementing Rules and Regulations Section 2(e)

It shall be the policy of the State to develop, promote, and implement a comprehensive National Disaster Risk Reduction and Management Plan that aims to strengthen the capacity of the national government and the local government units (LGUs), together with partner stakeholders, to build the disasters resilience of communities, and to institutionalize arrangements and measures for reducing disaster risks, including projected climate risks, and enhancing disaster preparedness and response capabilities at all levels.

A. Prepare for decentralized recovery

Decentralized service provision has predictable risks and benefits, some of which are identified in Table 4. These factors also apply to the implementation of recovery.

Table 4: Benefits and Risks of Decentralization

Benefits of decentralization	Risks of decentralization
Easier to identify beneficiaries	Possible lack of technical capacity and human
• Easier to mobilise the affected community for common	resources
goals	Possible lack of adequate funds
 Greater opportunities for joint decisions and planning 	Greater burden of procedural approvals
with beneficiary involvement	 Possible delays due to requirement of
 More likely that services reflect local preferences and 	coordination, monitoring and reporting to the
meet needs	central government
• Greater receptivity on the part of beneficiaries to pay	
for services or participate	
Greater engagement of beneficiaries in oversight and	
accountability	
 Easier coordination with local partners and 	
stakeholders	

Certain recovery functions can be carried out only at the central level, such as negotiations with international donors. Some can be shared, like planning and infrastructure reconstruction and others can be fully executed locally such as community mobilisation.

Decentralized recovery succeeds when there is a strong commitment to decentralization and measures are put in place to support it, as shown in Table 5.

Table 5: Measures to Prepare for Decentralized Recovery

Aspect of recovery	Proposed measures
Planning and policy	 Prepare the National Recovery Framework jointly with local governments Clarify the roles and responsibilities of local governments Support local land use planning that prioritizes risk reduction and identifies relocation sites Require local governments to have their business continuity and recovery plans
Institutional framework	 Ensure that the legal framework enables decentralized recovery Encourage adoption of local ordinances that support DRR and recovery requirements Encourage local governments to establish coordination platforms with local NGOs and private sector firms Stipulate local DRM committees to expand their disaster preparedness to recovery preparedness possibly through simulations Formalise arrangements with local NGOs to assist with recovery execution Formalise partnerships between local governments for additional staff
Financial management	 Require local governments to create budget reserves for early recovery Revise budget and related laws to permit transfer and liquidation of local government funding Upgrade financial management systems at the local government level so they are adequate for transfer and tracking of recovery funding Establish mechanisms to facilitate local procurement such as use of procurement agents Pre-qualify local contractors for predictable recovery functions

Aspect of recovery	Proposed measures
Implementing	 Second staff and build their capacities for local level implementation
recovery	 Ensure adequate resources for expanded facilities and functions at the local level Deploy social mobilisers and volunteers for mobilising community engagement Establish protocols and systems for information management and communications between the centre and local levels Develop reporting and monitoring mechanisms for information flow between the centre and local levels

B. Support local execution

Local authorities often need assistance, even when decentralized recovery has been anticipated, and measures are in place to support it. Critical challenges and some immediate solutions are listed in Table 6.

Table 6: Challenges and Solutions for Supporting Decentralized Recovery

D	
Decentralization challenges	Immediate solutions
Local officials overburdened with relief to transition to recovery	 Provide additional staff to support relief efforts and transition to recovery Set up a dedicated multi-sectoral recovery team at the local level Organize local recovery planning early and clarify roles and responsibilities
Lack of staffing and experience with recovery management	 Second government staff from central government and non-affected local governments Provide financial resources for hiring additional staff Request donor and NGOs financial or technical support for additional staff
Loss of municipal offices or meeting spaces	 If affected, provide for alternate office spaces in non-affected building, tents or temporary shelters to restore critical governance functions Request private sector for space to accommodate temporary local government functions
Inadequate systems for procurement and control	 Develop protocols for local governments to use ancillary systems such as procurement agents Conduct concurrent audits of local government operations Employ private firms to strengthen project management and control
Non-response to offers of and demands for assistance	 Ask local partners to create and manage coordination platforms for local governments to lead Ensure NGO participation in recovery is negotiated and under contract Provide project guidelines to NGOs; require written project proposals and monitoring reports Conduct an early registration or enumeration of affected households
Need for coordination with central government agencies on the ground	 Send central government staff to field offices Delegate coordination to local government officials Agree on two-way accountability between local and central government Provide reporting and communications systems that support coordination
Coordination between localities, when the disaster covers more than one jurisdiction	 Involve local governments jointly in recovery planning exercises Assign the coordination function to higher levels of government (region, province) Update land use plans for recovery at regional level and in a participatory manner Create an intergovernmental liaison function Provide monitoring systems that support inter-municipal coordination

Special Focus 1: Simulating the Recovery Planning Process

Governments have worked diligently over the past decade to improve preparedness for emergencies. As a result, countless lives were saved and people's vulnerabilities to disasters reduced, even in some very high-risk countries. With a similar motivation, countries are now putting arrangements in place to be ready for recovery. By preparing arrangements for disaster recovery, a government can simplify and accelerate the post disaster recovery planning process.

Simulating the recovery planning process is one such way of preparing for disaster recovery. This includes the following steps:

A. Develop disaster scenarios

Countries that plan for disasters often prepare either for a repeat of their most recent disaster or for their most frequent disasters, which may or may not have a high impact in terms of economic losses.

Designing recovery arrangements requires assessing risks and identifying the corresponding disaster scenarios those risks could produce. Some scenarios can be developed without sophisticated forecasting tools, including those for smaller-scale disasters that occur on a regular basis. But modelling less frequent, higher impact events, or events in multi-hazard environments, may require a more scientific approach, and an understanding of the interactions of hazards.

Because resources are limited, governments must decide which disasters to prepare for, and which recovery arrangements to develop. Some mechanisms are relatively inexpensive to develop, useful in many types of events, and have high benefits. Others are more expensive and complex to put in place. In this case, a cost/benefit analysis of proposed provisions can be used.

National Disaster Management Organisations (NDMO) often develop disaster scenarios for purposes of response planning. These data may also be useful for recovery planning. By sharing this information with a wider group of stakeholders and helping them understand its implications for disaster recovery, NDMOs can support readiness for recovery.

B. Prepare risk information systems for recovery

Risk information systems are evolving rapidly as tools for DRM, and their use in recovery is expanding equally fast.⁴² Some of the tools include:

- Geospatial data and satellite imagery can be used to estimate the damage and provide information needed to plan relocation and reconstruction.
- Spatial impact modelling done before an event such as a tropical storm or impact assessments conducted immediately afterwards can be used to develop rapid estimates of losses.
- Risk maps and information on land uses and land use-related vulnerabilities are crucial for deciding how and where reconstruction should occur.
- Risk models can also be used to assess the economic and fiscal impacts of disasters, using exposure databases to estimate expected damage from various events. This information then becomes the basis for making decisions about pre-disaster arrangements for recovery financing, as discussed below.

To maximize the usefulness of risk information for recovery planning, it needs to be gathered and applications designed before an event occurs. After the event, the time needed to collect and process the information can slow down the recovery planning process. In recovery, NDMOs can play an important role supporting governmental and non-governmental agencies and the private sector by providing risk information and supporting decision making.

C. Simulate the recovery planning process

The identification, design, and development of disaster recovery arrangements should take place in the context of the country's disaster risk management policy, its national development plan or other development policy and planning frameworks. The ASEAN Member States are increasingly establishing legal frameworks that require ministries and other government agencies to develop plans for preparedness and recovery at the sector and local level.

Simulation is an effective tool for improving recovery planning capacity and strengthening recovery performance. Participants in recovery simulations can come to an agreement on their roles and responsibilities and identify where recovery arrangements are needed. Governments can seek assistance with staging recovery planning simulations. The International Recovery Platform (IRP), for example, trains government officials around the world and offers advice on using simulation for anticipating recovery approaches.⁴³

Recovery simulation, like recovery itself, involves stakeholders who do not participate in the response.

NDMOs can support readiness for recovery by establishing working groups or other coordination platforms among government and key recovery stakeholders where simulations can be carried out.

At the end of the simulation exercise, each sector should develop guidelines for recovery that cover the following:

- I. Contribution and role of agency in recovery operations under various scenarios
- 2. Needs for support from other agencies in recovery operations
- 3. Aspects of sector policy framework applicable to recovery and identify gaps
- 4. Sector programmes, funding mechanisms, and operational procedures relevant to recovery operations and identify gaps
- 5. Recovery arrangements to be put in place
- 6. Business continuity plans for the agency
- 7. Action plan to fully operationalise recovery arrangements
- 8. Information requirements and identify gaps in the sector or agency
- 9. Training needs of the sector or agency
- 10. Resource needs of the sector or agency

Special Focus 2: Encouraging Private Sector Readiness for Recovery

A. Business Continuity Management in the private sector.

The recovery of the government and households depends on the recovery of the private sector and often on the recovery of the non-government/ non-profit sectors as well. This is particularly the case if these actors operate schools, hospitals, and other critical facilities. It is in the government's interest that the private and non-profit sectors are prepared for disaster recovery.

In some countries, private sector advances in preparing for disaster recovery have been greater

than those in the government. Private sector "business continuity" arrangements have been implemented in these countries over more than a decade.

Business continuity management (BCM) is defined as a holistic management process that identifies potential threats to an organisation or disruptive incidents and their impact on business operations. BCM provides a framework for building organisational resilience with the capability for an effective response that safeguards the interests of its key stakeholders, reputation, brand and value-creating activities. It is similar to what is called "continuity of operations" (COO/COOP) or "continuity of government" (COG) in the public sector. 44

⁴³ See www.recoveryyplatform.org and "Guidance note on recovery: pre-disaster recovery planning," http://www.unisdr.org/files/31963_predisasterrecoveryweb.pdf

⁴⁴ Oregon Emergency Management, [no date], COOP Planning Manual. http://www.oregon.gov/OMD/OEM/plans_train/docs/coop/oem_coop_manual.pdf

There is much the public and private sectors can learn from each other in pursuing these aims. The field of BCM began in the 1980s and, while first associated with information technology, has since expanded to cover a range of threats, including natural disasters, acts of terror, technology mishaps and environmental accidents and a broader definition of critical business processes.

The practice of BCM in the private sector is supported by business associations and consultants, and more recently by the involvement of the International Organisation for Standardization, ISO.⁴⁵ In 2012, ISO published a management systems standard for BCM that can be used by organisations of all sizes and types.⁴⁶

B. Encouraging private sector involvement in recovery

The government can encourage the use of BCM in the private sector and the non-profit sector. It can also support the involvement of the private sector in recovery planning, particularly with companies most needed to support recovery, such as financial institutions, construction and engineering firms, building materials wholesalers and retailers, transportation companies, etc. This can be done in a number of ways:

• Use BCM as a topic for private sector engagement - If the private sector is prepared for disasters and recovers more quickly, this helps the government and the affected population to recover. Governments can engage with the private sector to ensure that their BCM is updated on a regular basis and conforms to international standards.

- Encourage the use of BCM in small and medium-sized businesses While the leaders in BCM are large private firms, the Japanese International Cooperation Agency (JICA) has pioneered the concept of Area BCM in collaboration with ASEAN.⁴⁷ Governments could use the ABCM approach to work with farmers, fisher folk, and small and medium enterprises (SMEs) to prepare for and recover from disasters. This helps to protect the businesses of these groups and reduce the demands on the government to restore livelihoods.
- Engage the private and non-governmental sectors in the development of Recovery Plans In an emerging trend in the region, the private sector is establishing Disaster Resource Partnerships (DRP), national coordination bodies covering the construction sector and other recovery-related areas to plan for mobilization in the event of a disaster. Where they exist, these bodies should be engaged in the recovery planning process.
- Strengthen public/private sector recovery coordination - The government can establish specific coordination platforms between the government and the private sector depending on the scale and nature of the disaster.

UNISDR's "Disaster Risk Reduction Private Sector Partnership Post 2015 Framework" lists five visions to drive risk-sensitive and resilient business practices globally and across sectors. Vision 2 is: "Resilience in the built environment is driven by the public sector raising minimum standards, and enabling the private sector to work voluntarily towards optimum practices."

⁴⁵ See International Organisation for Standards, ISO 22313:2012, "Societal security -- Business continuity management systems -- Guidance," http://www.iso.org/iso/iso_catalogue_tc/catalogue_detail.htm?csnumber=50050

⁴⁶ International Organisation for Standards, 2012, ISO 22301.

^{47 &}quot;JICA backs ASEAN business continuity management against disasters," http://www.jica.go.jp/philippine/english/office/topics/news/140829.html and "Area Business Continuity Management Scalable Cross Sector Coordination Framework of Disaster Management for Business Continuity," http://www.jica.go.jp/information/seminar/2014/ku57pq00001muxjq-att/20140620.pdf

⁴⁸ Engineering and Construction Disaster Resource Partnerships (DRP) exist in Indonesia and the Philippines, and new DRPs are being created in ASEAN countries. http://www3.weforum.org/docs/WEF_EN_DisasterResourcePartnership_Report_2010.pdf

⁴⁹ Disaster Risk Reduction Private Sector Partnership, 2015. http://www.unisdr.org/files/42926_090315wcdrrpspepublicationfinalonli.pdf





3. POST DISASTER ASSESSMENTS

Major disaster events are typically followed by numerous agencies conducting a variety of assessments in many sectors. These can range from rapid assessments of immediate needs (more associated with the humanitarian phase of action), to elaborate assessments of long-term recovery and risk reduction requirements in particular sectors. The number of assessments, distinct methodologies, and diverse motivations of agencies can be confusing, including for the affected population.

On 25 September 2008, a Joint Declaration on Post-Crisis Assessments and Recovery Planning was signed between the World Bank, European Union, and the United Nations Development Group. They agreed to adopt a common approach to post disaster needs assessments and recovery planning, developing guidelines for the Post Disaster Needs Assessments (PDNA). The PDNA has emerged as the globally accepted tool for post disaster assessments. The PDNA assesses the damage, loss and needs estimates financial requirements and provides the basis for planning and prioritizing recovery.

This chapter focus on the preparedness measures for undertaking post disaster assessments and responds to the following key questions:

- What are the various kinds of assessments?
- How to conduct the assessment?
- What sectors should be assessed?
- What kind of information is required for assessments?
- What outputs are needed from the assessment process?

3.1 Understand Assessments

In any type or scale of disaster, the damages, losses, and needs must be assessed to develop a recovery strategy based on the critical needs of the affected population. A credible assessment also serves as an important tool for resource mobilization, which is a critical requirement in the event of a major disaster.

Disaster assessments provide the evidence base for the recovery strategy and programmes. Planning recovery from a major disaster event usually requires a multi-sectoral damage, loss, and needs assessment that covers the entire disaster zone, as well as other more targeted assessments.

A. International assessment methodologies

The purpose of an assessment is to provide the government and stakeholders with a comprehensive, multi-sectoral overview of a disaster's impact by region and sector. It should also produce an appraisal of recovery needs and an estimate of the costs to recover. It may also provide advice on the recovery strategy.

The PDNA is a government-led assessment exercise with integrated support from the UN, the European Union, the World Bank, and other national and international actors. It produces a consolidated report on the physical impacts of a disaster; the economic value of damage and loss; the human impacts as experienced by the affected population; and the resulting early and long-term recovery needs and priorities.

To date, PDNAs have been undertaken in ASEAN member countries including Myanmar (2015, 2008), Thailand (2011), Laos PDR (2011, 2009), Indonesia (2009) and the Philippines (2009, 2014). In both Indonesia and the Philippines, the PDNA is a legal requirement stipulated in the national DRR law. The national adaptation of the PDNA is elaborated in the next section.

The PDNA Guidelines provides an agreed framework and predictable arrangements for effective and efficient support to governments requesting international assistance for post disaster recovery and reconstruction. It also provides technical advice on the overall assessment process (Volume A) and sector assessment methodologies (Volume B).⁵¹ The PDNA sectors are shown in Box 3.

The PDNA methodology standardizes the assessment process and its outputs, which facilitates government assessment of recovery needs and allows disaster events to be analyzed in terms of effects and impacts. As shown in Figure 3, the PDNA builds on the Damage and Loss Assessment (DaLA) methodology developed by the Economic Commission in Latin American Countries (ECLAC) in the 1970s.

Box 3: Post Disaster Needs Assessment / Typical Sectors and Subsectors

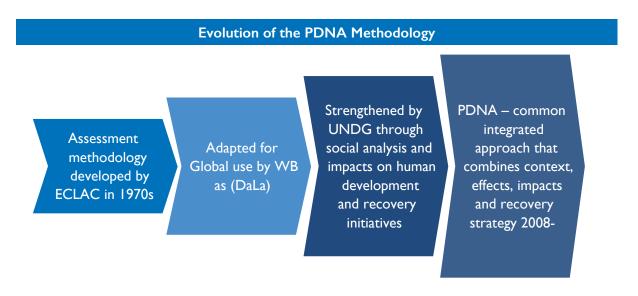
PRODUCT	ΓIVE S	OCIAL	INFI	RASTRUCTURE
Y Agricult	cure 💮	Housing	تتم	Water & Sanitation
Comme	erce	Education	1 €	Community infrastructure
Industry	· Q.	Health	÷0:	Electriciy
A Tourism	1 56	Culture	À	Transport
			P	Telecommunications

CROSS-CUTTING

GENDER GOVERNANCE ENVIRONMENT DISASTER EMPLOYMENT AND RISK REDUCTION LIVELIHOODS

Note: The diagram above illustrates the typical sectors that are assessed in the PDNA, this can vary from country to country.

Figure 3: Evolution of the PDNA Methodology



⁵¹ EC, GFDRR/World Bank, UNDP, 2013, PDNA Guidelines, Volumes A and B, http://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/pdna.html

B. Nationally defined assessment methodologies

Some countries have either formulated their own assessment methodologies or adapted the PDNA for national and local use. As mentioned above, Indonesia has adopted the PDNA process and tools to create the Indonesian PDNA (IPDNA).⁵² The IPDNA leads to the elaboration of the Action Plan for Rehabilitation and Reconstruction or RENAKSI that is sensitive to community perceived needs. It incorporates disaster risk reduction principles and other cross-cutting objectives, such as gender mainstreaming and a sound environmental approach. In developing the IPDNA, the government also developed a series of training manuals for assessment and implementation of rehabilitation and reconstruction activities.

PDNA guidelines can be adapted by governments to suit the country context and facilitate assessment and recovery planning such as to align sectors with ministries, departments, or national accounts. It can also incorporate local terminology or coding; incorporate country-specific recovery and development concerns; and/or translate materials to local languages. In doing

so, governments should strive to maintain outputs that are consistent with the international methodology.

C. Targeted and specialized assessments

Initial assessments, including humanitarian assessments, provide useful background information to guide the scope of the PDNA. The ASEAN Emergency Response and Assessment Team (ASEAN-ERAT) is designed to quickly respond to a major sudden on-set disaster in the ASEAN region. 53 This includes conducting rapid assessments and supporting the national disaster management offices of the disasteraffected Member State in the initial aftermath. There are several other initial assessment methodologies including those of the UN Disaster Assessment and Coordination (UNDAC); the Multi-Sector Initial Rapid Assessment (MIRA); the Disaster Emergency Needs Assessment by the International Federation of the Red Cross; 54 etc. Geo-spatial data and remote sensing also provide useful visual assessments for relief and recovery operations.

Depending on the purpose, a PDNA may be followed by more detailed assessments such as those in Table 7.

Table 7: Typical Assessments Conducted Following a Disaster

Type of Assessment	Example
Sector-specific assessments	Education sector assessment such as UNICEF's Rapid Education Assessment ⁵⁵
Specialized assessments of social, environmental, or economic conditions	Social impact assessment using a methodology such as that of the World Bank ⁵⁶ [See note] Initial and detailed livelihood assessments using guidance from the Food and Agriculture Organisation (FAO) and International Labour Organisation (ILO) ⁵⁷ United Nations Environment Programme (UNEP) post-crisis environmental assessment tools. ⁵⁸
Project-related assessments, leading to project design or re-design	Assessments of conditions in the specific project area, demand for intervention, availability of materials, etc.

Note: Social impact assessment (SIA) establishes a baseline for monitoring, analysing, and managing the social consequences of a disaster and the assistance effort. SIA is integrated into the PDNA through the incorporation of the HRNA. However, SIA can also be used on a stand-alone basis.

⁵² Global facility for disaster reduction and recovery. https://www.gfdrr.org/indonesia%E2%80%93-2009%E2%80%93-pdna-undertaken-after-earthquake-killed-1100-west-sumatra

⁵³ The ASEAN – Emergency Response & Assessment Team (ASEAN-ERAT) is designed to quickly respond to a major sudden on-set disaster within the ASEAN region. The ASEAN ERAT supports the national disaster management offices of the affected Member State in the initial phases of a disaster. http://ahacentre.org/about-erat

⁵⁴ International Federation of the Red Cross and Red Crescent Societies, 2000, Disaster Emergency Needs Assessment http://www.ifrc.org/en/what-we-do/disaster-management/responding/disaster-response-system/emergency-needs-assessment/

en/what-we-do/disaster-management/responding/disaster-response-system/emergency-needs-assessment/

55 UNICEF, 2006, "Rapid Education Assessment," Section 1.3 in Education in Emergencies: A Resource Tool Kit, http://www.unicef.org/rosa/Rosa-Education_in_Emergencies_ToolKit.pdf

World Bank and UNDP, Analysing the Social Impact of Disasters, Volumes I and II. http://siteresources.worldbank.org/INTEAPREGTOPSOCDEV/Resources/PostDisasterocialAnalysisToolsVolumeI.pdf and http://siteresources.worldbank.org/INTEAPREGTOPSOCDEV/Resources/PostDisasterSocialAnalysisToolsVolumeII.pdf

⁵⁷ FAO and ILO, 2009, The Livelihood Assessment Tool-kit: Analysing and responding to the impact of disasters on the livelihoods of people. http://www.fao.org/fileadmin/user_upload/emergencies/docs/LAT_Brochure_LoRes.pdf.

Flash Environment Assessment Tool (FEAT): https://docs.unocha.org/sites/dms/Documents/FEAT_Version_1.1.pdf Rapid Environmental Assessment (REA): www.eecentre.org/ToolGuidanceDetails.aspx/id/75/lan/en-US_Environmental Needs Assessment in Post disaster Situations (ENA):/www.gdrc.org/uem/disasters/disenvi/pdna.pdf

3.2 Prepare for assessments

The PDNA is an inclusive, government-led process which builds on the capacity and expertise of national and international actors. While not all disaster events require a full PDNA, all assessments follow similar steps.

A. Timing of the assessment

The purpose of the PDNA is to identify recovery needs. Therefore, the assessment typically begins after the initial relief efforts are completed. At a minimum, there should be assurance that the assessment will not impede ongoing relief activities. Local government staff must be available to assist with the assessment.

Depending on the nature and scale of a disaster, a PDNA could start at least two weeks or later after a disaster and take between three to six weeks to complete. The timing varies based on the scope of the assessment and the data available at the onset of the process.

B. Prepare for the assessments

Refer to the PDNA Guidelines

The PDNA Guidelines have useful information for preparing for a PDNA including Terms of References (ToRs); templates and preparatory requirements for the conduct of a PDNA. There is also extensive experience from the conduct of PDNAs in the ASEAN Member States from which these preparatory tools can be adapted.

Several measures can be taken to prepare for PDNAs. This includes:

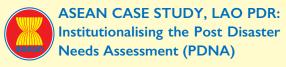
 Designating a lead government agency to manage and coordinate the PDNA (usually the Ministry of Planning);

- Establishing protocols for launching and activating a PDNA:
- Identifying key sectors to be assessed and focal points within the government line ministries including at the local level to lead the assessment;
- In case external assistance is required, identifying key partners from the UN agencies, international NGOs, donor agencies, etc.;
- Establishing pre-disaster baselines;
- Conducting trainings on the PDNA methodology;
 and
- Identifying logistical support required for the conduct of a PDNA including office space, interpreters, field visits, etc.

In addition to the PDNA Guidelines, the tripartite partners have developed a training package with the purpose of creating a cadre of trained PDNA experts who can be deployed for a PDNA after a disaster. A number of such trainings have been carried out, including a regional training for the ASEAN Member States in July 2015. The AHA Centre's Executive Programme (ACE programme) has also instititionalised training on the PDNA for NDMO officials. In addition to such training, an orientation before the actual start of a PDNA is important to establish a common understanding of the context and scope of a particular assessment and to train those not familiar with the methodology.

C. Prepare to mobilise data

An analysis of the pre-disaster context in each sector is required to determine the post disaster effects. This information, known as the baseline, provides the pre-disaster status in a sector or location prior to a disaster. Baseline data also helps to understand the underlying causes of a disaster. Time is saved during the PDNA process if baseline data is collected and available beforehand. Table 8 lists some useful sources of baseline data.



Lao PDR is one of the few countries in the region that has institutionalized the post disaster needs assessment. The Ministry of National Planning and Investment (MPI) along with line ministries and with the assistance of the World Bank and the Asian Disaster Preparedness Centre (ADPC) has developed a Handbook for Post disaster Recovery and Reconstruction Planning in Lao PDR. Adapting the global PDNA guidelines, the Handbook aims at improving the post disaster needs assessment and provides guidance on recovery and reconstruction planning.

The handbook identifies the key agencies, scope of the assessment, process and timeline; sectors covered and also includes relevant assessment templates. The Lao PDR PDNA methodology was first used in 2011 after Cyclone Haima. A workshop was conducted with all relevant stakeholders to review and update the methodology where a balance between the assessment of 'economic loss' and 'post disaster needs' was established. It led to

the establishment of a *Technical Disaster* Assessment Committee led by the MPI, the development of a *Manual for Damage and Loss Calculation* and further training for officials from key line ministries.⁵⁹

The methodology was also adapted to the provincial level. In Khammouane province of Lao PDR, the damage, loss, and needs assessment system was further strengthened through the development of province-specific tools. These included the *Standard Operating Procedures (SOPs)* for Damage, Loss and Needs Assessment and Guidelines on Planning, Budgeting, and Financing for post disaster recovery and reconstruction activities. The SOPs include guidance on the purpose, timing, scope and funding for the assessment as well as pre-assessment activities and procedures for conducting assessments.⁶⁰

Despite the challenges of baseline information and better data, the PDNA process in Lao PDR has been integrated with recovery and planning. The PDNA is seen as a useful tool for resource mobilization particularly with development partners interested in supporting specific components of recovery and reconstruction.

Table 8: Useful Data Sources for Recovery assessments

Data type	Explanation and Data Sources
Demographic and Economic data	 Data from national census for affected population Data from economic analysis and forecasts for impact on GDP
Sector data	 Data from sector ministries and other sources using formats available in the PDNA sector guidelines⁶¹
Disaster loss and damage database	 Data tracking impacts of hazard events over time and by sector including parameters such as number of deaths, physical damages, and economic losses⁶²
Inventories of public assets	 Data from geo-referenced public asset inventories Data (visual) from satellite imagery of public asset inventories
Housing registries	 Data from official records of housing locations and values from property cadastres, property tax systems, or homeowner's insurance

⁵⁹ The World Bank Group, et al, Strengthening institutional capacities for resilient recovery, Lao PDR, April 2014, p.22

⁶⁰ Department of Planning and Investment and et al, Standard Operating Procedure: Damage, Loss and Needs Assessment in Khammouane province, Lao PDR, p. 5

⁶¹ EC, GFDRR/World Bank, UNDP, 2013, PDNA Guidelines, Volumes A and B, http://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/pdna.html

⁶² UNDP, 2013, A Comparative Review of Country-Level and Regional Disaster Loss and Damage Databases. http://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/loss-and-damage-database.html

The National Statistics Bureau or the Census Office provides baseline demographic and economic data and projections for the affected area. It can also help establish protocols for geo-referencing assessment data, allowing it to be cross-referenced with census data and provide expertise on data security issues. Indonesia's initiative to develop the Disaster Recovery Index is being spearheaded by the National Statistics Office, see Box 4 for details.

Box 4: Indonesia's Disaster Risk Index (DRI)

Indonesia has been working to establish the National Disaster Recovery Index, a standardized national tool to measure recovery progress in communities affected by natural disasters. Piloted in communities affected by the 2010 Mount Merapi eruption and the 2011 Lahar floods, the Index utilizes 22 variables to determine how communities are recovering and restoring infrastructure, housing, livelihoods, and social structures, among others. The goal is to speed up recovery efforts in disaster-hit areas of Indonesia. The project involves the country's Statistics Agency – BPS, it was launched in 2014 as a national tool for monitoring recovery.⁶³

However, not all countries collect the kind of data mentioned in the table although they can provide valuable baseline information. For instance, housing registries often have records of size, condition and features of housing stock which can help to determine post disaster damage to the housing stock and plan assistance programmes.

An assessment therefore is based primarily on government sources of data and data collected through surveys and interviews during the assessment process. Also, governments may consider other sources, including innovative sources for collecting baseline information, including through crowdsourcing information.

Risk maps, topographical maps, and land use plans are important sources of hazard risks which are critical for post disaster planning.⁶⁴ Analysing risk information before a disaster helps to establish the baseline. Assessments based on hazard models and satellite imagery can be used to develop rapid estimates of losses, identify hazard zones, and plan relocation and reconstruction. Geo information, an important source of data, supports a range of risk mitigation and recovery interventions.⁶⁵

The open data philosophy says that disaster risk data, as well as the knowledge of how to analyse and apply those data, need to be available to everyone. Governments can promote the open data approach by pro-actively resolving legal, costs, and technical issues associated with data sharing, either in advance of the disaster or during recovery planning. Protocols can be established in advance for recovery partners to request technical assistance and information for planning and implementation, consistent with the Open Data Resilience Initiative (OpenDRI) methodology. 67

3.3 Conduct Assessments

The government must direct the assessment process to ensure that the outputs satisfy its purposes and that the public has confidence in the results. In the ASEAN region, international agencies such as the UN, the EU, the World Bank, Asian Disaster Preparedness Centre, Asian Disaster Reduction Centre, and the Asian Development Bank have extensive post disaster

⁶³ UNDP, 2014, Indonesia eyes nationwide application of Disaster Recovery Index in 2015. http://www.undp.org/content/indonesia/en/home/presscenter/pressreleases/2014/10/30/indonesia-eyes-nationwide-application-of-disaster-recovery-indrex-in-2015.html

⁶⁴ Global Facility for Disaster Reduction and Recovery, 2014, Understanding Risk in an Evolving World - A Policy Note. World Bank. https://www.gfdrr.org/RAPolicyNote.

⁶⁵ See Joint Board of Geospatial Information Societies and United Nations Office for Outer Space Affairs, 2010, Geoinformation for Disaster and Risk Management - Examples and Best Practices, http://www.un-spider.org/about/portfolio/publications/jbgis-unoosa-booklet and 2013. The Value of Geo-Information for Disaster and Risk Management: Benefit Analysis and Stakeholder Assessment. http://www.un-spider.org/sites/default/files/VALIDPublication.pdf

Open data advocates work to make disaster risk information technically and legally open, accessible, interoperable, and reusable, in order to maximize the use and impact of this data in reducing risk. The Open Data for Resilience Initiative (OpenDRI) works with governments to implement these principles. See: World Bank/GFDRR, 2014, Open Data for Resilience Initiative Field Guide. https://www.gfdrr.org/sites/gfdrr/files/publication/opendri_fg_web_20140629b_0.pdf

See Prevention web, 2014, "New field guide explores open data innovations in disaster risk and resilience," http://preventionweb.net/go/36861 and Open Data for Resilience Initiative Field Guide. https://www.gfdrr.org/sites/gfdrr/files/publication/opendri_fg_web_20140629b_0.pdf and the website of the State of Maharashtra, India, Remote Sensing Applications Centre. http://www.mrsac.gov.in/en/projects/software-development-project/dmis

Box 5: Open data philosophy

"Data must be legally open, in terms of intellectual property licenses that permit them to be reused, repurposed, and redistributed without cost. They must also be technically open, so that any software can open them, manipulate them, and save new analyses in open formats. Data needs to be collected, analysed, and curated by the people facing the risks. Only through this process of having the data available to all and curated by those who are potentially affected can behaviour fully change."

Source: World Bank, 2014, Open Data for Resilience Initiative Field Guide. http://preventionweb.net/go/36937.

assessment experience and often participate when countries need additional assessment capacity. In the event a PDNA is conducted, support can be provided throughout the assessment process.

A. Launch the PDNA

A government considering a PDNA begins by communicating with a representative of one or more of the PDNA partners: the EU, the World Bank, and the UN. Beginning with the initial contact, these steps are typically followed:

- I. Official request from the government and joint decision to activate a PDNA;
- 2. Designation of the national lead agency for the PDNA;
- 3. Deployment of a planning mission to formulate the terms of reference (TOR) for the PDNA if required; and
- 4. Agreement on the support that government and partners will provide to the process.

The TOR provides the framework for the assessment including duration of the assessment, geographical areas, and sectors to be covered, data to be collected, field visits to be conducted, teams to be deployed and reports to be prepared.

Depending on the agreement reached, PDNA partners may assist the government with financial and technical support, including the recruitment of international and national experts in the relevant sectors from international and national rosters.

B. Organize the assessment process

The PDNA process consists of an organized sequence of activities. These steps can be followed when other assessment processes are used as well.

- **Establish** the assessment team, including a steering committee, a coordination team, and sector teams;
- Conduct training on the assessment methodology;
- Collect and validate data;
- Draft sector reports using standardized format;
- Consolidate and analyse sector effects, impact, and needs;
- Formulate the Recovery Strategy; and
- Define the resource mobilization and implementation approach.

Government officials should oversee the assessment in all sectors. Relevant national and international stakeholders should participate in all sectors, for both the assessment process and development of the Recovery Strategy. Stakeholders include:

- Government representatives from relevant line ministries:
- Local authorities;
- The affected population, civil society, and local NGOs;
- International actors, including INGOs and donors expecting to be involved in recovery; and
- Private sector representatives.

Donor engagement in the PDNA brings international experience to the assessment and helps donors better understand recovery needs.



Successive typhoons, a significant rise in the level of the Mekong River, trans-boundary flash floods in the western provinces and heavier-than-average monsoon rains between May and October 2013 caused severe flooding in Cambodia. The floods killed 168 people and affected 1.8 million people spread across 20 of the country's 24 provinces.

A post disaster assessment to determine the damage, loss and needs were undertaken by development partners covering economic, social and infrastructure sectors. The *Post-Flood Early Recovery Needs Assessment* (PFERNA) report estimated total damage at US\$-153.28 million and loss at US\$202.94 million.⁶⁸ It was estimated that the GDP would shrink by 7.0 per cent down from the pre-flood projection of 7.6 per cent, which was largely caused by shrinking agriculture production.

The recovery and reconstruction needs for each sector were identified. The total needs were

US\$306.28 million, which included US\$118.41 million for short (3-6 months) needs, US\$89.56 million and US\$98.32 million for medium (6-18 months) and long-term (beyond 18 months) needs respectively. The report was shared widely among the government institutions and development partners and mobilised about US\$200 million from donors in grants and loans to finance recovery and reconstruction projects.⁶⁹ The report identified strengthening of disaster risk management systems as one of the priorities. The Disaster Management Law was enacted in March 2015.

The assessment process was cost effective as stakeholders pooled their resources and expertise. For instance, UNDP provided resources for field assessment and meetings, sector experts from line agencies were deployed by participating agencies without any fee and the government covered the cost of publication and dissemination of the report. This process also helped in building capacities of the national and sub-national agencies on post disaster assessments and identified several areas of improvement in assessment as well as disaster risk management systems in Cambodia.

C. Understand assessment outputs

The PDNA produces several critical outputs that result from the consolidation of sector assessments, which can be used to mobilise resources and organize the recovery process:

- A consolidated assessment report showing effects and impacts of the disaster overall, by location, and on each sector;
- A cross-cutting analysis of disaster impacts on gender issues, environment, risk reduction, and governance;

- A Recovery Strategy that defines:
 - The vision for national recovery;
 - A strategy for recovery within each sector and affected region;
 - A description of recovery needs for each sector and location and cost estimates that can be used as a basis for resource mobilization; and
 - An outline of the implementation arrangements.

Setting overall priorities in line with available resources is a government responsibility and one of the most essential tasks involved in preparing the Recovery Strategy.

⁶⁸ Post-flood early recovery need assessment report, 2014. http://www.kh.undp.org/content/dam/cambodia/docs/PovRed/Cambodia%20post-flood%20recovery%20need%20assessment%20report.pdf





• RESOURCE MOBILISATION AND FINANCIAL MANAGEMENT FOR RECOVERY

In the Recovery Framework, the recovery financing component addresses mechanisms for mobilising, spending and reporting on the use of recovery funds. It also includes the policies that assign roles and responsibilities for finance-related tasks and governs the implementation of the financial aspects of the recovery programme.

This chapter on resource mobilisation and financial management of recovery addresses the following key questions:

- What are the sources of funding available for recovery?
- What are the recovery programmes financed by the government finance and how will the funds be delivered?
- What kind of financial systems will be used to fund recovery?
- What information is needed to plan, control, and report on recovery expenditures?
- How will "off-budget" financing, such as that contributed by NGOs or the private sector, be directed, tracked, and reported?

The responsibility for issues related to recovery finance rests with several agencies, especially: the Ministry of Finance, Ministry of Planning, Government Treasury Office, local governments, NDMOs, donors, and the private sector including banks and insurance providers.

4.1. Define the Recovery Financing Approach

A. Prepare recovery financial policies

Each disaster's financial strategy is unique, but the options for financing disaster recovery is predictable. If a government can establish recovery financing policy and put financial arrangements in place before a disaster, as part of a Recovery Framework, it will accelerate post disaster implementation.

The financial policies of a particular recovery programme are defined on the basis of:

A government's financial policies that apply to all development activities [National Development Plan or sector development plans]

Recovery financial policies already established in the Recovery Framework or used in previous recovery programmes [National Recovery Framework or sector recovery strategies]

Broad recovery policies announced for the specific recovery programme [See Chapter I]

Following a disaster, with fiscal policies defined, and fundraising underway, the financial plan can be prepared, and the necessary regulations and administrative arrangements set up accordingly.

4.2 Mobilise Funding Sources for Recovery

A. Maximize public funding sources

Funding sources for recovery can be categorized as internal (government's own budget, contingency funds, and insurance proceeds) or external (donor or NGO assistance or international financial institution (IFI) loans). External funding can be on-budget (IFI loans and some donors) or off-budget (NGO assistance and other donors), as shown in Table 9.

Table 9: Sources of Recovery Financing by Category

Source of funding	Category
PUBLIC FUNDS	
Internal resources	
Government operational and capital budgets	On budget
Insurance proceeds (public assets)	On budget
Special levies or taxes	On budget
Government contingency funds	On budget
Contingency financing arrangements	On budget
External resources	
IFI loans	On budget
Bilateral donor emergency and recovery assistance	On or off budget
Multi-donor trust funds	Generally, on budget
International and national NGO emergency and recovery assistance	Off budget
Regional funding sources	On or off budget
Private Funds	
Private companies' reserves and loans	
Household savings and loans	
Insurance proceeds (private assets)	
Remittances	
Private gifts	

The principal sources of government recovery funding in the ASEAN Member States are government budgets and contingency funds. However, these sources are also tapped for emergency relief and may be insufficient to cover recovery needs.

Table 10 describes key public funding sources used to finance recovery, associated implementation issues, and examples of ASEAN Member States using these sources of funding.

Table 10: Key Public Funding Sources, Implementation Issues, and Examples

Funding Source	Explanation	Examples
Contingency funds	Internal reserves and contingency budget lines provide the government (and local government) with flexibility in the event of a disaster. At least three ASEAN countries have budget laws that require a percentage of national and local budgets to be reserved for DRR, emergency, and/or recovery purposes. Contingency funds are rarely adequate to cover significant recovery needs, especially in municipal government. New revenue sources are needed to build these funds.	Philippines Myanmar Indonesia
Contingent financing arrangements	Contingent financing gives governments rapid and low-cost access to loan funds for disaster relief, recovery, and reconstruction. Contingent financing instruments include: Immediate Response Mechanism. Certain World Bank borrowers can set up an arrangement whereby in the event of an emergency they can access five per cent or US\$ 5 million of the un-disbursed portfolio balance. Contingent Emergency Response Component: A project component financed by an investment loan from an international financial institution that allows rapid reprogramming of loan funds following a disaster. Sometimes called "zero component." Contingent credit facility: A free-standing line of credit deployed after a specific event (e.g. an emergency declaration), such as the Catastrophe Deferred Drawdown Option (CAT DDO) offered by the World Bank associated with a development policy loan.	The Philippines government signed a US\$500 million CAT DDO loan in 2011 and tapped it following both Tropical Storm Sendong (Washi) and Tropical Storm Yolanda (Haiyan). ⁷² Myanmar's National Electrification Project, financed by the World Bank in 2015, includes a Contingent Emergency Response Component. ⁷³
Donor emergency funding (bilateral or NGO funds)	Funds raised from the UN Central Emergency Response Fund (CERF), Flash Appeals, or other resource mobilization activities organized by the IASC are meant principally for humanitarian response. Governments can request that funds are spent on early recovery and work to minimize duplication between international and national emergency funding, leaving more local funding for recovery.	The humanitarian appeal for the Philippines following Typhoon Haiyan requested US\$776 million of which US\$469.1 million was funded. ⁷⁴
Donor recovery funding (bilateral or NGO funds)	Donor funding commitments for recovery are made during Donor Pledging Conferences or through direct communication with donors. Because donor recovery funds are often reprogrammed from existing development programmes, governments should require that recovery activities support long-term development objectives.	In the pledging conference held following the 2004 Indian Ocean tsunami, donors pledged more than US\$3 billion.

⁷⁰ World Bank, 2015, Investment Project Financing--IDA Immediate Response Mechanism Guidance Note. http://siteresources.worldbank.org/ PROJECTS/Resources/40940-1365611011935/Guidance_Note_IRM.pdf

⁷¹ World Bank, [no date], Catastrophe Deferred Drawdown Option: Product Note. http://treasury.worldbank.org/documents/ CatDDOProductNote 2015.pdf

⁷² World Bank, 2011, Disaster Risk Management Development Loan with a CAT DDO. http://www.worldbank.org/projects/P125943/disasterrisk-management-policy-loan-cat-ddo?lang=en

World Bank, 2015, National Electrification Project. http://www.worldbank.org/projects/P152936?lang=en
 Financial Tracking Service, PHILIPPINES: Typhoon Haiyan - November 2013. <a href="https://fts.unocha.org/pageloader.aspx?page=emerg-emergemergencyDetails&appealID=1043

Funding Source	Explanation	Examples
Multi-donor Trust Funds	Multi-donor trust funds (MDTFs) are vehicles for programming, channelling, and/or tracking donor recovery resources. MDTFs vary in their purpose and organisation. Some types include: Funds deposited by multiple donors and managed by the government or a third party 'Virtual' funds that are largely vehicles for tracking commitments in a particular sector Independent funds dedicated to a specific recovery purpose Setting up a MDTF can be time-consuming, so governments should consider establishing permanent legal arrangements that can be activated when needed. UN Development Group administers MDTFs for governments. Sample legal documents are found on their website. To	The Multi Donor Fund for Aceh and Nias operated from 2005 to 2012 and financed recovery of communities, housing, infrastructure, economic development, environmental improvements, and capacity building following the 2004 Indian Ocean tsunami and 2005 Nias earthquake. ⁷⁶ In 2010, Indonesia established the Indonesia Multi-Partner Fund Facility for Disaster Recovery, a standing mechanism to fund Rehabilitation and Reconstruction Action Plans that require international assistance. ⁷⁷
Asia Pacific Disaster Response Fund (ADRF) ⁷⁸	The APDRF was established by the Asian Development Bank to provide up to US\$3 million of quick-disbursing grant funds to restore life-saving services and augment other aid flows. APDRF grants can be used to procure goods, works, and services related to disaster response. Some permitted uses also accelerate early recovery, for example, transitional shelter, water purification and sanitation systems, and debris management.	Following Typhoons Nesat and Nalgae in Cambodia in 2011, APDRF funds were used for seed, to rapidly replant destroyed rice fields, temporary repair of irrigation canals, and food- and cash-for-work schemes to repair rural roads.

Funding sources that government can control directly, such as its own budget, are preferable to resources that other agencies programme and spend. However, international agencies and NGO funding can be significant and should be considered part of the overall recovery financing plan.

A point to note is that external funders may not clearly distinguish between emergency and recovery funding. Shortening the emergency period may allow more funds to be dedicated to early recovery and recovery activities.

Recovery funding from both internal and external sources often comes from reprogramming funds previously committed to other purposes, especially to development projects, demonstrating how disasters can have a negative effect on national development plans.

B. Expand market-based financing arrangements

Disasters not only put financing demands on governments, to cover reconstruction costs, but they may also simultaneously reduce government tax revenues. Some countries are reducing exposure to these fiscal shocks using mechanisms that transfer risk to the market.

After most disasters, more financing for recovery comes from private sources than from the government, especially if households are considered. It is in the government's interest that the private sector and households also have access to market-based mechanisms and risk management tools. Some examples are described in Table 11.

⁷⁵ UNDG, Multi Donor Trust Funds, https://undg.org/home/guidance-policies/joint-funding-approaches/multi-donor-trust-funds/.

⁷⁶ Multi Donor Fund, 2012, Sustainable Futures: A Legacy of Reconstruction (Multi Donor Fund, Final Report, Volume 1). http://www.multidonorfund.org/doc/pdf/MDF_report_vol_01_ENG.pdf

⁷⁷ Government of Indonesia, 2010, The Indonesian Multi Donor Fund Facility for Disaster Recovery (IMDFF-DR) Operation Manual. http://mdtf.undp.org/document/download/5910

⁷⁸ Asia Pacific Disaster Response Fund (APDRF) web site: http://www.adb.org/site/funds/funds/asia-pacific-disaster-response-fund-apdrf

Table 11: Market-Based Risk Management Tools

Market mechanism	Explanation	Examples
Catastrophe bonds	Cat bonds create securities that raise funds and transfer certain catastrophe risks to capital market investors. ⁷⁹ If a qualifying event occurs, investors lose their principal, and the issuer receives those funds to cover their losses. Triggers can be actual losses (indemnity), cumulative losses hitting a certain total (industry loss trigger), or actual catastrophe conditions (parametric index trigger). A catastrophe bond can cover a single loss event or multiple events ("multi-cat") over a risk period.	Governments can issue cat bonds to have the resources for post disaster assistance, as an alternative (or in addition) to individual homeowners buying their own insurance. ⁸⁰ The government of the Philippines is preparing to enter the cat bond market with the assistance of the World Bank.
Weather derivatives	These are financial instruments used to reduce the risks associated with adverse weather conditions such as rainfall, snowfall, or temperature. ⁸¹ The derivative lets buyers smooth their earnings over a period of adverse weather which would usually have affected them financially. ⁸² A broader category of disaster risk management derivatives includes geological and meteorological events. ⁸³	Farmers, governments, or companies.
Property catastrophe insurance (PCI)	PCI protects homeowners and businesses against losses arising from property damage. Insurance programmes must reach scale to be economically feasible, and insurance markets are still underdeveloped in the ASEAN region. Some governments purchase PCI for public assets, but more self-insure, sometimes through a public company. Government subsidies may be required to help programmes reach scale. If businesses and households can insure their assets, government's need to finance recovery is reduced. Options such as this should be included in the DRFI strategy.	Thailand's National Catastrophe Insurance Fund was created in 2012 as a reinsurance reserve. It acquires a portion of private insurers' insurance policies written for households, small and medium enterprises, and industries. The Fund is reinsured in the international market. Turkey's Natural Catastrophe Insurance Pool (TCIP) was created following the 1999 Marmara earthquake as a partnership between the government of Turkey and the domestic insurance industry. As of 2014, over seven million of Turkey's 19 million households participated in the programme. ⁸⁴

ARTEMIS, [no date], What is a Catastrophe Bond (or cat bond)? http://www.artemis.bm/library/what-is-a-catastrophe-bond.html
80 Gilles Carbonnier, 2015, "The Rise of Disaster Risk Insurance and Derivatives," from C. Brassard et al. (eds.), Natural Disaster Management in the Asia-Pacific: Policy and Governance, Disaster Risk Reduction, Chapter 11. f

A derivative is a financial contract whose value is derived from another asset (equity, bond or commodity).

ARTEMIS, [no date], What are Weather Derivatives? http://www.artemis.bm/library/what-are-weather-derivatives.html
World Bank Group, 2013, Financial Solutions for Disaster Risk Management. http://treasury.worldbank.org/web/documents/WBG Cat Risk Brochure 2013 Feb.pdf

Gurenko, Eugene; Lester, Rodney; Mahul, Olivier; Gonulal, Serap Oguz. 2006. Earthquake Insurance in Turkey: History of the Turkish Catastrophe Insurance Pool. Washington, DC: World Bank. http://hdl.handle.net/10986/7142. Also see: http://www.tcip.gov.tr

Market mechanism	Explanation	Examples
Index-Based Agricultural Insurance (I-BAI)	I-BAI coverage is based on an index correlated with crop losses, such as wind speed or rainfall (weather-based indices) or average yield losses over a region (area yield indices). ⁸⁵ Buyers (usually farmers and rural financial institutions) receive payouts when the index falls above or below a specific threshold. Index insurance protects farmers' livelihoods when there is a large-scale or regional risk (in the case of area yield insurance), or a well-defined climate risk (in the case of weather-based index insurance). ⁸⁶	The Philippine Crop Insurance Corporation launched the Weather Index-Based Crop Insurance (WIBCI) programme in Western Visayas in 2013, which pays out for extreme rainfall. Farmers receive payments if the Philippine Atmospheric, Geophysical & Astronomical Services Administration (PAGASA) rules that rainfall exceeds or falls under average levels by a certain amount. The insurance premium is tied to farmland value. ⁸⁷
micro insurance	Insurance services for low-income clients without access to mainstream insurance services. It can protect low-income households and microenterprises against risks such as an accident, illness, and natural disasters in exchange for premiums proportional to the likelihood and cost of the relevant risk. Micro insurance is offered by commercial insurers, mutual funds, microfinance institutions, NGOs, governments or semipublic bodies, but in some countries has had mixed success in terms of financial sustainability. ⁸⁸	In Thailand, five commercial insurers began selling micro insurance in 2013 through Counter Service, the payment service at Seven-Eleven stores. Micro insurance is regulated by the Office of the Insurance Commission. ⁸⁹ In the Philippines, many insurers offer a variety of micro insurance products. CARD Pioneer, which serves five million low-income customers, was processing claims in Tacloban the day after TS Yolanda struck. ⁹⁰ Regulations for micro insurance were issued in 2010. ⁹¹

C. Create National Disaster Funds to finance recovery

It is proposed to establish a National Disaster Fund (NDF) in the ASEAN Member States to finance post disaster recovery and reconstruction programmes. ⁹²

The National Disaster Fund (NDF) would:

- (i) Conduct transparent and efficient damage assessments of public assets;
- (ii) Mobilise immediate funding post disaster; and
- (iii) Execute the funds in close collaboration with relevant line ministries and public agencies.

The NDF would be established under both the Ministry of Finance and the National Disaster Management

Office, and could include the following windows:

- An Emergency Fund designed to respond to the immediate needs of a population affected by a natural disaster, hence supporting the NDMO.
- A programme for reconstruction, providing financial support to rehabilitate and reconstruct physical assets. The programme would focus on the reconstruction of public infrastructure and low-income housing.
- An NDF Trust, providing resources for post disaster recovery and reconstruction activities approved by the programme.
- The NDF could also act as the contracting authority for risk transfer mechanisms, including insurance.

⁸⁵ Consultative Group for International Agricultural Research, 2013, Scaling up Index Insurance for Smallholder Farmers: Recent evidence and insights, CCAFS Report No. 14. https://ccafs.cgiar.org/themes/index-based-insurance

⁸⁶ See International Fund for Agricultural Development and World Food Program, 2011, Weather Index-based Insurance in Agricultural Development: A Technical Guide. https://www.wfp.org/content/weather-index-based-insurance-agricultural-development-technical-guide

⁸⁷ Philippines Crop Insurance Company, 2014, "PCIC Pilots Weather Insurance in Iloilo." http://pcic.gov.ph/news/pcic-pilots-weather-insurance-in-iloilo/

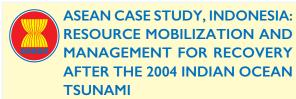
⁸⁸ Micro-insurance Network, "Key Concepts." http://www.microinsurancenetwork.org/microinsurance/key-concepts

⁸⁹ Bangkok Post, 2014, Micro-insurance needs a push to reach potential in Thailand. http://www.bangkokpost.com/print/419923/1/1

⁹⁰ CARD Pioneer website, Pioneer Champions Micro-insurance, http://www.cardmri.com/cpmi/?p=2062

P1 Republic of the Philippines Insurance Commission, Regulations for the Provision of micro insurance Products and Services. http://www.insurance.gov.ph/htm/..%5C_@dmin%5Cupload%5Creports%5CIMC%201-2010.pdf

⁹² Recommendations excerpted from "Advancing Disaster Risk Financing and Insurance in ASEAN Member States: Framework and Options for Implementation," 2012, presented to ASEAN.



Indonesia, the country worst affected by the 2004 Indian Ocean tsunami was able to mobilise and manage resources to undertake recovery on an unprecedented scale. External aid to the country was massive, with 130 countries providing assistance. There were many reasons for such large scale funding. The world had not faced a disaster of such mammoth scale, so the tsunami recovery was not in competition for aid with other disaster recovery programmes;. The tsunami killed people in 14 countries from 40 different nationalities, which further connected the people across the world; the internet and media coverage was widespread and in real time making it the most reported disaster to date. The aid architecture was propitiously conducive to a government-driven reconstruction programme and the creation of BRR, a dedicated agency for recovery and reconstruction which enhanced the confidence level among donors.

To manage resources, a number of funding channels were used. These included the government treasury where funds were channelled through the government budget by signing a grant or

loan agreement (World Bank and ADB used this modality); on budget/off treasury where donors disbursed funds to government accounts for further channelling to implementing agencies (used by Governments of Japan and Germany); and the off budget/ off treasury for directly funding on the ground implementation (used by UN agencies, NGOs and the private sector).

A rigorous system for financial accountability was followed that helped to gain donor confidence and mobilise resources for recovery. BRR was responsible for financial reporting of all on-budget expenditures while for off-budget projects; it relied on partners' own accountability mechanisms to report on their financial achievements. BRR submitted periodic Financial Reports to the Audit Agency, and the agency accordingly issued an opinion on each of those reports. The 2007 Statement of Accountability received an unqualified opinion from the Indonesia's supreme audit institution.

The committed funds to resource mobilization were approximately 93 per cent of the pledged funds, an extremely high success rate for resource mobilization. After four years of recovery, more than 90 per cent of the rehabilitation and construction was complete and over 90 per cent of the pledged amount was utilized.

D. Develop a Disaster Risk Financing and Insurance strategy

Funding for recovery needs is often insufficient. Governments must develop comprehensive financial protection strategies for disasters that identify expected events, and determine which financing instruments are appropriate for various needs, from emergency response to long-term reconstruction.

A Disaster Risk Financing and Insurance (DRFI) strategy helps allocate risk, reduces costs and delays in mobilising funds following a disaster, and brings more certainty to the fundraising process. ⁹³ Ex-ante disaster risk management, including financial contingency planning in the form of a DRFI strategy, can ensure

access to fast and cost-effective liquidity after a disaster.⁹⁴ This can in turn speed up recovery and help maintain the country's long-term development. DRFI instruments range from property catastrophe insurance for homeowners and agricultural insurance for farmers and herders to sovereign-level contingent facilities such as the World Bank's loan with catastrophe deferred drawdown option (CAT DDO).

The World Bank and UNISDR are assisting the ASEAN Member States in the area of disaster risk financing and insurance. DRFI has been identified as an area for exploration under the Prevention, and Mitigation component of the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) Work Programme, for implementation in Phase I.

⁹³ World Bank Group. 2014. Financial Protection Against Natural Disasters: An Operational Framework for Disaster Risk Financing and Insurance. Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/21725

⁹⁴ Advancing Disaster Risk Financing and Insurance in ASEAN Member States, 2012. https://www.gfdrr.org/sites/gfdrr/files/publication/ DRFL_ASEAN_REPORT_lune12.pdf

Developing a DRFI strategy is a long-term commitment that countries make because they realize it will pay off as experience is gained and new financing instruments emerge. The creation of the ASEAN Economic Community is expected to increase DRFI options, particularly with respect to regional insurance markets.

Regional DRFI activities: Through ASEAN, Member States can work together to identify and establish regional funding arrangements that expand DRFI options, as well as to share national progress on DRFI. The ASEAN Secretariat and the World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR) have proposed several regional activities, such as the creation of a regional insurance pool and a regional disaster risk modelling capacity that would support other DRFI initiatives.⁹⁵

City-level DRFI. Citizens look immediately to local governments to manage emergency and recovery efforts. Local governments have similar needs to national governments in financing recovery, but may have greater challenges such as the concentration of risk and fewer income sources. Cities can benefit from developing DRFI strategies; however, city-level DRFI has only begun in most countries. The Asian Development Bank (ADB) has been working with cities to develop prototype city-level DRFI strategies. ADB's expectation is that city DRFI initiatives will greatly expand in the coming years and that cities will have much to learn from each other.⁹⁶

4.3 Prepare Financial Arrangements for Recovery

A. Ensure continuity of government financial operations

As mentioned before, BCM in the public sector, especially for catastrophic events, is referred to as "continuity of operations" (COO/COOP) or "continuity of government" (COG).

The objectives in developing a COO plan are:97

- Ensure the safety of employees;
- Ensure the continuous performance of agency's essential functions during an emergency;
- Protect essential equipment, records, and other assets;
- Reduce disruptions to operations;
- Minimize damage and losses;
- Achieve an orderly recovery from emergency operations; and
- Identify relocation sites and ensure operational and managerial requirements are met before an emergency occurs.

All agencies managing government finances should have a BCM or COO strategy in place because (amongst other reasons) the interruption of these operations could seriously undermine the financing of a national recovery effort. Guidance and formats for BCM and COO plans are available from various sources.⁹⁸

B. Adapt financial management systems to recovery

Public financial management (PFM) comprises all activities for managing a government's financial affairs, including:

- Financial planning;
- Budget preparation and approval;
- Mobilising and managing cash (treasury);
- Accounting;
- Financial reporting;
- Procurement; and
- Auditing.

Reconstruction and recovery add demands on financial management systems due to time pressure, an expanded flow of financial transactions, and the need for closer tracking and more rapid reporting. Some aspects to consider are:

⁹⁵ World Bank. 2012. Advancing Disaster Risk Financing and Insurance in ASEAN Member States: Framework and Options for Implementation, Volume 1. Main report. Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/12627

⁹⁶ Asian Development Bank, 2015, Strengthening city disaster risk financing in Viet Nam. Mandaluyong City, Philippines: Asian Development Bank. http://www.adb.org/sites/default/files/publication/176535/strengthening-city-disaster-risk-financing-viet-nam.pdf

⁹⁷ Oregon Emergency Management, [no date], COOP Planning Manual. http://www.oregon.gov/OMD/OEM/plans_train/docs/coop/oem_coop_manual.pdf

⁹⁸ Ibid and International Organisation for Standards, 2012, ISO 22313:2012: "Societal security, Business continuity management systems, Guidance," http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50050

- Financial management practices: Financial agencies must decide whether any normal PFM policies and procedures should be modified to accommodate the demands of recovery.
- Financial functions: Special financial management functions may be required, such as tracking donor commitments.
- Financial reporting: Systems for reporting on recovery progress need to be timely, user-friendly, efficient, and readily accessible to implementing agencies.

A number of public financial management challenges encountered in recovery are shown in Table 12, along with potential solutions.

Table 12: Common Public Financial Management Challenges in Recovery and Potential Solutions

PFM Challenge	Potential Solution
Financial management capacity is stretched	 Prepare to add capacity to manage surge in procurement and other financial transactions Anticipate the need for financial systems in the recovery agency, if one is created Set up twinning arrangements among municipalities
Budget amendments may hold up recovery	 Modify budget law so reprogramming and amendment of budgets can be done efficiently in the event of national emergencies
Recovery expenditures need to be segregated and geo-coded	 Evaluate how government systems can be modified to provide segregated reporting the need for geo-coding and tracking of projects from budgeting to delivery are important issues Consider using international systems such as Development Assistance Database (DAD), knowing they will take time to put in place if there is no previous national experience⁹⁹ Avoid re-entering the same financial data into more than one system
Need to streamline procurement procedures	 Implement measures that reduce procurement delays without introducing significant risk Sign standby contracts with pre-qualified contractors for work that facilitates recovery, such as debris removal or restoration of basic services
Financial reporting must be timely	 Evaluate whether parallel systems dedicated to recovery or government systems are more capable of meeting recovery PFM requirements Implement upgrades to government systems so they meet recovery requirements

Procedures and systems for post disaster PFM can be designed, approved, and developed before a disaster. This overcomes the challenge of doing so while launching a recovery programme.

C. Put fiscal transfer mechanisms and controls in place

Agencies and individuals carrying out recovery activities funded by the government need prompt and convenient access to their funds. Finance officials must determine how to channel funds to and ensure control by implementing agencies. The primary concerns to resolve include:

- Transfer of funds (disbursing in a form useful to the implementer)
- Control of funds (ensuring the funds are used for the intended purposes and costs controlled)
- Documenting the use of funds (presenting invoices or other evidence of how funds were used)
- Channelling funds to local governments

Local governments' recovery activities often rely on central government financing, especially for large-scale disaster events. Control and conflicts of interest are the most common concerns for local government management of recovery funds.

The fiscal decentralization system should be designed to handle extraordinary funding transfers, but that is not always the case. Regulations meant to ensure transparency in normal times can turn into implementation bottlenecks after a disaster. How fiscal transfers will be disbursed and controlled should be addressed when adapting the PFM system to response and recovery. Other short-term solutions include:

- Using on-site auditors to address control issues;
- Disbursing through a trust fund or administrative agent to improve control and reduce political influence;
- Arranging for financial institutions to manage cash transfers to local governments or their contractors;
- Using mobile phones or debit cards to transfer cash and post disaster housing subsidies;
- Using existing social safety net programmes that provide cash transfers after a disaster (although this contingency must be designed into the programme since dispensing cash creates safety risks for all involved that must be resolved in advance); and
- Contracting with private financial institutions to channel cash transfers to community groups or individuals (a competitive selection process should be conducted in advance).

Cash transfers are an increasingly popular way to provide assistance to households. Government cash transfers or vouchers require policies, legal and regulatory backing; a system to certify eligibility; and transfer modalities, all of which can be designed in advance.

The principal risks with cash transfers are that they are used for unintended purposes (vouchers help to address this risk) and that ineligible households receive them. The popularity of cash transfers also means the government and donors may be duplicating efforts. Grievance redressal systems, careful design of transfer mechanisms, and tracking of donor activities can help mitigate these risks. All programmes that involve cash transfers must be designed with monitoring and audit mechanisms. ¹⁰⁰

4.4 Manage Finances during Implementation

A. Reinforce financial management capacity

Financial management of the Recovery Programme is a continuous, dynamic function. During implementation, numerous financial management functions must be urgently carried out, in particular:

- Tracking the receipt of pledges and mobilising additional funding;
- Monitoring the financial progress of implementation;
- Overseeing the transfer of funds to outside agencies and households;
- Financial accounting, auditing, and timely reporting on the recovery programme within the government, to donors, and to civil society; and
- Budgeting and adjusting financial programming as funding sources or funding needs change.

Recovery financial management can overload national and local government financial management staff if they are also carrying out normal financial management responsibilities. As a result, additional staff or other support may be required. Approving streamlined procedures for predictable activities, such as modifying the financial plan, also reduces the workload of financial staff.

B. Understand macroeconomic and fiscal impacts

The macroeconomic impact of the disaster may require specific interventions to support the country's fiscal balances and balance of payments since these can affect the feasibility of the recovery programme and other development plans. Impacts such as reduced economic activity, increased inflation and interest rates, and higher borrowing costs and reduced tax revenues for government are common. Increased demand for social services also commonly occurs.

Each of these changes can affect the national fiscal condition and put pressure on the capital budget, current budget, or both. These may be short- or longterm effects; reduced capital spending immediately after the disaster will likely be reversed once the recovery gets underway. The effect of losing a major source of employment, however, can linger for years.

Some impacts can be minimized using business continuity practices. For instance, banks should have emergency power, so that tax payments can be made and people have access to their savings.

The macroeconomic and fiscal impacts of the disaster should be calculated as part of the post disaster needs assessment process. These are then taken into consideration in developing the Recovery Framework.

4.5 Promote Aid Effectiveness

When external assistance makes a significant contribution to the recovery financing plan, a structure is needed for coordination with external agencies, along with rules on the use of funds and procedures for tracking progress. For instance, external agencies should be required to:

 Coordinate funding appeals with the government: The government should be fully informed of the purposes and timing of

- humanitarian appeals carried out on its behalf;
- Report on progress with fundraising and changes in scope: The government must be informed of the progress being made on externally funded projects. When unforeseen circumstances lead to modified funding commitments or changes in the scope of interventions, this also needs to be reported to the government, as it can affect the recovery of intended beneficiaries;
- Conform to agreed norms and standards: Minimum standards for both the process for developing aid projects (level of community involvement) and the outputs (DRR, environmental impact, house size or cost, etc.) helps ensure that results are equitable and of adequate quality; and
- Minimize future financial obligations of the government: Physical structures built by donors should be designed so that future maintenance and operating costs are understood, and are affordable.

The systems for tracking government and external expenditures should ideally be integrated, allowing comprehensive progress reports to be prepared. Countries receiving external assistance should frequently work with donors to develop this capacity.

ASEAN CASE STUDY, THAILAND: RECOVERY OF THE INDUSTRIAL SECTOR POST 2011 FLOODS

The 2011 floods in Thailand was one of the top five costliest natural disasters in modern history. ¹⁰¹ UNISDR estimated that the flood reduced the world's industrial production by 2.5 per cent. ¹⁰² The manufacturing sector bore 71 per cent of the total damage and loss. Production in the transport machinery sector reduced by 84 per cent and in the information and communication sector by 73 per cent compared to the previous year. Approximately 90 per cent of the damage and loss were borne by the private sector. ¹⁰³

The Thailand Board of Investment undertook several medium to long- term measures to support the recovery of flood affected industries. These included tax exemption incentives as well as non-tax incentives to help affected companies or entrepreneurs restart their businesses, prevent them from relocating or help with temporary relocation and invest in risk reduction measures. These measures helped to boost investor confidence and built resilience for swift economic recovery. A survey by the Ministry of Industry in February 2012 found that approximately 50 per cent of 862 companies in seven flooded industrial estates restarted their operations. A 2014 report found that more than 80 per cent of Japanese-related companies in Thailand were back in business in the seven industrial parks.

^{101 2011} Thailand Flood Event Recap Report, 2013. http://docplayer.net/601894-2011-thailand-floods-event-recap-report-impact-forecasting-march-2012.html

¹⁰² UNISDR, Towards a post-2015 framework for disaster risk reduction, March 2012. p.3. http://www.unisdr.org/files/25129_towardsapost2015frameworkfordisaste.pdf

¹⁰³ The World Bank, Thai Floods 2011: Rapid Assessment for Resilient Recovery and Reconstruction Planning, Washington D.C., U.S.A., 2012, p.1. https://www.gfdrr.org/sites/gfdrr/files/publication/Thai_Flood_2011_2.pdf



5 IMPLEMENTATION, COORDINATION, COMMUNICATIONS AND MONITORING FOR RECOVERY

Recovery is evaluated based on a number of variables. These include timeliness, transparency, efficiency, and equity. Delivering on these expectations requires an effective implementation strategy. Such a strategy requires capacities, communications and information management and monitoring and evaluation.

This chapter on implementation, coordination, communications, and monitoring respond to the following key questions:

- What are the capacities required for implementation?
- How can community participation and selfrecovery be encouraged?
- What are the elements of a communications and information management strategy?
- How can a monitoring system be established?
- How can transparency in recovery operations be ensured?
- How should recovery activities be evaluated?

Systems and protocols for monitoring, communications, feedback, and transparency should be designed in advance, so that they are readily deployable should a disaster strike. This starts with the systems used in non-disaster times, such as for monitoring of development projects. In some cases, new systems or protocols are required.

5.1 Implement Recovery

The chapter on institutional frameworks highlighted the need to define the roles, responsibilities, and functions of agencies and staff in recovery. For implementing recovery activities, it is important that staff have the knowledge, capacities and expertise to implement the recovery programme. By seconding staff who

have worked on recovery projects across sectors and partnering with agencies that have experience of implementing recovery projects, recovery initiatives can be successfully implemented.

In addition, standard operating procedures (SOPs), manuals and guides on recovery project operations can help with implementing recovery projects. Government focal points identified before a disaster should be aware of such guidance and how to implement them.

Systems and facilities that help project implementation can be put in place before-hand. These include information management systems; reporting, monitoring and evaluation mechanisms and grievance redressal mechanisms.

Recovery is not "business as usual." Maintaining a sense of urgency, redesigning bureaucratic processes when necessary, and putting the most capable people in key positions were strategies used in Indonesia for the successful 2004 Indian Ocean tsunami reconstruction.¹⁰⁴

The ultimate measure of a good recovery programme is one where risk reduction has been integrated so that there is an increased capacity to deal with future disasters and reduced vulnerability to them.

Integrating Disaster Risk Reduction measures into recovery includes taking steps to ensure that all public and private infrastructure that will be reconstructed is informed by risk assessments, it would include activities to promote disaster-resilient structures. The factors that promote resilient building structures are better construction materials, trained manpower, information on risks to reconstruction, right location for reconstruction, adherence to building codes, etc. In addition, there are other aspects to promoting resilience such as providing alternate livelihoods that are more resilient to disasters, promoting insurance options to small businesses etc. Depending on the context, countries can develop a set of activities both structural and non-structural measures that promote disaster resilience.

¹⁰⁴ The Executing Agency for Rehabilitation and Reconstruction (BRR) of Aceh–Nias, 2009, Ten Management Lessons for Host Governments Coordinating Post disaster Reconstruction. http://www.recoveryplatform.org/assets/publication/BRR%2010%20Management%20Lessons%20 for%20Host%20Governments.pdf.

5.2 Participation and Self-Recovery as central tenets of Implementation

A. Channel the self-recovery impulse and mobilise community participation

Active participation of the affected community through community-based organisations and local agencies is desirable especially during the planning and implementation of the recovery programme. This helps to identify the communities' capacities and needs and ensure that the Recovery Programme is benefitting the affected people. Participation of this kind has practical and psycho-social benefits; it accelerates recovery and educates the population about risk and good recovery practices, while creating solidarity and giving people back a sense of control over their lives.

Self-recovery is the driving force behind most recovery activities at the household level. It entails households raising or borrowing funds for their housing and livelihoods recovery, and working on their own or with friends and family to accomplish it. Self-recovery helps to speed up the recovery of affected communities, especially in the event of large-scale disasters. The relative contribution of self-recovery is often underestimated when compared to a large, organized recovery programme.

However, self-recovery can also increase risk, especially when households receive no financial or technical assistance and reproduce the unsafe conditions that led to the disaster, or do not work collectively when a common solution is required. It is therefore extremely important that the governments provide financial and technical assistance to the affected communities, or empower municipalities or NGOs to do so, for safer and risk reducing results.

Many recovery partners and some governments are experienced in participatory methods, such as owner-driven reconstruction. See case study on Indonesia's REKOMPAK programme below.

However, not all households can recover on their own or participate in organized recovery activities. The government should prioritize addressing the needs of the most vulnerable and marginalized groups and ensure that there is no discrimination based on gender, age, ethnicity, disability, sexual identity, etc., with regard to service delivery. Community volunteers can play an important role in identifying vulnerable families that should be given priority, the precise support required by each household, or supplying labour or other in-kind assistance to these households.



Between 2004 and 2006, Indonesia was affected by multiple disasters. The 2004 Indian Ocean tsunami killed 127,720 people and left 93,258 missing. The tsunami destroyed 139,165 houses and severely affected sectors such as education, livelihoods, and health.¹⁰⁵ On 27 May 2006, a shallow earthquake of 6.3 magnitude hit the city of Yogyakarta, Central Java and led to the death of over 5,700 people and destroyed 350,000 houses. Two months later in July 2006, a massive tsunami struck West Java and killed approximately 1,000 people and displaced 50,000 others.¹⁰⁶

With the need to recover from the number of disasters occurring in the span of just two years, the Multi Donor Fund for Aceh and Nias (MDF) and the Java Reconstruction Fund (JRF) were set up. Under these funds, Indonesia pioneered *Rekompak*, a community-based approach for large-scale reconstruction of homes and community infrastructure. In Bahasa, Rekompak means 'reunion,' conveying the desire to increase cohesiveness and become solid again.

In Aceh and Java, communities needing assistance to rebuild houses were identified through governmentled assessments. The specific beneficiaries within these communities were identified through a community consultation process, based on a clear set of criteria

¹⁰⁵ BRR, Housing. Roofing the pillars of hope, ISBN 978-602-8199-53-7, Indonesia, p. XI

¹⁰⁶ The World Bank, REKOMPAK Rebuilding Indonesia's Communities after Disasters, The Secretariat of the Multi Donor Fund for Aceh and Nias and the Java Reconstruction Fund, October, 2012, p. 35.

including the degree of physical damage to houses, willingness of the community to implement settlement rehabilitation and reconstruction, availability of funds and reconstruction commitments by other donors, etc. The identified beneficiaries were organized into community housing groups comprising of approximately ten families each. Members of the group were usually neighbours or relatives who were willing to work together to rebuild their settlement. Together with its household members, the committee made investment decisions, procured materials, controlled funds, assisted with construction, supervised accounts for funds expended and reported on progress. Each committee reported to the village trustees.

Through a participatory process, Community Settlement Plans were developed to guide how physical rebuilding would take place. Systems and procedures for operation and maintenance were also established. The Community Settlement Plans were submitted for approval to village trustees and also to the Project Management Unit (PMU). After approval, funding was provided, and construction began. The community was also provided technical assistance on seismic risk reduction so that new homes were built on safe ground.

The Rekompak model resulted in a high level of houses reconstructed and occupied by the community. The primary reason was that the community themselves were involved, and so the houses were designed to suit their needs. There were additional positive benefits of this approach —

- a) the building material and manpower used was mostly locally procured or available which helped in regenerating the local economy,
- b) the involvement of the community empowered them as decision makers on issues that concerned them and
- c) the community had a greater awareness of the need for seismic features in their houses and risk reduction

Engaging the community as a partner in recovery also contributed to the long-term development of the community. The World Bank has identified community driven housing recovery as one of the ten guiding principles of housing recovery. ¹⁰⁷ This model is highly replicable as community-driven housing recovery programmes in India (2001 Gujarat arthquake) and Nicaragua (1998 hurricane Mitch).

5.3 Coordinate Recovery

Recovery is characterized by interdependencies among many stakeholders, which makes coordination among stakeholders an imperative. Coordination mechanisms could be new, set up for a particular disaster; an existing mechanism repurposed for recovery coordination; or an effective mechanism from a past recovery programme reactivated.

Coordination during recovery helps avoid duplication and bridges gaps. Regular information sharing helps keep partner interventions aligned with the overarching recovery vision and facilitates new partnerships and more coordinated implementation. It also provides a platform for sharing of lessons learnt. The government can establish coordination arrangements before-hand. This includes: terms of reference for the coordination team, meeting and reporting protocols, decision-making quorums, information management tools, etc. Coordination may happen through regular physical or virtual meetings that are followed up with clear communication of the next steps and actions.

A. Agree on coordination arrangements

The Lead Recovery Agency is also responsible for coordination. A description of the mechanisms to be used for coordination with partners should be included in the Recovery Framework. Coordination arrangements may evolve as recovery progresses.

Non-government partners should be expected to participate in coordination mechanisms and share information on their recovery activities. The ASEAN Member States use different models for recovery coordination at both national and local levels, some of which are described here.

Early Recovery cluster

The early recovery cluster is a standing inter-agency mechanism led by UNDP and includes 21 UN and non-UN agencies. ¹⁰⁸ The cluster operates alongside other humanitarian clusters with the aim of augmenting humanitarian assistance, supporting recovery initiatives and laying the foundations for long-term recovery. At the country level, the early recovery cluster supports or partners with the government and recovery stakeholders to coordinate early recovery activities.

Government established clusters

The Philippines has used a government-led cluster model, including after Tropical Cyclone Yolanda. Response Clusters, which operated during the crisis period, were reorganized into Rehabilitation and Recovery (R&R) clusters after approximately one year. Each cluster is led by two government agencies. The R&R clusters include social services, infrastructure, livelihoods, resettlement and housing, and are aided by the cluster support unit. Clusters also operate at

the local and regional level, led by local officials, with the participation of local representatives of national government agencies and partner agencies.¹⁰⁹

Permanent disaster risk management (DRM) committees

Viet Nam and Indonesia are among the countries that have created joint government/partner DRM committees that operate on a permanent basis. The DRM committees work on a range of DRM issues in non-disaster times and provide relief and recovery coordination when recovery is underway. The Viet Nam committee is called the Disaster Management Working Group.¹¹⁰

Sector coordination platforms

Development coordination mechanisms such as sector tables are found in some lower-income countries where there are numerous external agencies involved in a sector. Used principally to coordinate agency interventions in the sector with the government, they can also be used for coordination of reconstruction activities. Since the coordination agenda of sector platforms include policies and ongoing programmes in the sector, using them for recovery coordination can strengthen the coherence between recovery and regular development plans.



In May 2008, Myanmar was hit by Cyclone Nargis, the worst natural disaster in the history of the country and the most devastating to strike Asia since 1991. The cyclone severely affected 2.4 million people. It led to the death of 84,537 people, 53,836 others went missing, and 19,359 were injured. Myanmar suffered a total damage and loss of US\$4.1 billion.

The disaster required an urgent need for external assistance including humanitarian staff and a coordination mechanism for response and recovery. The ASEAN Secretary-General urged all Member States to provide urgent relief assistance through the framework of the AADMER.¹¹² The ASEAN Emergency Rapid Assessment Team was deployed for 10 days and submitted its report to the ASEAN Ministerial Meeting. At the meeting, it was decided that an ASEAN-led coordinating mechanism would be established to 'facilitate the effective distribution and utilization of assistance from the international community.'

 $^{108\ \} UNOCHA,\ Cluster\ Working\ Group\ on\ Early\ Recovery.\ \underline{https://www.humanitarianresponse.info/en/clusters/early-recovery.}$

¹⁰⁹ Office of the Presidential Assistant for Rehabilitation and Recovery, 2014, Yolanda-Rehab-Briefer. http://president.gov.ph/wp-content/uploads/2014/08/Revised-DraftYolanda-Rehab-Briefer-as-of-1-Aug-2014-w-status-report.pdf

¹¹⁰ The Government of Viet Nam and One UN working together in disaster risk management, 2008. http://www.preventionweb.net/files/10518_VietnamOneUNDRM.pdf

III Tripartite Core Group, Post Nargis Joint Assessment, July 2008, pp. 1-20.

¹¹² Humanitarian Policy Group, Humanitarian Exchange, Number 41, December 2008, p 6.

A two-tiered structure, to facilitate day-to-day operations was set up consisting of a diplomatic body, the ASEAN Humanitarian Task Force (AHTF), and a Yangon-based Tripartite Core Group (TCG). The Yangon-based TCG was set up to oversee the coordination of resources, operations, monitoring, and reporting. It comprised of three ASEAN members; three from the Government of Myanmar; and three from the United Nations. The TCG mechanism for humanitarian response was adjusted to coordinate the recovery. The three working groups under the recovery structure included basic services, livelihood and physical and social protection, which were identified in the Post-Nargis Recovery and Preparedness Plan (PONREPP).

The TCG provided a unique platform for the government, the ASEAN Secretariat and the UN to work together. The mechanism helped to put in place

a transparent aid mechanism, facilitate an effective needs assessment and establish follow-up recovery plans¹¹⁴ that helped in resource mobilization. It provided momentum to the application of AADMER and valuable experience to the ASEAN Secretariat for coordinating disasters of such a scale. It set a precedent for possible future use in other member states.¹¹⁵

The TCG-led recovery mechanism embedded the "Build Back Better" principle in recovery planning and monitoring. The Periodic Review process included disaster risk reduction (DRR), giving impetus to a number of risk reduction initiatives in Myanmar. For example, the Disaster Risk Reduction Working Group constituted to support the Cyclone Nargis recovery plan, continued beyond the recovery process to support the Government of Myanmar on integrating DRR into policies and programmes.

B. Formalise involvement of NGOs

The role of NGOs in recovery has been highlighted in Table 12. It is useful for governments to formalise arrangements with NGOs so that their involvement in recovery is streamlined, coordinated and aligned with the recovery outcomes. Figure 4, shows the process by which the involvement of NGOs can be formalised.

Registration

Most ASEAN Member States have a registration system for NGOs and CSOs for operating in the country. NGO registration, also called "Association registration" in some countries, helps to establish the purpose and areas of service of the organisation. It also ensures the NGOs are able and willing to report on their activities and the financial resources under their control. The registration process may also include an assessment of organisations' experience, constituency, and technical and financial capacity.

Figure 4: Tools for Formalizing NGO Involvement in Recovery

NGO registration

Provides notice to government of NGO operations

Memorandum of understanding

Establishes "rules of engagement" with NGOs

NGO contract

Engages NGOs to provide services

¹¹³ Launch of the Post-Nargis Recovery and Preparedness Plan., 2008. http://www.unescap.org/speeches/launch-post-nargis-recovery-and-preparedness-plan-post-nargis-and-regional-partnership

¹¹⁴ Reliefweb, Myanmar: ASEAN finds new purpose with Cyclone Nargis response, 9 May 2009. http://reliefweb.int/report/myanmar/myanmar-asean-finds-new-purpose-cyclone-nargis-response (Accessed on 31 August 2015)

¹¹⁵ Reliefweb, Q&A-What impact will end of post-cyclone body have on Myanmar? 2 May 2010. http://reliefweb.int/report/myanmar/qa-what-impact-will-end-post-cyclone-body-have-myanmar (Accessed on 31 August 2015)

¹¹⁶ For example, in Viet Nam, the Committee for Foreign NGO Affairs (COMINGO) works with the Viet Nam Union of Friendship Organisations (VUFO) and The People's Aid Co-ordinating Committee (PACCOM) to manage the country's relationships with international NGOs. http://www.ngocentre.org.vn/content/comingo-vufo-and-paccom

Memoranda of Understanding (MOU)

An MOU establishes the "rules of engagement" for particular NGO activities even when these activities are self-financed, and particularly when the funding is considered a grant to the country. An MOU can document agreements such as the nature, location, and scope of the NGO's activities; beneficiary selection process; funding level and source of funding; monitoring and reporting requirements; and exit strategy. For instance, Indonesia requires NGOs intending to participate in DRM activities including recovery to submit a proposal and a work plan, and to sign an MOU.¹¹⁷

Contracting NGOs

A legal framework must be in place to allow NGO contracting. Governments also contract the services of NGOs and CSOs as a way to reduce direct implementation by the government. INGOs have long contracted local NGOs to assist in project implementation, and contracted neighbourhood groups through the use of "community contracts." This is because local NGOs now have more experience with disaster recovery in many countries, and their execution capacity has grown.

For instance, in the Philippines, under the Government Procurement Reform Act, NGO contracting (Section 53.11) and community contracting (Section 53.12) have been allowed since the Revised Implementing Rules and Regulations were approved in 2009. The Philippines government has also issued implementation guidelines for NGO procurement and guidelines and a procurement manual for community procurement. Recently, Guidelines for Civil Society Organisations acting as Implementing Entities of Public Funds were also released.

C. Engage the private sector

The recovery of society as a whole depends on the recovery of private enterprises, which include banking, transport, engineering, and construction companies. The private sector is a supplier of goods and services for the government. The private sector also comprises small and micro enterprises that produce critical services and employment for people at all income levels.

Depending on the context, the most likely private sector partners that will participate in planning and implementation are individual firms; associations and alliances of firms; industry representatives; and chambers of commerce. The private sector can help governments improve public sector recovery, and also help governments address the recovery needs of the private sector. They can contribute sector experts for assessments and recovery planning, particularly related to commerce, industry, housing, trade, etc. In addition, private firms may have goods, services, and skills to contribute to the recovery effort that should be considered in planning recovery.

A number of national and regional initiatives are underway to strengthen private sector involvement in disaster response and recovery, as highlighted in Box 6.

Private sector actors will have limited time to engage in recovery planning unless their function is clearly defined and has been discussed in advance. Governments should support private sector initiatives to participate in disaster recovery. Protocols for private sector participation should ideally be negotiated in advance.¹¹⁹

¹¹⁷ National Disaster Management Agency (BNPB), "Government Regulation of the Republic of Indonesia Number 23 of 2008 Concerning Participation of International Institutions and Foreign Non-Governmental Organisations in Disaster Management."

¹¹⁸ Asian Development Bank, 2010, Rebuilding Lives and Homes in Aceh and Nia's, Indonesia. http://www.adb.org/sites/default/files/publication/27996/rebuilding-aceh-nias.pdf

¹¹⁹ Business continuity planning, which the private sector uses to plan recovery, is explained in Special Focus: Encouraging Private Sector Readiness for Recovery, page 52.

Box 6: Private Sector Involvement in DRR and Recovery

The Disaster Resource Partnership, promoted by the World Economic Forum, is a new framework for engaging the engineering and construction industry in disaster relief, recovery, and prevention. Indonesia's DRP was launched in 2011, with the objective of developing a cross-sector, professional, and accountable private sector response to disasters that can be scaled up to meet growing demands. Disaster Recovery Partnership Indonesia, http://drpindonesia.org/.

ARISE, the Private Sector Alliance for Disaster Resilient Societies, is a collaboration between UNISDR and private sector partners aimed at using disaster risk-informed public and private investments for disaster risk reduction and climate change. Goals include expanding resilience and contributing to fulfil the Sustainable Development Goals (SDGs). Twenty leading companies in the Philippines joined the global ARISE effort in 2015. UNISDR, 2015, Private Sector https://www.unisdr.org/partners/private-sector.

The Corporate Citizen Foundation (CCF), based in Singapore seeks to catalyze corporate collaboration to exercise collective corporate citizenry towards a better, safer and friendlier Asia.

CCF has a collaboration with ASEAN focused on sustainable community development to increase capacity and resilience of vulnerable communities through livelihood enhancement, risk reduction, and disaster preparedness. http://corporatecitizen.org/

The Asia Pacific Alliance for Disaster Management (A-PAD), based in Japan, is a trans-national disaster aid alliance that works to facilitate cooperation and understanding between governments, private companies, and NGOs in the Asia Pacific region. Participation of a country in A-PAD requires the creation of a national joint government/nongovernmental/private sector DRR platform. Several ASEAN countries have already joined A-PAD. http://apadm.org/

Asia-Pacific Economic Cooperation (APEC) has drafted the "Principles on Public-Private Partnerships and Disaster Resilience," aimed at enhancing the capability of both the public and the private sector to respond to and recover from disasters. http://publications.apec.org/publication-detail.php?pub_id=1133

5.4 Communications and Information Management

The Recovery Programme should have a communications strategy. Most recovery programmes are criticised by the media, mainly due to the lack of information on recovery programmes shared with the public. The communications strategy should target all recovery stakeholders, especially donor agencies, the private sector, the affected population and the media.

Training and sensitizing reporters about disaster recovery and providing accurate information about progress helps to improve the quality, quantity, and

tone of the media coverage. Having information about the progress of recovery also allows families to make plans and take action on behalf of their self-recovery. Therefore, communication should also be considered as a tool for feedback that can be used to fine-tune the recovery programme.

A. Conduct a communications assessment

The communication strategy requires that the government knows its stakeholders. Before developing a communication strategy, it is best to conduct a quick communications assessment, as described in Table 13.¹²⁰

¹²⁰ Based on Chapter 3, "Communications in Post disaster Reconstruction," from Abhas K. Jha, et al, 2010, Safer Homes, Stronger Communities: A Handbook for Reconstructing after Natural Disasters, The World Bank, Washington, DC. http://documents.worldbank.org/curated/en/2010/01/11702495/safe-homes-stronger-communities-handbook-reconstruction-after-natural-disaster

Area to analyse Focus of analysis Purpose of Communications Strategy Political risks, Understand perceptions of the Use to adjust recovery activities and to challenges, and government's disaster response and plans, develop communication messages opportunities and of how the government and other service providers have performed since the disaster Stakeholder analysis³¹ Identify and analyse stakeholders who will Need to target communications and be directly and indirectly affected by the design feedback mechanisms reconstruction programme Media, communications Understand how groups communicate Information that helps with selection of channels, and local formally with one another, and the local media channels and formats capacity capability and acceptability of media institutions Identifies alternative channels for Social and participatory Identify informal systems and community communication communications practices communications and feedback, especially for lower-income communities

Table 13: Elements of a Post disaster Communications Assessment

B. Develop a communications strategy

The communications strategy should use the findings of the communications assessment to identify the changes sought as a result of communications with stakeholders, which should be directly related to the goals and objectives of the Recovery Framework. Changes can be categorized as awareness, knowledge, attitudes, behaviours, mobilization, or collaboration.

Understanding what needs to be communicated helps to design key content and messages and determine the most effective way to communicate them. Selecting the appropriate medium for communications, such as a campaign, electronic media, social media, SMS, etc. helps to reach a variety of stakeholders. The government may appoint an official to assist with communications with the media and others.

5.5 Monitoring Recovery

Monitoring is the process by which stakeholders obtain regular feedback on the progress being made towards achieving goals and objectives. This means that monitoring is concerned with tracking not only projects and the use of resources; but also whether progress is being made towards accomplishing the

desired results.¹²¹ Monitoring systems support decision-making and coordination, contribute to transparency and help build public confidence.

A. Prepare to monitor

Decide what to monitor and how to measure results

All recovery activities funded with on-budget resources should be monitored, as should certain activities funded off-budget. Politically sensitive sectors or industries that rely on significant external funding, for example, may need to be monitored even if funding is from non-governmental sources.

Develop indicators and targets

Outcome indicators and targets need to be established in every aspect of the monitoring system.¹²² For recovery, this could include various levels of government, geographic areas down to the level of communities, and sectors and subsectors. They should be designed to monitor at least the following dimensions:

- Funding pledged, received, allocated, and spent;
- Financial and physical progress of projects and programmes;¹²³
- Conformance to targets;

¹²¹ UNDP, 2009, Handbook on Planning, Monitoring and Evaluating for Development Results. http://web.undp.org/evaluation/guidance.shtml#handbook

¹²² Outcome indicators are the quantitative or qualitative variables that provide a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of an organisation against the stated outcome. Targets are the quantifiable levels of the indicators that a country, society, or organisation wants to achieve by a given time. [World Bank, 2004, Ten Steps to a Results-Based Monitoring and Evaluation System.]

¹²³ The definitions of "project" and "programme" can vary considerably from one context to another and need to be specified in designing the monitoring approach.

- Social and economic conditions;¹²⁴ and
- Programme results.

Output and outcome indicators are developed at national, local, and sector levels during recovery planning processes and included in the Recovery Framework. Targets are dates, costs, or other points

of reference that can be used to gauge progress. Indicators and targets at the three levels should be aligned.

While indicators vary between levels and sector, they should include the types listed in Table 14.

Table 14: Types of Results Indicators for Recovery Programmes and Projects

Indicator	Explanation	Recovery example
Inputs	The human, financial, and technical resources deployed	Cash transfers provided, construction materials delivered, project financing disbursed
Activities and processes	The performance of tasks and factors affecting project performance	Supervision provided, audits completed, planning processes carried out
Outputs	The immediate results the project achieves (also "deliverables")	Schools constructed, houses built, roads repaired
Outcomes and impacts	Significant or lasting changes in people's lives brought about by a given action or series of actions	Outcomes: Livelihoods restored, families rehoused, risks reduced Impacts: Restoration of social and economic well-being

B. Design and implement the monitoring system

Large-scale recovery programmes often include several recovery projects that need to be monitored. The activities of both government and NGO implementers should be monitored, although the data collection and reporting approaches may differ. Overall, the monitoring system may be quite complex, and combine information from various sources.

A single agency is normally responsible for collecting, receiving, and analysing monitoring information and producing official reports. There are two options for recovery monitoring: create a new monitoring system for the recovery programme or modify an existing system (or systems) to serve this purpose.

Designing, testing, and implementing a new system or major modifications to existing systems require significant time. An option to avoid delays is to contract a private provider for post disaster monitoring services. ¹²⁵ In such cases, appropriate private firms should be identified beforehand along with strict performance benchmarks and penalties.

Procedures for collecting and submitting monitoring information should be established beforehand. Formats for data-input (hard copy or digital) and user instructions should be prepared. All those involved in using the monitoring system should be trained.

5.6 Evaluate Recovery Projects and Programmes

Evaluation is a rigorous and independent assessment of completed or ongoing activities to determine whether they are achieving their stated objectives. Like monitoring, evaluations can be conducted for the overall recovery programme, a policy, a strategy, a programme, a project, an activity, a sector, a locality, or an organisation.

A. Understand evaluation basics

Monitoring and evaluation both provide information that can help inform decisions, improve performance, and achieve planned results. The key distinction is that evaluations are independent, and provide an objective assessment of whether results are being achieved. Evaluations are also less frequent; more rigorous in their procedures, design, and methodology;

¹²⁴ Social conditions include issues such as coverage of assistance to vulnerable households, reopening of social services (schools, clinics, etc.), or evidence of social stress in the community. Economic conditions could include concerns such as livelihood restoration, reopening of businesses, and market prices.

¹²⁵ Applications such as Synergy International Systems' Post disaster Management Suite are available from private companies.



Cyclone Nargis of May 2008 in Myanmar was the worst natural hazard-induced disaster in the living memory of the country. The Post-Nargis Joint Assessment (PONJA) released in July 2008 included preliminary social impacts of the disaster at the community level in two areas: the direct social impacts of the Cyclone Nargis and how the communities responded; and the long-run social impacts that external longer-term recovery responses to the cyclone may have.

To track the social impact of the Cyclone Nargis over the course of the relief and recovery, the Government of Myanmar and development partners initiated Social Impact Monitoring (SIM), building on the initial assessment results of the PONJA. Four rounds of studies were conducted. This was a first of its kind initiative where the social impacts of a natural hazard-induced disaster were assessed periodically.

The first three studies accompanied the post disaster recovery period and provided in-depth information on how village life was changing post-Nargis and how aid responses could best help Delta communities. It focused on issues of aid effectiveness, the socioeconomic impacts of the disaster and the impact on social relations within and between communities. The fourth study (2013) provided a snapshot of village economic and social life five years after Cyclone Nargis struck. ¹²⁶ It assessed two areas: socioeconomic conditions, and social relations and institutions.

All four studies used the same methodology: indepth qualitative interviews, focus group discussions, and key informant interviews. They covered 895 inhabitants in 40 villages in the eight townships across the Delta that were most affected by the Cyclone. The SIM studies provided information on aid effectiveness, needs, and insights into the human face of recovery.

While roads and bridges take a few months or years to rebuild, human lives take a generation or two. 127 The SIM process in itself was very significant as it highlighted the often neglected social impact of a disaster and led to the inclusion of qualitative social impact assessment into the post disaster assessment. As a result, it formed the basis for ongoing social impact monitoring. This social assessment was incorporated into the formal Post-Nargis Joint Assessment report enabling the SIM findings to be incorporated into formal appeals for assistance.

It is said that the human dimension of disasters is what makes the news, but it is the rebuilding of bridges and roads that get the money. The qualitative methods used in the SIM were essential in focusing attention on the 'why' and 'how' of the aid effort, in understanding the processes and pathways of aid, and in identifying issues that would have been missed by quantitative methods alone. For example, in Myanmar, the SIM quickly identified that farmers and casual labourers had the issue of spiralling debt and high-interest rates. This finding led to a US\$50 million budget allocation for credit in the post-Nargis recovery plan.

UNIC, Post Nargis Needs Assessment, 2013. http://yangon.sites.unicnetwork.org/files/2013/05/post-nargis_joint_assessment_all_pages.pdf
 Dr. Kambon, Asha, Measuring the social impacts of a disaster: capacity needs and gaps, ADPC, Asian Disaster Management News, Volume 22, 2015, p. 24

¹²⁸ Ibid, p. 24.

and involve more extensive analysis than monitoring. Evaluation types include the following: 129

- Process evaluation Analysis of how the programme operates. Focuses on problems in service delivery.
- Cost-benefit or cost-effectiveness evaluation
 - Assesses programme costs (monetary or non- monetary), in particular, their relation to alternative uses of the same resources and the benefits being produced by the programme.
- Impact evaluation Determines whether the project or programme had the desired effects on individuals, households, and institutions and whether those effects are attributable to the intervention. Formally, an impact evaluation requires a control group whose situation can be compared to the group assisted by the recovery intervention. (Not always feasible in recovery programmes.)
- Assessments Not formally part of an M&E system, assessments use available data and interviews to inform decision makers whether or not an ongoing recovery effort is likely to produce the desired outcomes and identify needed changes.

Recovery projects and programmes are not always rigorously evaluated. Governments should consider joint evaluations of recovery programmes, especially when a number of donor agencies are present. A request from the government for joint evaluations could help overcome the two principal impediments to the evaluation of recovery programmes: lack of demand from the government and lack of resources since evaluation resources would be pooled.

The United Nations has led the development of methodologies and tools for conducting joint evaluations, also referred to as joint humanitarian impact evaluations. Joint evaluations can vary in focus from individual projects to multilateral agency programmes, sector-wide programmes, co-financing arrangements, cross-cutting or thematic concerns. ¹³⁰

Box 7

The Tsunami Evaluation Coalition (TEC) was a successful joint independent learning and accountability initiative established immediately after the 2004 Indian Ocean tsunami. TEC conducted five joint thematic evaluations, which formed the basis of the Synthesis Report. The TEC project led to the development of guidance on joint evaluations, and its website provides valuable material on recovery programming.

B. Prepare an evaluation strategy

The lack of demand for evaluations from beneficiary governments and the lack of resources to conduct evaluations are the main reasons so few recovery interventions are evaluated. An evaluation strategy should be included in the Recovery Framework. Resources should be earmarked to implement it.

Conducting an impact evaluation of a large recovery programme is difficult, but process and cost-effectiveness evaluations can be carried out. Existing policies on the evaluation of public investment projects may be relevant for recovery projects in some countries.

Not all recovery interventions require an evaluation; choices should be strategic. One option is to evaluate individual projects or groups of projects that meet specific criteria, such as:

- Projects that are likely to be replicated in the future;
- Projects in which different methodologies were used to accomplish similar ends, such as a group of housing reconstruction projects;
- Projects that exceeded a specific cost benchmark; and
- Projects considered particularly successful or unsuccessful based on beneficiary feedback.

¹²⁹ Judy L. Baker, 2000, Evaluating the Impact of Development Projects on Poverty: A Handbook for Practitioners, (Washington, DC: World Bank), http://go.worldbank.org/8E2ZTGBOI0

¹³⁰ United Nations Evaluation Group, Resource Pack on Joint Evaluations. https://www.ecgnet.org/document/resource-pack-joint-evaluations. The Resource Pack includes checklists and other tools for conducting joint evaluations.

¹³¹ ALNAP, Tsunami Evaluation Commission http://www.alnap.org/TEC

ASEAN CASE STUDY, PHILIPPINES: ASEAN'S STRATEGIC ASSISTANCE TO YOLANDA RECOVERY THROUGH THE ARYA PROJECT POST SUPER TYPHOON HAIYAN/ YOLANDA

In response to the devastating super typhoon that hit the Philippines in November 2013, the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) swung into action. The assistance provided by the ASEAN through the AHA Centre started with the issuance of situation reports and early warning, response and relief activities, which further built into recovery and rehabilitation. The measures were based on the recommendation of the ASEAN Secretary-General H.E. Le Luong Minh, following his visit to the affected areas.

The AHA Centre was monitoring the direction of the typhoon and providing regular updates to the ASEAN Member States. On November 7th, the AHA Centre deployed the Emergency Response and Assessment Team (ERAT) and set up an emergency communication system. Given the likelihood of communication failure due to the impact of the typhoon, the AHA Centre trained the concerned office on the use of a satellite phone and Broadband Global Area Network (BGAN). ¹³²

The AHA Centre played a key role in immediate response: some planes and naval ships were immediately deployed carrying essential relief supplies including medicines; mobile storage facilities, offices and field hospitals were quickly

set up; medical personnel and rescue teams were deployed, and water purification tablets and cash assistance were distributed. These activities were coordinated through the National Disaster Risk Reduction and Management Council/Office of Civil Defence in the Philippines.

The AHA Centre's role continued during the recovery and rehabilitation phase, through the ASEAN Assistance for the Recovery of Yolanda-Affected Areas in the Philippines known as the ARYA Project. The project budget was over US\$5 million and sourced from the ASEAN Development Fund. A key feature of the project was, focus on capacity building and technical assistance, which had multiple and long-term benefits. The project supported activities from early warning to the recovery phase, which helped in the rapid implementation of activities.

The support under ARYA helped the targeted Local Government Units (LGUs) to develop their recovery and rehabilitation (R&R) plans, helping them access the Yolanda R&R fund from the national government. The development of the Comprehensive Land Use Plan (CLUPs) and the ecological profiling and assessment are a long-term investment towards disaster risk reduction and climate change adaptation.

The ARYA project coordinated ASEAN Member States support to the Yolanda R&R and helped in mobilising resources from the Member States and development partners. It also helped in facilitating south-south cooperation as ASEAN Member States shared its R&R experience with the Philippines.

C. Build capacity for impact evaluation

Conducting an impact evaluation is the best way to understand what effect a recovery project has had on a region or population group. Impact evaluations are designed to answer the "counterfactual questions": Are the changes observed solely the result of the recovery intervention?

What happened to people who were not assisted by the project or programme?

If those who were not assisted had been assisted, what would have been the outcome?

Impact evaluation requires comparing a group of households or individuals who were involved in the recovery intervention to a similar group that was not involved.

¹³² ASEAN, Second ARYA Project Steering Committee Meeting, PPT, Manila, 14th July 2015

¹³³ Discussion with Senior Recovery Coordinator, ARYA Project on 8th September 2015 in Manila.

5.7 Establish high standards for Accountability and Transparency

A. Make a government commitment to transparency and accountability

Competition for funding, time pressure, inadequate oversight, and economic desperation in the population are all risk factors for corruption in recovery.

The government should set a high standard for integrity and transparency in recovery programmes and enlist all partners and stakeholders in the integrity campaign. See Box 8 for a definition of transparency.

Communications, monitoring, and evaluation, are important instruments for promoting transparency and for ensuring accountability to the affected population and society in general.

B. Enlist recovery actors in fighting corruption

The challenge in recovery is to take concrete steps to fight corruption, while not letting the fear of corruption (or charges of corruption) impede the recovery effort. Some concrete steps include:

- Appoint a visible, trusted individual or agency to lead the anti-corruption effort;
- Strengthen systems for detection and prosecution;
- Communicate that corruption will not be tolerated;
- Engage external agencies in fighting corruption.

Box 8: Defining Transparency

Transparency is about shedding light on rules, plans, processes and actions, and about knowing why, how, what, and how much. Transparency ensures that public officials, civil servants, managers, board members and business people act visibly and understandably, and report on their activities [so that] the general public can hold them to account. Transparency [guards] against corruption, and helps increase trust in the people and institutions.

Transparency International, "FAQs on Corruption," 2015. http://www.transparency.org/whoweare/organisation/faqs_on_corruption http://www.transparency.org/whoweare/organisation/faqs_on_corruption

C. Provide systems for grievance redressal

Grievance redressal systems handle conflicts and complaints arising from the implementation of the recovery programme and help maintain a focus on the needs of the beneficiary population. Some predictable reasons for complaints include exclusion of those who are qualified; inclusion of those who are not qualified or false claims and hardship.

Complaint and grievance redressal mechanisms help to ensure transparency and fairness and reduce errors and manipulation in assistance programmes that have direct beneficiaries. Table 15 lists the essential elements of a grievance redressal programme.

With recovery partners, the government can establish standards for complaint handling and grievance redressal for projects with direct beneficiaries. These standards should apply to both government programmes and those of recovery partners.

Table 15: Elements of a Grievance Redressal System

Element	Purpose
Announcement	The right to complain must be explained in detail to beneficiaries. Procedures for receipt and processing of complaints must be transparent.
Complaint intake	Intake procedures must be clear. Appointments may be advisable. All complaints received must be registered, regardless of source. Complainants should receive a receipt, and ideally a copy of the written record.
Location	A safe place is provided to present complaints and to be interviewed, ideally away from where cash or vouchers are distributed. Complainants should not be allowed to congregate at this location.
Inquiry and verification	Each complaint should be verified within a given period, using local information and established procedures. A system for appeals may be necessary.
Communicating decisions	The complainant should be notified in writing as to whether the complaint has been accepted or denied.

Source: World Bank, 2010, Safer Homes, Stronger Communities: A Handbook for Reconstructing after Natural Disasters.

Special Focus 5: How to "Build Back Better" in Recovery

The call to "Build Back Better" (BBB) was first sounded in Aceh, Indonesia, after the 2004 Indian Ocean earthquake and tsunami, and it re-emerges almost every time a new recovery programme is planned.

The idea to build back better is logical and potentially effective as an organizing principle for a recovery programme. But to be effective, its implications for the recovery programme must be defined in practical terms and agreed to with stakeholders.

A. What does it mean to "Build Back Better"?

Simply put, the BBB concept means that both the process and the results of the post disaster humanitarian activities should improve on what was in place before the disaster.

These improved conditions include not just stronger and safer buildings and settlements, but a better social and political context with strengthened capacities, greater equity, and enhanced economic and social development.

The original key propositions of BBB include diverse concepts such as self-recovery, donor coordination, quality control, information management, entrepreneurship, and disaster risk reduction.

Establishing BBB as a goal implies doing more than restoring what existed before the disaster. However, there are at least two distinct interpretations of that aspiration explained below:

- DRR-focused BBB: For some stakeholders, BBB is principally about disaster risk reduction in reconstruction, in particular, strengthening DRM capacity, reconstructing stronger infrastructure and buildings, and situating houses and other buildings in safer sites.
- Multi-dimensional approach to BBB: Other stakeholders interpret BBB more broadly to mean leveraging the recovery process to accomplish fundamental changes that are both

structural (improving physical recovery) and non-structural (improving social, economic, or environmental conditions, or strengthening institutional arrangements and capacities). This interpretation may also extend to addressing conflicts and other shortcomings in the political process.

Agencies agree that there are four critical dimensions of recovery. BBB can occur in all of them:

- Physical recovery;
- Social recovery;
- Economic recovery; and
- Environmental recovery.

Some examples of BBB-related outcomes under each approach are shown in Table 16.

B. Many Visions of "Building Back Better"

There are many interpretations of BBB. In ASEAN countries and institutions working in the region here are some of the ways it has been applied.

Indonesia 2004 earthquake and tsunami recovery

The commitment to "Build Back Better" from the tsunami in Indonesia meant using the recovery effort to bring Aceh and Nias into the national fold, and get them onto an equal footing with the rest of the country. From the beginning, the BRR used the language of "build back better" to describe its mission, which included four major areas of improvement: physical infrastructure, communityled programmes, empowerment of marginalized constituents, and resilience to future disasters. Building trust with previously marginalized communities allowed engagement with the common goal of a peaceful and prosperous future. Facilities rebuilt were of higher quality and better suited to beneficiary needs. For example, housing included sanitation facilities. BBB also included innovations that reformed national governance systems. 134

Philippines 2013 Tropical Cyclone Yolanda

The Philippine Disaster Risk Reduction and Management Act of 2010 defines post disaster recovery as the restoration and improvement where appropriate, of facilities, livelihood and living conditions

Table 16: Outcomes of Different Approaches to Building Back Better

	DRR-focused BBB	Multi-dimensional approach to BBB
Physical recovery	 Building codes enforced; reconstruction guidelines disseminated Escape routes constructed Risk maps used in site selection 	 Participatory re-planning of settlements Schools rebuilt with internet connectivity Secondary roads upgraded
Social recovery	 Neighbourhoods mobilised to rebuild safely Subsidies tied to safe construction favour poorer households 	 Excluded groups receive national ID cards Migrants from disaster zone provided psychosocial support
Economic recovery	 Suppliers improve quality of construction materials Key industries relocated to safer sites 	Rural residents provided banking servicesSmall-holder farmers receive land titles
Environmental recovery	Mangroves restoredHouseholds relocated from no-build zones	 Small business is taught how to profit from recycled debris Households receive technical assistance to develop relocation sites
Political / institutional context	 Early warning systems strengthened Municipal DRR capacity strengthened Agreement reached to halt illegal tree cutting 	Georeferenced property database established for local governmentsGang conflict settled in disaster zone

of disaster-affected communities, including efforts to reduce disaster risk factors, by the principles of "build back better." The Philippines National Economic and Development Authority (NEDA) published the recovery planning document "Reconstruction Assistance on Yolanda: Implementation for Results" (RAY/I4R) in September 2014. Explaining that Yolanda risked causing a negative impact on growth, poverty reduction and employment creation objectives of the Philippine Development Plan 2011-2016 (PDP), NEDA proposed a Results Framework for Yolanda recovery. Based on the PDP, the goal was to create resilient, sustainable regions with high and sustainable growth, able to withstand and recover from future disasters. NEDA identified a window of opportunity to "build back better" and achieve a higher level of development outcomes in some of the poorest areas of the country and explained that the PDP provided the framework to define and monitor these outcomes. 135

Myanmar 2008 Tropical Cyclone Nargis

The term BBB does not figure prominently in the Post-Nargis Joint Assessment, organized by the Tri-Partite Group (government, ASEAN, and the UN), or in the Post-Nargis Recovery and Preparedness Plan.

ASEAN's assessment of the post-Nargis experience points out how BBB contributed in three areas: (1) strengthening DRR and improving construction techniques; (2) building back livelihoods; and (3) the use of ASEAN and local volunteers to carry out recovery programmes. Overseas Development Institute (ODI) notes ASEAN's own role in mediating and facilitating the integration of international organisations in the recovery process. 136 ASEAN characterized its work with partners on DRR as "striking while the iron is hot" (that is, taking advantage of the moment) to spread the concept of building back better into the daily lives of the affected population. Cyclone Nargis was the first time that the AADMER was activated and tested in a real post disaster situation, which provided ASEAN and its members with valuable inputs, lessons learned, tools, and mechanisms that could be applied in future disasters. 137

Asian Development Bank, 2015

Recovery should result in higher disaster resilience, both physically and institutionally. The reconstruction process should adopt an all-hazards approach in all relevant regards. Planning should encompass the entire affected area and include proper site selection for relocation. Application of building codes, selection of hazard resilient

¹³⁵ NEDA, 2014, Reconstruction Assistance on Yolanda: Implementation for Results.

¹³⁶ Overseas Development Institute, 2013, Disaster as opportunity? Building back better in Aceh, Myanmar and Haiti, Humanitarian Policy Group.

¹³⁷ ASEAN, 2010, A Humanitarian Call: The ASEAN Response to Cyclone Nargis.

housing and infrastructure designs and capacity building on safe construction are equally important. Recovery is an opportunity to strengthen capacities for building code enforcement, improve land use planning for both urban and rural areas, and strengthen the country's institutional set up for disaster risk management. Disasters cause sudden inflows of large amounts of money, goods, and services and [countries are] under pressure to deliver aid quickly. Because this can heighten the risk of corruption, strong financial management systems also need to be put in place.¹³⁸

The World Bank, 2014

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 enhancing community resilience following disasters and identifies what is considered successful recovery. While recovery policymakers and practitioners lack a consensus on what BBB should include, at a minimum, BBB should signify a policy commitment to right-sizing, right-siting, and improving the resilience of critical infrastructure. 139

C. Leadership to encourage Building Back Better

Disasters change people's thinking and motivate stakeholders to address causal factors. The opportunity to reduce disaster risk after a disaster should not be lost, especially when the resources are available.

Without guidance on BBB, experience shows that each agency will interpret the phrase on its own. This may include anything from structural integrity, as emphasized in Haiti, to social transformation, such as occurred in Aceh.

Ultimately, it is up to the government to provide the leadership with partners to decide what the standards and principles are to build back better and to communicate this clearly.

In planning a recovery programme, government can:

- Reach agreement on what the "Building Back Better" vision is in planning a particular recovery programme;
- Engage recovery actors in supporting this vision and deciding how it will be implemented;
- Ensure the conditions are in place for the vision to be realized, including adequate funding; and
- Utilize indicators for BBB in the monitoring system and ensure BBB messages are included in the communications plan.

As part of its effort to strengthen its readiness for recovery, governments can:

- Work with partners to reach agreement on BBB goals for infrastructure and services for sectors and regions, and incorporate these in the country's Recovery Framework;
- Develop enabling policies and regulations, and technical standards for sectors and regions, such as guidelines or modifications to building codes, which help in implementing the goals;
- Work with technical experts to identify the additional costs required to meet BBB goals and develop disaster risk financing strategies to reduce and/or cover these additional costs;
- Develop indicators to measure whether BBB is being accomplished in sectors and locations;
- Require the incorporation of BBB goals in regulations for land use and development planning at all levels; and
- Develop communications tools to disseminate BBB goals and standards on both an ex-ante and ex-post basis.

¹³⁹ World Bank/GFDRR, Guide to Developing Recovery Frameworks, Sendai Edition, 2014.





ANNEX I: AADMER WORK PROGRAMME, 2010-2015 ON RECOVERY

This particular component of the Work Programme elaborates Article 17 of AADMER, i.e., rehabilitation. The Work Programme uses the word "recovery" as it covers the whole spectrum of the recovery process that includes rehabilitation and reconstruction. It is also to ensure consistency with the terms used internationally.

Article 17 of AADMER summarises that Member States shall, jointly or individually, develop strategies, implement programmes, and promote cooperation (bilateral, regional and international) for rehabilitation as a result of a disaster. During recovery, Member States will lead, manage, and coordinate the overall recovery process, while ASEAN through AADMER mechanisms will provide full support, based on the need and upon request of the affected Member State/s.

This component of the Work Programme was drafted based on individual experiences of Member States in managing their recovery process in the past five years, in particular, the experience of the ASEAN Humanitarian Task Force (AHTF) for Cyclone Nargis in Myanmar.

Objectives

The recovery component aims to strengthen the capacity of Member States to:

- Conduct damage and loss assessment within one month after a disaster occurs;
- Develop an effective recovery action plan for rehabilitation and reconstruction within three months after a disaster occurs;
- Mobilise resources from the local, regional and international community to support implementation of the recovery process;

- Coordinate and implement activities within a targeted time frame as stated in the recovery plan; and
- Develop a transition plan and link post disaster recovery process into sustainable development one year before the end of the recovery period.

The underlying principle of the recovery component is the promotion of a pro-active planning process for early to long-term recovery even before a disaster occurs. Many of the activities outlined below focus on capacity development. The activities are meant to be done by the Member States before a disaster event at all levels of government, to ensure a more effective recovery process. Pre-disaster recovery planning not only promotes greater participation of various stakeholders in a non-disaster environment but will also help them respond more effectively to and recover faster from the impacts of a disaster. Thus, the recovery component contributes to the achievement of the overall goal of disaster resilience and sustainable development of Member States.

Expected Outcomes

- Members States are self-sufficient in terms of effectively leading, managing, and coordinating their respective recovery processes; and
- More effective transition from post disaster recovery process into sustainable development.

Lead Shepherds

Indonesia and Myanmar

Linked Activities

- ASEAN Humanitarian Task Force for the Victims of Cyclone Nargis;
- Post disaster Needs Assessment and Recovery Framework of the World Bank, UN, and EC;
- International Recovery Platform (IRP);
- ASEAN Secretariat-UNISDR-World Bank Memorandum of Cooperation (MOC) on Disaster Risk Reduction; and
- ASEAN-UNISDR Technical Cooperation on the Implementation of HFA in ASEAN.

Expected Outputs

Output I.I: A tool box (such as an operation manual, guidelines, methodology, community-based approaches, database, etc.) to facilitate the conduct of an effective damage and loss assessment and assist the Member States to produce damage and loss assessments within one month after a disaster occurs.

Output 1.2: A series of capacity building tools and activities for conducting effective damage and loss assessments developed and organised to assist the Member States to produce damage and loss assessments within one month after a disaster occurs.

Output 1.3: A partnership mechanism for conducting joint damage and loss assessments agreed and established to assist the Member States to produce damage and loss assessments within one month after a disaster occurs.

Output 2.1: A guideline on effective recovery action plan developed to strengthen the capacity of Member States to develop an effective recovery action plan for rehabilitation and reconstruction within three months after a disaster occurs.

Output 2.2: A series of capacity building tools and activities for developing an effective recovery action plan developed and organised to strengthen the capacity of Member States for rehabilitation and reconstruction within three months after a disaster occurs.

Output 2.3: A partnership mechanism for the joint development of a recovery action plan agreed and established to strengthen the capacity of Member States to develop an effective recovery action plan for rehabilitation and reconstruction within three months after a disaster occurs.

Output 3.1: A series of possible mechanisms for effective resource mobilisation identified and developed to assist the Member States to mobilise resources from the local, regional and international community to support the implementation of the recovery process.

Output 3.2: A series of capacity building tools and activities developed to assist the Member States to mobilise resources from the local, regional and international community to support the implementation of the recovery process.

Output 3.3: Cooperation among national governments, ASEAN, civil society, the private sector and the international community in mobilising resources enhanced to support the mplementation of the recovery process.

Output 4.1: A series of possible mechanisms for coordination identified and developed to support the Member States in the implementation of the recovery process.

Output 4.2: System for coordination and monitoring developed

Output 4.3: Organize and develop a series of capacity building tools and activities for an effective recovery coordination and monitoring.

Output 5.1: A guideline on effective transition plan developed.

Output 5.2: A series of capacity building tools and activities for an effective transition plan developed.

Output 5.3: A series of possible mechanisms to link post disaster recovery to sustainable development with related ASEAN initiatives identified and developed.

Note that the original text includes expected outputs, activities, responsible parties, timeline, and milestones.

ANNEX II: CONCEPT NOTE SIX: ASEAN DISASTER RECOVERY TOOLBOX

Strategy and Priorities for AADMER Work Programme 2013–2015

ASEAN-UN Strategic Plan of Action on Disaster Management

2015

Lead Agency	UNDP, ESCAP	
Supporting Agencies	IOM, OCHA, UN-Habitat, UNISDR, UNOPS, UN-Women, WHO	
Project Title	UN Support to ASEAN Disaster Recovery Toolbox	
Project Contact/s	Sanny Jegillos, UNDP, sanny.jegillos@undp.org Puji Pujiono, ESCAP, pujiono@un.org Alf Blikberg, ESCAP, blikberg@un.org	
Pillar	Recovery	
Project Objective and related Concept Note:	Support to the development of an ASEAN Disaster Recovery Toolbox to develop and apply knowledge products on best practices, training manuals, guidelines and other tools as well as support to capacity development Concept Note 6 – ASEAN Disaster Recovery Toolbox (ASEAN-DRT)	
ASEAN Partner(s)	AHA Centre	
Project Duration	2015	
Resources Required	TBC – UNDP resource requirements to be estimated	
Resources Available	In-kind	
Resources to be mobilized	TBD	

AGREED STRATEGIC APPROACH

The UN will support the development of an ASEAN Disaster Recovery Toolbox that consists development of and application of knowledge products on best practices, training manuals, guidelines and other tools based on international best practice and adapted to the ASEAN context. The UN's engagement in 2015 would be to support ASEAN to develop the ASEAN Guidelines for Recovery Planning. The Guidelines will be presented and discussed in a relevant ASEAN meeting. As the resources will allow, a set of trainings for a core group of practitioners will be conducted in 2015 based on these guidelines and priority needs, such as post disaster needs assessment, planning recovery programmes, and monitoring and reporting progress. In addition, the UN will also support the strengthening of national governments' post disaster needs assessment institutional capacity to provide the basis for such recovery planning through national and, as appropriate, regional level capacity building activities.

The Guidelines will be based on best practices from Member States and should be appropriate to the context and needs of these countries. To achieve this, the ASEAN through the AHA Center, Member States and the ASEAN Secretariat will be actively engaged in the process of developing the toolbox and in implementing the relevant institutional strengthening activities. The UN has developed coordination mechanisms, assessment tools, signature programmes and is continuously documenting practices, including those based on experiences in supporting affected countries in the Southeast Asian region. In accordance with their respective mandates, UN agencies will be advocating for key sectoral issues and provide expertise, as required.

KEY ACTIONS

- Support the development of ASEAN Guidelines for Recovery Planning, based on best practices in the region and taking into
 account international experiences;
- Coordinate UN agencies' and IOM inputs to the ASEAN Guidelines for Recovery Planning, as required; and
- Provide training and workshops at regional and national levels on post disaster needs assessment and other assessment methodologies as jointly prioritized with ASEAN.

OUTPUTS, INDICATORS AND MEANS OF VERIFICATION

Output I: ASEAN Guidelines on Recovery Planning.

Indicators:

- Draft Guidelines prepared, based on best practices in the region and taking into account international experiences.
- Guidelines are presented to the meetings of the ACDM Working Group on Recovery.

Means of verification:

- · Review of (draft) Guidelines by ASEAN.
- Relevant decisions of ACDM Working Group on Recovery's meetings.

Output 2: Presentation and dissemination of the Guidelines to ASEAN Member States to be used as a reference in post disaster recovery planning.

Indicators:

National and regional level workshops conducted where jointly agreed by ASEAN and UN.

Means of verification:

• Workshop reports.

RESOURCE REQUIREMENTS			
Agency	\$US		
UNDP	- International Consultant 6 months; - Funding for regional and national workshops; - One regional PDNA training		
ESCAP	In-kind		
ЮМ	In-kind		
ОСНА	In-kind		
UNOPS	In-kind		
UNHABITAT	In-kind		
UN Women	In-kind		
Total	TBC		

ANNEX III: NATIONAL DISASTER RECOVERY FRAMEWORKS: INDONESIA, LAOS PDR AND MYANMAR

A. Disaster Recovery Framework of Indonesia

Policy Vision: To rebuild or establish better conditions and in community. Introduce better environmental safeguard disaster. Agency for Policy formulation: In case of a large-scale of National Agency for Disaster Management (BNPB) Planning and programming Planning process: Post Disaster Needs Assessment—E Rehabilitation and Reconstruction by BNPB in coordinChanges in Action Plan through quick reassessment stakeholders Content of Action Plan: The key elements (defined by	disaster it is undertaken by the Development of Action Plan for ation with other stakeholdersand coordination with the
Content of Action Plan: The key elements (defined by a. General condition of the affected areas and disast b. Description of the condition of the affected populosses, and impact of the disaster; c. Prioritized programmes, activities and budget, and d. Institutional management, asset management, end sustainability; and e. Time frame of the recovery process, standard of sindicators Lead agency: BNPB is lead agency in formulating the pilan Recovery related guidelines General Guidelines for Rehabilitation and Reconstructi Technical Guidelines on the Procedure to Propose and Grant (Perka BNPB No.16/2010) Guidelines on Monitoring and Evaluation (Perka BNPB) Examples: Post-tsunami Mentawai and post-Mount Mera Central Java	er occurrence; ation, the total damages, and available resources, of the programmes, and ervices and performance ost disaster recovery action on (Perka BNPB No 17/2011) d Manage Aid in the Form of a No.5/2012)
 Coordinating agency: National Agency for Disaster Manag Implementing agencies: Ministries and non-government ag Tools: Indonesia's Post Disaster Needs Assessment Guide 	encies

Component	Explanation		
	Management	of Indonesia, Number 24 of 2007 concerning Disaster on No.21/2008 on Implementation of Disaster Management	
amework	Large-scale	 Coordination: BNPB Implementation: Ministries or Local Government Work Units 	
Institutional framework	Small-scale	 Coordination: BNPB's Regional Agency for Disaster Management (BPBD) Implementation: Ministries or Local Government Work Units 	
<u>=</u>	Special provision	Setting up an ad hoc coordinating agency for recovery to assist the BNPB/ BPBD	
	Coordination w/ Private sector, NGOs, etc.	BNPB at national level while BPBD at local level	
Resource mobilization and financial management	 Funding National government budget (APBN) Regional government budget (APBD) Indonesia Multi Donor Fund Facility for Disaster Recovery International funding through bilateral and multilateral mechanisms Insurance Audit: Finance and Development Audit Agency and Finance Audit Agency conduct monitoring and audit on the use of state's budget 		
Implementation, communication, and monitoring	 Duration: Maximum three years Fast tracking procurement: Special provision for emergency response and transitional period from emergency response to recovery Monitoring and Evaluation: Five indicators namely: consistency, coordination, participation, capacity and sustainability (Perka BNPB No. 5/2012) Line agencies to submit Financial Report and Performance Report periodically to BNPB Communication: BNPB leads communication with objectives to disseminate Action Plan and to check rumours using all medium, though communication strategies need to be drafted. Integration with long-term development: Results of recovery activities or to accomplish recovery activities 		
Phases	Relief (3-8 days); Early Recovery	(2 to 18 months); Recovery (3 years)	

References

- Law of the Republic of Indonesia, Number 24 of 2007 concerning Disaster Management http://www.ifrc.org/docs/IDRL/956EN.pdf
- BNPB, Perka No. 17/2011, the General Guidelines for Rehabilitation and Reconstruction, 2011.
- Presentation by Indonesia at 2nd NFP Meeting of ASEAN Recovery Guidelines on 19/10/2015
- UNDP, Recovery Framework Case Study: Indonesia, 2014.
- The World Bank Group and et al, Institutionalizing Post disaster Recovery: Learning from Mentawi Tsunami and Merapi Eruption, Recovery Framework Case Study, September 2014. https://www.gfdrr.org/sites/gfdrr/files/Indonesia%20Post disaster%20Recovery%20Institutionalization.pdf

B. Disaster Recovery Framework of Lao PDR

Component	Explanation				
Policy and Planning	 Apex body: National Assembly provides oversight on planning and implementation Lead planning agency: Ministry of Planning and Investment (MPI) "Handbook for Post disaster Recovery and Reconstruction Planning" provides guidance on planning and implementation of recovery interventions Planning process: Bottom-up needs assessment; Consolidation by National Committee for Disaster Prevention and Control (NCDMC) and Department of Disaster Management and Climate Change(DDMCC) at national level; Review and budget approval by MPI & Ministry of Finance (MOF); NCDMC approval 				
Institutional framework	 Laws and regulations Prime Ministerial Decree 220/PM, 2013 National Disaster Management Plan 2012-15 (draft) by the Ministry of Labour and Social Welfare (MLSW) Organisational model National level NCDPC under Deputy Prime Minister/Minister of Defence, apex body for coordination Secretarial support to NDCDPC: Department of Disaster Management and Climate Change Lead agencies for planning: Ministry of Planning and Investment; and Ministry of Finance Lead agencies for implementation: Ministry of Agriculture and Forestry; and Ministry of Public Works and Transport Sub-national level Provincial, District and Village Committees for Disaster Prevention and Control Ministry Focal Points at province and district levels Coordination with NGOs, private sector, etc. National Round Table Process includes standard reporting and quarterly, annual, and triennial meetings and ad hoc on-ground monitoring 				
Post disaster assessment	 Lead agency: MPI Timeline: Start two-three weeks after disaster and finalize by the fifth week Capacity: Government officers trained; format and Standard Operating Procedures for PDNA developed Examples: Assessment after Cyclone Ketsana, 2009 and Cyclone Hima, 2011 				
Resource mobilization and financial management	 Lead Agency: Ministry of Finance National funding National Disaster Fund: Managed by the NCDMC and administered by Department of Social Welfare. National Contingency Fund: Administered by Department of Budget State Accumulation Fund: Approval by National Assembly Sub-national funding The national level funding is a major source of funding recovery and provincial level funding is mainly for relief, and it varies across the country. Some of the funding mechanisms include Provincial Disaster Fund; Rice Fund; Provincial Emergency Fund; Provincial Contingency Fund; and Rollover Fund. Coordination with international agencies: MPI's Department of International Cooperation and Department of Planning lead coordination with international agencies on the mobilization of resources 				

Component	Explanation
6 0	 Lead agencies for implementation Ministry of Agriculture and Forestry and Ministry of Public Works and Transportation
nitorii	• Procurement
ow Pi	 Standard Procurement Manual and standard bidding documents developed by MOF also used for recovery
Implementation, communications, and monitoring	 Procurement Evaluation Committee set-up under Governor/Deputy Governor of province to expedite recovery/development
unicati	 Agreement in place to fast-track procurement for recovery between Ministry of Finance and Governors
Ē	Monitoring and Evaluation:
8,	 Lead agency: MPI and MOF
Ëon	 Process: Provincial implementing agency reports on the progress of project
nta1	implementation to the provincial MPI and Cabinet and to relevant ministries at the
in e	central level, which compiled and reported to MPI and MOF.
Imple	■ Committee: Monitoring Committee is set-up for specific recovery programmes. Example, the Monitoring Committee for Flood Recovery and Production Promotion was established to monitor the implementation of Haima/Nok-Ten recovery activities.

References:

- Strengthening institutional capacities for resilient recovery, GFDRR.
- Handbook for Disaster Recovery and Reconstruction Planning in Lao PDR, MPI
 http://www.adpc.net/igo/category/ID623/doc/2014-tyo0SF-ADPC-Laos Post disaster Handbook MPI
 http://www.adpc.net/igo/category/ID623/doc/2014-tyo0SF-ADPC-Laos
- Draft National Disaster Management Plan 2012-15, MLSW http://www.gripweb.org/gripweb/sites/default/files/draf national disaster management plan.pdf
- Standard Operating Procedure: Damage, Loss and Needs Assessment in Khammouane province, Lao PDR, MPI. http://www.adpc.net/igo/category/ID618/doc/2014-di83Co-ADPC-KDP_DalnaSopEnglishWEB.pdf
- National progress report on the implementation of the Hyogo Framework for Action (2013-2015), Lao PDR http://www.preventionweb.net/files/41813 LAO NationalHFAprogress 2013-15.pdf

C. Disaster Recovery Framework of Myanmar

Component	Explanation
Policy and Planning	 Policy Apex body: National Disaster Management Committee Principle: Disaster resilient reconstruction Objectives To conserve and restore the environment To provide health, education, social and livelihood programmes to bring about better living conditions for victims Social protection based on Myanmar's National Social Protection Strategic Plan (2014) Planning process Data collection/confirmation of damage and loss; drafting of Rehabilitation and Reconstruction Plan; continuation of relief/rehabilitation activities; reconstruction Government-led Rehabilitation and Reconstruction Plan includes organisations and individuals with duties for each programme/task, communication, logistic and supervisory duties

Component	Explanation				
Institutional framework	 Laws and Regulations Natural Disaster Management Law, 2013 Standing Order on Natural Disaster Management, 2009 National level Nodal agency: National Recovery Coordination Committee chaired by the Union Minister for Construction Advisory Committee of experienced sector specialist Sub-national level: State/Region Recovery Coordination Committee Coordination with the Private sector, NGOs, etc. Recovery Forum comprising experts, sector working group coordinators and state and region coordinators 				
Post disaster assessment	 Coordinating agency: Recovery Coordination Committee Implementing agency: Line ministries and departments Damage Assessment Form: Annex G, Standing Order Post Disaster Needs Assessment formats developed by the Relief and Resettlement Department in 2015 				
Resource mobilization and financial management	 Funding President's Reserve Fund National Natural Disaster Management Fund and Region/State Natural Disaster Management Fund Allocation from the Union budget fund Contribution from foreign countries and external organisations Donations from local bodies and civil society Audit National Committee to submit an audit report in respect of spending and management of the National and the Region or State Natural Disaster Management 				
Implementation, communication, and monitoring	 Key sectors for rehabilitation and reconstruction: Health, Education, Social, Agriculture, Livelihoods, Housing and Psychosocial Implementation coordinated on the ground by States/Regions Communication: Ministry of Social Welfare, Relief and Rehabilitation/ Ministry of Construction periodically updates the Cabinet on progress of recovery Monitoring and evaluation Line agencies monitor sector rehabilitation and reconstruction Overall M&E by Ministry of Social Welfare, Relief and Rehabilitation /Ministry of Construction Tax exemption: Rehabilitation material imported exempted from tax 				

References

- The Government of Myanmar, Natural Disaster Management Law, 2013 http://www.themimu.info/sites/themimu.info/files/documents/Natural_Disaster_Management_Law_2013_ENG.pdf
- Deputy-Director, Ministry of Construction, presentation on 'Institutional Arrangement on Recovery Coordination in Myanmar on 19 October 2015.
- The Government of Myanmar, Standing Order on Natural Disaster Management, 2009. http://www.recoveryplatform.org/assets/publication/SO%20Printing%20new.pdf
- The Government of Myanmar, Programme for Reconstruction of Cyclone Nargis-affected areas and implementation Plans for Preparedness and Protection from Future Natural Disasters, 2008.

ANNEX IV: ASEAN MEMBER STATES INSTITUTIONAL ARRANGEMENTS FOR RECOVERY

Country	NDMO/Recovery Agency	Disaster Management Law	Disaster Risk Management Plan
Brunei	National Disaster Management Centre, Ministry of Home Affairs http://www.home-affairs.gov.bn/ Theme/Laman%20Utama.aspx	Disaster Management Order, 2006 http://faolex.fao.org/docs/pdf/ bru87653.pdf	Strategic National Action Plan for Disaster Risk Reduction
Cambodia	National Committee for Disaster Management http://www.ncdm.gov.kh/index en.php	Law on Disaster Management http://www.ifrc.org/Global/ Publications/IDRL/DM%20acts/ Cambodia%20DM%20Law English. pdf	Strategic National Action Plan for Disaster Risk Reduction, 2008-2013 http://www.adrc.asia/countryreport/KHM/Plan/Cambodia_SNAP-DRR_2008-2013_Eng.pdf
Indonesia	National Agency for Disaster Management (BNPB) http://www.bnpb.go.id/#english	Law of the Republic of Indonesia, Number 24 of 2007 concerning Disaster Management BNPB, Perka No. 17/2011, http://www.ifrc.org/docs/IDRL/956EN.pdf General Guidelines for Rehabilitation and Reconstruction, 2011	Rencana Nasional Penanggulangan Bencana, 2010-2014 [In Indonesian] http://www.bnpb.go.id/uploads/ renas/1/BUKU%20RENAS%20PB. pdf (National Disaster Management Plan, 2010-2014)
Lao PDR	National Disaster Management Committee / Ministry of Planning and Investment http://www.investlaos.gov.la/	Decree on the Establishment of National Disaster Management Committee http://www.preventionweb.net/files/22033_15958ndmcpmdecree1.pdf	Draft National Disaster Management Plan 2012-15, MLSW
Malaysia	Central Disaster Management and Relief Committee (JPBBP) (National Security Division, Secretariat) https://www.mkn.gov.my/ [National Security Council]	National Security Council Directive No. 20, Policy and Mechanism of National Disaster Management and Relief http://www.adrc.asia/management/ MYS/Directives National Security Council.html?Fr	NA
Myanmar	National Recovery Coordination Committee (Ministry of Construction)	Natural Disaster Management Law 2013 http://www.themimu.info/sites/ themimu.info/files/documents/ Natural_Disaster_Management Law 2013 ENG.pdf Standing Order on Natural Disaster Management, 2009	Myanmar Action Plan on Disaster Risk Reduction, 2012 http://reliefweb.int/sites/reliefweb. int/files/resources/RDD_ FILE_1340609699_MAPDRR_ English_June%202012.pdf
Philippines	National Disaster Risk Reduction and Management Council (Department of Defense and Department of Interior and Local Government, Co-Chairs) / National Economic Development Agency (recovery) http://www.ndrrmc.gov.ph/ http://www.neda.gov.ph/	Disaster Risk Reduction and Management Act of 2010 http://www.preventionweb.net/files/22035_17303ra10121drrmact1.pdf	The National Disaster Risk Reduction and Management Plan, 2011-2028 http://www.dilg.gov.ph/PDF_File/ reports_resources/DILG-Resources- 2012116-420ac59e31.pdf

Country	NDMO/Recovery Agency	Disaster Management Law	Disaster Risk Management Plan
Singapore	Homefront Crisis Ministerial Committee (Minister of Home Affairs, Chair) https://www.mha.gov.sg/key-topics/ civil-defence-and-emergency- preparedness	Various laws apply, depending the disaster, including, among others: Civil Defence Act http://statutes.agc.gov.sg/aol/search/display/view.w3p;orderBy=date-rev.loadTime;page=0;query=ld%3A36413277-caae-4813-87ac-48dc4779f44firec=0 Civil Emergency Operations Plan Building and Construction Authority Act https://www.bca.gov.sg/publications/BuildingControlAct/others/BCARegConPer2008.pdf Building Control Act Environment Protection and Management Act Environment Public Health Act Hazardous Waste (Control of Export, Import and Transit) Act Infectious Disease Act National Environment Agency Act Radiation Protection Act	
Thailand	Department of Disaster Prevention and Mitigation (Ministry of Interior, Chair) http://61.19.54.141/inter/ddpm/ index.html	Disaster Prevention and Mitigation Act	National Disaster Prevention and Mitigation Plan 2015
Viet Nam	Department of Natural Disaster Prevention and Control (Ministry of Agriculture and Rural Development, Standing Body) http://www.mard.gov.vn/en/Pages/ default.aspx	Law on Natural Disaster Prevention and Control	National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020 http://www.isgmard.org.vn/VHDocs/ NationalPrograms/National%20 Strategyfordisasterprevention2020. pdf

ANNEX V: CHARACTERISTICS OF GOOD RECOVERY WITH PERFORMANCE INDICATORS

The Principles for Good Recovery are listed below with indicators to measure results. In utilizing these indicators as part of a monitoring system, targets would be required for each indicator.

Table 17: Principles for Good Recovery with Monitoring Indicators

Good Recovery Principles Proposed Indicator		
PRINCIPLE 1: Governments and citizens should be ready for recovery		
 1.1 Governance systems support streamlined operations while maintaining accountability and transparency 1.2 Recovery arrangements are in place to permit a timely transition from relief to recovery to sustainable development 1.3 Assessments have reliable baselines and provide information useful for recovery planning purposes 1.4 A Disaster Risk Financing and Insurance (DRFI) strategy facilitates the mobilization of recovery funding 1.5 Systems to support accountability and transparency are already in place 1.6 Advice to stakeholders on disaster risk reduction is readily available 	 1.1 Citizen perceptions of transparency and timeliness; adherence to project schedules 1.2 Recovery is fully operationalised in DRM strategies; a Recovery Framework is approved 1.3 Evaluation of assessment data quality and relevance 1.4 Progress on defining and implementing DRFI strategy. 1.5 A recovery accountability system is designed and accessible for any disaster. 1.6 Effectiveness and availability of guidelines, coordination, and assistance on disaster risk reduction 	
PRINCIPLE 2: Recovery programmes should be ca	refully planned and well managed	
 2.1 Recovery is implemented in timely manner; a sense of urgency is maintained 2.2 Damage, losses, and needs are assessed through a timely, participatory process, led by government 2.3 The Recovery Framework supports agreed vision, goals, and priorities 2.4 The Lead Recovery Agency has a clear and sufficient mandate 2.5 Governmental and non-governmental actors have clear roles and responsibilities 2.6 The Recovery Framework reflects the country's strategic development goals 2.7 Cross-cutting social, economic, and environmental recovery needs are addressed in the Recovery Framework 2.8 Local government has a clear role and adequate support 2.9 Adequate financial resources are raised and allocated to priority needs 2.10 A Recovery Framework guides implementation and can be modified efficiently 	 2.1 Comparison of recovery activity schedule to actual delivery 2.2 Date of delivery, number of participants, evaluation of government role 2.3 Invested funds map to outcomes established in Recovery Framework 2.4 Timing of designation of Lead Recovery Agency and evaluation of terms of reference 2.5 Understanding and satisfaction of ministry officials, municipal authorities, NGOs, and private sector with roles 2.6 Assessment of coherence between Recovery Framework and other national plans 2.7 Percentage of projects applying established safeguards 2.8 Share of recovery funding channelled to local governments and local organisations; training of local officials 2.9 Funding gap compared to needs; coherence of funding allocations with needs and Recovery Framework 2.10 Completion and dissemination of the Recovery Framework; administrative procedures for 	

Good Recovery Principles

- 3.1 Recovery planning is participatory and inclusive
- 3.2 Non-governmental and private sector organisations' efforts are encouraged and integrated into the Recovery Framework
- 3.3 Coordination mechanisms with all key stakeholders operate effectively
- 3.4 The monitoring system supports accountability to stakeholders
- 3.5 Plans and progress are communicated widely and channels for feedback are available
- 3.6 All partners commit to a transparent recovery process
- 3.7 Community involvement and self-recovery are encouraged and supported
- Recovery of vulnerable groups is explicitly addressed in 3.8 Timely delivery of commitments to vulnerable planning and implementation
- 3.9 Livelihood recovery is a priority

Proposed Indicator

- 3.1 Level and diversity of participation processes
- 3.2 Comparison of external agency projects to Recovery
- 3.3 Effectiveness of coordination mechanisms
- 3.4 Completeness, timeliness, and dissemination of monitoring reports
- 3.5 Share of agencies with communications plans; public perception of communications; use of feedback mechanisms;
- 3.6 Perceptions of transparency; use of transparency tools; timeliness of financial reporting
- 3.7 Perception of households; share of housing reconstruction that is owner-driven
- groups
- 3.9 Resources allocated to livelihoods; indicators for recovery of employment and employment generation

PRINCIPLE 4: Recovery should prioritize risk reduction and resilience building

- and reconstruction
- 4.2 Practical advice on disaster risk reduction is communicated widely
- 4.3 Disaster risk reduction is a commitment of both governmental and non-governmental agencies
- 4.4 Recovery reinforces the capacity and resilience of local governments and other local stakeholders
- 4.1 The "Build Back Better" imperative drives recovery 4.1 BBB is defined clearly and in practical terms and DRR standards are enforced
 - 4.2 Public understanding of DRR messages
 - 4.3 Share of affected population in safer conditions post-
 - 4.4 Perception of local government; number of recovery practices documented and institutionalized

PRINCIPLE 5: Countries should strive for continuous improvement of recovery practices

- 5.1 Recovery projects and programme results are evaluated
- 5.2 Recovery interventions are sustainable after the recovery period ends
- 5.3 Policies are based on pre-disaster recovery arrangements, whenever possible
- 5.4 Institutional arrangements allow a timely transition from relief to recovery to sustainable development
- 5.1 Enforcement of policy on programme and project evaluations
- 5.2 Share of interventions with environmental and fiscal impact studies; indicators of willingness to pay
- 5.3 Share of key policies defined beforehand
- 5.4 Existence of humanitarian exit strategy; clear indicators for completion of recovery phase

ANNEX VI SPECIAL FOCUS: RELOCATION AND ACCESS TO LAND IN POST DISASTER RECOVERY

Governments and families frequently confront challenges related to land occupancy and land tenure in post disaster recovery. These can take the form of:

- A. Managing land-related vulnerabilities in recovery
- B. Finding land for relocation of at-risk households
- C. Providing secure tenure to families and businesses to avoid later displacement

These challenges are often compounded by the presence of informal land systems and weaknesses in formal land administration. Situations such as poor land records may be pre-existing problems, or caused by the disaster.

A. Managing land-related vulnerabilities

UN-HABITAT identifies five land-related characteristics of disaster vulnerability, which are mutually reinforcing. 140

- Unsustainable land uses
- Poor urban planning
- Landlessness (lack of access to land markets)
- Land-related discrimination
- Weak land administration

Long-term disaster risk reduction in ASEAN Member States depends on improving access to safe land, particularly for low-income households, and on making land use sustainable. The need for significant relocation of facilities or housing following a disaster often indicates policy and regulatory gaps, either in land administration or land use planning and regulation, or both.

The disaster recovery period will not provide the time to fully implement reforms to reduce land-related risks. Nevertheless, they should be addressed in recovery to the extent possible, and tackled in a more fundamental way before or after the disaster period.

B. Finding land for relocation

Human settlements in unsafe locations can cause or worsen disaster impacts. As a result, recovery frequently prompts a search for land to relocate facilities, households, and businesses to safer sites. Yet the site selection process itself is subject to various risks. Relevant solutions may be different in urban and rural contexts. In a Recovery Framework, these issues can be addressed ex-ante. Table 18 describes risks and potential solutions.

Consider alternatives to large-scale relocation

Relocation can be expensive, socially disruptive, and difficult to organize. Even when a large group of households is located in an unsafe site, there may be alternatives to large-scale relocation. In fact, relocation should be considered as a last resort, exhausting other alternatives including:

- Absorb households into existing communities using community consultation and land readjustment¹⁴¹
- Allow groups or individuals needing to be relocated to find smaller relocation sites that meet specific criteria, providing a subsidy from public funds for purchase and construction
- Offer subsidies to land owners in suitable neighbourhoods to provide or construct housing units that meet standards
- Provide rental subsidies to households to lease housing units that meet defined standards

C. Providing secure tenure

Providing an improved housing solution on disputed land may cause later dislocation of beneficiary households when other "owners" attempt to capitalize on the increased property value. Disasters can also weaken tenure security, by erasing property boundaries, damaging records, causing households to relocate with uncertain arrangements. For these reasons, recovery projects aimed at improving housing conditions should provide a minimum level of tenure security.

¹⁴⁰ UN-HABITAT, 2010, Land and Natural Disasters: Guidance for Practitioners. http://unhabitat.org/books/land-and-natural-disasters-guidance-for-practitioners/

¹⁴¹ Land readjustment is also called community-based land adjudication. See Herman Soesangobeng. "Land Adjudication, Titling, and Acquisition," in Asian Development Bank, 2010, Rebuilding lives and homes in Aceh and Nias, Indonesia. https://www.adb.org/sites/default/files/publication/27996/rebuilding-aceh-nias.pdf and Hong, Yu-Hung and Isabel Brain, "Land Readjustment for Urban Development and Post disaster Reconstruction," in Land Lines, January 2012 issue. https://www.lincolninst.edu/pubs/dl/1992_1317_Land_Readjustment.pdf.

Table 18: Site Selection Challenges and Potential Solutions

Site selection challenges	Potential solutions
Land acquisition causes delays	 Use a market-driven approach, solicit offers of land for sale Consider both public- and privately-owned land Negotiate prices to avoid eminent domain proceedings Identify land for post disaster relocation in normal planning processes Acquire options on land to gain control
Resources meant for recovery are diverted to land acquisition	 Use a land lease or delayed purchase Solicit donations of land Purchase land using private credit Require a financial contribution from businesses or households Redesign relocation sites to be higher-density Contract with private developers in possession of land
Sites do not conform to local zoning regulations or development plans	 Ensure local officials lead site selection process Use or quickly update local land use plan so it guides the selection process Incorporate relocation with other planned development initiatives
Sites identified are remote, unsuitable, or have inadequate services	 Establish minimum conditions for new sites; conduct feasibility studies to compare costs and benefits with other alternatives Budget fully for site improvements and future costs for the government and occupants Involve beneficiaries in the identification of sites
Price of land inflates in post disaster period	 Use market valuation methods Use competitive bidding process to establish prices Temporarily impose land price controls
Areas from which communities are moved for risk reduction are rapidly resettled by others	 Consider alternatives to relocation Approve regulation that forbids resettlement in an area Provide budgetary support so enforcement bodies can secure area Create community enforcement mechanisms Transform areas to new use, such as recreation that the public is motivated to protect

The Global Land Tenure Network explains that rights to land lie on a continuum, as shown in Figure 5.¹⁴² On the formal end of this continuum, the owner has a registered freehold and a range of rights, including the right to sell or transfer the land to his or her heirs, and these rights are registered, mapped, and

documented in formal records. At the informal end of the continuum are situations, where tenure rights are perceived by the community or a group has customary rights to use a piece of land that may not have clearly marked boundaries, and where there are no official records.

ASEAN CASE STUDY, INDONESIA: IMPACT OF 2004 INDIAN OCEAN TSUNAMI ON HOUSING IN ACEH

The Indian Ocean tsunami of 2004 wiped out residential property boundaries of villages near the coast and civil records in many local sub-district offices. An initiative was launched to involve people in rebuilding their settlements, supported by multiple donors, which included community-driven land adjudication (or community land mapping). Volunteers were trained to identify landmarks and to produce drawings that showed parcel boundaries. Once completed, the

map was signed by a family member and owners of neighbouring parcels. The national Land Administration Agency validated the community's findings regarding ownership and boundaries, using land records from before the tsunami and parcel measurements, and then secured community agreement. The ruling on the land parcels was published, and registration of titles was offered free of charge. The goal was to formalise 600,000 land titles. The property management system was computerized, and joint titling for married couples was introduced. This activity set the stage for reconstruction in these disaster-affected regions. ¹⁴³

¹⁴² United Nations Human Settlements Programme (UN-Habitat), 2012, Handling Land: Innovative Tools for Land Governance and Secure Tenure. http://unhabitat.org/books/handling-land-innovative-tools-for-land-governance-and-secure-tenure/

¹⁴³ Abhas Jha, et al, 2010, Safer Homes, Stronger Communities: A Handbook for Reconstructing after Natural Disasters. https://www.gfdrr.org/housingreconstruction

Perceived Tenure Adverse **Approaches** Occupancy possession Leases Formal land Informal land rights rights Registered Customary **Alternatives** Group to eviction tenure freehold

Figure 5: Continuum of Land Rights

Source: United Nations Human Settlements Programme (UN-Habitat), Handling Land: Innovative Tools for Land Governance and Secure Tenure.

Security of land tenure is considered by many to be as important for housing and livelihoods as formal land ownership, especially for women.

Consider the following in seeking to provide tenure security in recovery:

- Various arrangements can be used to provide tenure security, but it is important to understand which is most relevant to a particular situation. For the affected population, the formal system may be foreign and irrelevant. But a community's knowledge of a family's longevity in a site may be highly valued.
- Households being considered for relocation may have acquired tenure rights in their current

- location, which need to be respected. It is unjust to ask a family to move from a location where they consider their tenure to be secure to another where their tenure situation is insecure or unclear, regardless of the perceptions of outsiders.
- No one should be relocated without knowing their tenure situation in the new location, and (in some countries) being compensated for giving up their prior rights.¹⁴⁴
- The risk of disasters is not the only risk occupants consider in deciding where to settle. Among others, security, livelihood protection, social networks, and costs such as transportation enter a family's calculation. Relocation decisions based solely on disaster risk considerations may seem illogical to households with multiple vulnerabilities.

¹⁴⁴ Food and Agriculture Organisation, 2012, Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. https://www.fao.org/nr/tenure/voluntary-guidelines/en/ and Oxfam, 2015, Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security from a Gender Perspective. https://www.oxfam.de/system/files/ox_vggts_broschuere_web.pdf



On 8 November 2013, Typhoon Haiyan (known as Yolanda in the Philippines), one of the strongest typhoons ever recorded, hit the Philippines affecting 6.1 million people. The disaster killed more than 6,000 people, 4.1 million were displaced, and another 1,785 others went missing. Around 1.2 million houses were damaged; 50 per cent severely.¹⁴⁵ The affected areas were some of the poorest provinces of the country.

Following the disaster, the President of the Philippines declared a no-build zone of 40 meters from the shoreline with the objective of reducing the exposure of lives and assets in the vulnerable coastal zones, especially during the Yolanda recovery process. Between November 2013 and January 2014, a number of local institutions (municipalities and cities) in the affected areas issued ordinances related to no-build zones.¹⁴⁶

On I February 2014, the Government of the Philippines downgraded the no-build zone to a no-dwelling zone. It was clarified that a blanket application of the no-build zone will not address exceptional circumstances and may be impractical for certain areas. For example, areas with fishing industries or tourism-oriented businesses still need

to build structures within 40 meters from the coastline. Moreover, areas located in high elevations, though in the 40-meter zone, are not susceptible to storm surges.

This entailed distinguishing between 'Safe Zones' and 'Unsafe Zones' and identifying 'No Dwelling Zones.' In order to identify safe and unsafe zones, hazard risk maps were developed of the affected areas between April and November 2014. An Inter-Agency Committee comprising of the Department of National Defence, Department of Public Works and Highways, Department of Interior and Local Government, Department of Science and Technology and Department of Environment and Natural Resources collaborated to prepare hazard maps of usable scale for the affected region. The Department of Environment and Natural Resources developed and shared geo-hazard maps at a scale of 1:10,000 for 131 out of the 171 municipalities of Yolanda-hit provinces. These maps were intended to be of use by the Local Government Units as a tool to plan their resettlement and rebuilding efforts.

The implementation of the no-dwelling zone resulted in an increased awareness of the need and usage of high-resolution hazard maps for risk reduction in recovery. It also included setting up a mechanism for the generation, dissemination, and usage of high-resolution hazard maps in recovery planning and implementation

GLOSSARY

Accountability

The obligation to demonstrate that the activities of public and non-governmental actors are conducted in accordance with agreed rules and standards and report fairly and accurately on results.

Aid effectiveness

The effectiveness of development aid in achieving economic or human development (or development targets). It aims to establish relations between donor and developing countries, based on principles of partnership.

Audit

An official examination and verification of accounts and records to analyse the legality and regularity of project expenditures and income, in accordance with laws, regulations, and contracts, such as loan contracts and accounting rules. It may also analyse efficiency and effectiveness of funds.

Annual expected loss

Expected loss per year when averaged over a long period of time. The sum of annual event losses over the period multiplied by their probability.

Baseline data

Data that characterizes pre-disaster social, economic, or environmental conditions, including indicators for housing conditions, employment, poverty, service levels, etc.

Benchmarks

Reference point or standard against which performance or achievements can be assessed.

Build back better

An approach that advocates for using reconstruction to improve upon one or more aspects of pre-disaster social, political, economic, or environmental conditions, in particular to reduce disaster risk and vulnerability.

Building code

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

Capacity

The combination of all the strengths, attributes and resources available within a community, society or organisation that can be used to achieve agreed goals.

Cash transfers

Assistance to a targeted group in the form of cash to accomplish a specific social or economic purpose related to relief or recovery.

Catastrophe bonds

High-yielding, insurance-linked security providing for payment of interest and/or principal to be suspended or cancelled in the event of a specified catastrophe, such as an earthquake.

Climate change

A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

Clusters

Groups of humanitarian organisations (UN and non-UN) working in the main sectors of humanitarian action, e.g. shelter or health.

Community

A group of households that identify themselves in some way as having a common interest or need. A social group that resides in a specific locality.

Contingency fund

Cash set aside to be used for specific purposes (contingency) that is likely but cannot be predicted with certainty.

Contingency planning

Planning for specific potential events or situations that could threaten society or the environment and establishing arrangements in advance to enable timely, effective and appropriate responses.

Contingent credit lines

A free-standing line of credit deployed after a specific emergency event, such as the Catastrophe Deferred Drawdown Option offered by the World Bank.

Contingent financing

Any form of financing, generally credit, made available following the occurrence of a specific event or situation that is likely but difficult to predict.

Corruption

The misuse of a public or private position for direct or indirect personal gain.

Critical facilities

The primary physical structures, technical facilities and systems which are socially, economically or operationally essential to the functioning of a society or community, both in routine circumstances and in the extreme circumstances of an emergency.

Damages

Total or partial destruction of physical assets.

Decentralization

A political and administrative process whereby functions and powers are redistributed away from a central location or authority to the local level, usually, to local government.

Derivatives

A financial contract whose value is generally derived from another asset (equity, bond or commodity). Weather derivatives are used to reduce the risks associated with adverse weather conditions such as rainfall, snowfall, or temperature, and let buyers smooth their earnings over a period of adverse weather which would have otherwise affected them financially. The underlying "asset" is the weather.

Direct costs

The immediate consequences of the disaster's physical phenomenon, including damage, fatalities, and injuries, often classified into direct market losses and direct non-market losses.

Disaster

A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts. Generally, one which exceeds the ability of the affected community or society to cope using its own resources.

Disaster risk

The probability of harmful consequences, or expected losses in terms of deaths, injuries, property, livelihoods, economic activity or damage to the environment resulting from interactions between natural or human-induced hazards and vulnerable conditions.

Disaster risk financing and insurance

Tools to increase the financial and fiscal resilience to natural disasters by institutionalizing sustainable (generally market-based) and cost effective risk financing strategies.

Disaster risk management

The systematic process of using administrative directives, organisations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.

Disaster risk reduction

Minimizing vulnerabilities and disaster risks throughout a society. Avoiding through prevention or limiting through mitigation and preparedness, the adverse impacts of hazards, within the broad context of sustainable development.

Disaster risk reduction (or management) plan

A document prepared by an authority, sector, organisation or enterprise that sets out goals and specific objectives for reducing disaster risks together with related actions to accomplish these objectives.

Early recovery

A multidimensional process of recovery that builds on humanitarian programmes to catalyse sustainable development opportunities. It encompasses the restoration of basic services, livelihoods, shelter, governance, security and rule of law, including the reintegration of displaced populations.

Early warning system

The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organisations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

Enabling conditions

Rules and regulations that support implementation of a specific activity, such as community participation or DRM.

Enumeration

A participatory process whereby affected households (and sometimes their real property) are categorized and registered as input to a recovery plan.

Environmental impact assessment

Process by which the environmental consequences of a proposed project or programme are evaluated, undertaken as an integral part of planning and decision-making processes with a view to limiting or reducing the adverse impacts of the project or programme.

Essential services

Services provided by critical facilities, whose disruption would endanger the life, health, or safety of a population.

Evaluation

The systematic and objective assessment of an ongoing or completed project, programme, or policy, including its design, implementation, and results, to determine the relevance and fulfilment of objectives, development efficiency, effectiveness, impact, and sustainability.

Ex-ante measures

Actions taken in advance of a disaster in the expectation that they will either prevent, or significantly reduce the impact of a possible disaster. (Also, prospective disaster risk management)

Ex-post measures

Actions taken after a disaster has occurred to recover from damage and losses caused by the disaster.

Exposure

The presence of people; livelihoods; environmental services and resources; infrastructure; or economic, social, or cultural assets in places that could be adversely affected by a hazard.

Extensive risk

The widespread risk associated with the exposure of dispersed populations to repeated or persistent hazard conditions of low or moderate intensity, often of a highly localized nature, which can lead to debilitating cumulative disaster impacts.

Flood

The overflowing of the normal confines of a stream or other body of water, or the accumulation of water over areas that are not normally submerged.

Forecast

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

Geological hazard

Geological process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Governance

The exercise of economic, political, and administrative authority to manage a country's affairs at all levels. It comprises mechanisms, processes, and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations, and mediate their differences.

Grievance redressal

A system for receipt and adjudication of conflicts and complaints arising from the implementation of the recovery programme.

Hazard

A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Housing

The immediate physical environment, both within and outside of buildings, in which families and households live and which serves as a shelter.

Hydro meteorological hazard

Process or phenomenon of atmospheric, hydrological or oceanographic nature that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Hyogo Framework for Action

The plan that covered the period of 2005-2015 for building the resilience of nations and communities to disasters.

Index-based agricultural insurance

Insurance that pays out based on an objectively measured index (rainfall, area-average yield statistics, and vegetation conditions) rather than actual losses.

Indirect costs / losses

Indirect losses include losses attributed to the consequences of the disaster, rather than to the disaster itself. Indirect losses can be market or non-market losses, and include output losses (e.g. business interruption or supply-chain disruption), macro-economic impacts (including reduced market demand), and the impact on poverty or inequality.

Infrastructure

Systems and networks by which public services are delivered, including water supply and sanitation, energy and other utility networks, and transportation networks.

Input

Resources such as people, raw materials, energy, information, or finance that are put into a system (project, manufacturing plant, etc.) to obtain a desired output.

Intensive risk

The risk associated with the exposure of large concentrations of people and economic activities to intense hazard events, which can lead to potentially catastrophic disaster impacts involving high mortality and asset loss.

Land-use planning

The process undertaken by public authorities to identify, evaluate and decide on different options for the use of land. It includes consideration of long term economic, social and environmental objectives and the implications for different communities and interest groups, and the subsequent formulation and promulgation of plans that describe the permitted or acceptable uses.

Legal framework

A set of rules, procedural steps, or tests, often established through precedent in the common law, through which judgments can be determined.

Lifeline services

Services provided by critical facilities, whose disruption would endanger the life, health, or safety of a population.

Livelihoods

The capabilities, assets (including both material and social) and productive activities required for earning a living.

Loss

Changes in flows of goods and services caused by a disaster, including diminished revenues and/or additional costs.

Memorandum of understanding

A tool for documenting the common intent of two or more parties.

Micro insurance

Insurance services for low-income households and microenterprises without access to mainstream insurance services that protect against risks such as accident, illness, and natural disasters.

Mitigation

The effort to lessen the potential adverse impacts of physical hazards (including those that are human-induced) through actions that reduce hazard, exposure, and vulnerability.

Monitoring

A continuous function that uses the systematic collection of data on specified indicators to provide stakeholders of an ongoing intervention with indications of the extent of achievement of objectives and information on progress in the use of funds.

Multilateral financial institutions

Institutions that provide financial support and professional advice for economic and social development activities in developing countries, e.g. the World Bank Group and four Regional Development Banks. [Also multilateral development banks]

National platform for disaster risk reduction

A national mechanism for coordination and policy guidance on disaster risk reduction that is multi-sectoral and inter-disciplinary, with public, private and civil society participation.

Natural hazard

Natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Needs

The financial, technical, and human resources needed to implement an agreed-upon programme of recovery, reconstruction, and risk management.

Off-balance sheet financing

Financing for recovery activities that support the objectives of the Recovery Framework, but are being carried out by third parties (private entities or non-governmental organisations). Also referred to as "off-budget, off-treasury."

Participation

A process through which stakeholders influence and share control over development initiatives which affect them.

Partner

A person or organisation taking part in a recovery activity where risks and benefits are shared with others.

Physical planning

Design exercise based on a land use plan to propose infrastructure for public services, transport, economic activities, recreation, and environmental protection for a settlement of an urban or rural area.

Policy

A principle or protocol to guide present and future decisions and achieve rational outcomes, selected from among alternatives and in light of given conditions. Policies embrace both the general goals and acceptable procedures of a governmental body.

Post Disaster Needs Assessment (PDNA)

An approach to analysing disaster effects and disaster impact for the purpose of identifying recovery needs, defined from human, socio-cultural, economic, and environmental perspectives.

Recovery Programme

The total of all projects and programmes that address recovery needs and contribute to the realization of the recovery goals and objectives.

Preliminary assessment

An assessment that provides immediate information on needs, possible interventions, and resource requirements, which may be multi-sectoral or address a single sector or location.

Preparedness

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

Prevention

The outright avoidance of adverse impacts of hazards and related disasters.

Procurement

The act of obtaining or buying goods and services, including the processing of a demand for the good or service, receipt of it, and delivery of the vendor's payment.

Project outcomes

Uptake, adoption, or use of project outputs by the project beneficiaries (e.g. school attendance).

Project outputs

The supply-side deliverables, including the events, products, capital goods or services that result from a development intervention (e.g. school construction).

Public awareness

The extent of common knowledge about disaster risks, the factors that lead to disasters, and the actions that can be taken individually and collectively to reduce exposure and vulnerability to hazards.

Readiness

The state of being prepared before a disaster to manage disaster recovery.

Reconstruction

The replacement and repair of damaged physical structures and infrastructure following a disaster. May have a broader definition similar to recovery in some countries.

Recovery

The restoration, and improvement where appropriate, of facilities, livelihoods, and living conditions of disaster-affected communities, including efforts to reduce exposure and vulnerability to disaster risk.

Recovery Framework

A document prepared in a consultative manner to direct and guide implementation of a Recovery Programme, which addresses recovery policy, institutional arrangements, financing, management, and monitoring, and includes a sequenced and prioritized plan of recovery activities at the programmatic level.

Recovery Programme

A comprehensive set of policies, programmes, projects, and organisational strategies to achieve physical, social, economic, and environmental recovery and build back better in disaster-affected areas, and fulfil recovery goals and objectives.

Recovery strategy

An abbreviated recovery plan proposal prepared as part of a post disaster needs assessment.

Rehabilitation

The restoration, and improvement where appropriate, of facilities, livelihoods, living conditions and governance of disaster-affected communities, including efforts to reduce exposure and vulnerability to disaster risk. Synonym for Recovery or Reconstruction in some countries.

Reinsurance

Essentially insurance on insurance, which transfers portions of risk to other parties when risk exposure exceeds prudent limits.

Relief

The provision of assistance or intervention immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected.

Relocation

A process whereby a communities housing assets and public infrastructure are rebuilt in another location.

Resettlement (involuntary resettlement)

Direct economic and social losses resulting from displacement due to infrastructure projects or changes in land use for public purposes, together with the consequent compensatory and remedial measures. Relocation is one mitigation measure considered in carrying out resettlement.

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.

Resilience

The ability of a system, community or society to resist, absorb, accommodate, and recover from the effects of a hazard in a timely and efficient manner.

Response

Provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.

Retrofitting

Reinforcement or upgrading of existing structures to become more resistant and resilient to the damaging effects of hazards.

Risk

Disaster risk is the potential occurrence of a hazard-hydro-meteorological or geo-physical—that may cause loss of life, injury, or other health impacts, as well as damage to exposed assets, livelihoods and service provision.

Risk assessment

A methodology to determine the nature and extent of risk by analysing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend.

Risk management

The systematic approach and practice of managing uncertainty to minimize potential harm and loss.

Risk transfer

The transfer of the financial consequences of a risk to another by legal contract and/or insurance.

Sector

A segment of the economy sharing common characteristics, often used interchangeably with "market" or "industry," e.g. technology, health care, or energy. Also, a distinction among private, public, and non-governmental activities, e.g. private sector, public sector, non-governmental sector. Also, a division into spheres of activity, whether public, private, or non-governmental, e.g. the education sector.

Self-recovery

The process of recovery from a disaster, psychological disturbances, trauma, etc., which is financed and managed directly by the affected person or household.

Sendai Framework for Disaster Risk Reduction

An international agreement covering the period 2015-2030 under which countries have committed to using disaster risk management to make substantial reductions in disaster risks and losses.

Social protection

Policies designed to reduce the exposure to risks by individuals, households, and communities, enhancing their capacity to protect themselves against hazards and loss of income.

Stakeholder

Those affected positively or negatively by an activity or programme and/or those able to influence the activity or programme in a positive or negative way.

Structural and non-structural measures

Structural measures: 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. Non-structural measures: Any measure not involving physical construction that uses knowledge, practice or agreement to reduce risks and impacts, in particular through policies and laws, public awareness raising, training and education.

Sustainable development

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Transparency

Government's obligation to share information with citizens so that citizens are informed and can hold public officials accountable.

Vulnerability

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

ACRONYMS AND ABBREVIATIONS

AADMER ASEAN Agreement on Disaster Management and Emergency Response

ADB Asian Development Bank

ADPC Asian Disaster Preparedness Centre
ADRC Asian Disaster Reduction Centre

AEL Annual Expected Loss

AHA ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management

AHTF ASEAN Humanitarian Task Force

APDRF Asia Pacific Disaster Response Fund

ASEAN Association of Southeast Asian Nations

BBB Build Back Better

BCM Business continuity management

BNPB The National Agency for Disaster Management (Badan Nasional Penanggulangan Bencana)

BRR Executing Agency for Rehabilitation and Reconstruction

CBO Community-based Organisation
CERF Central Emergency Response Fund

COG Continuity of Government
COO/COOP Continuity of Operations
CSO Civil Society Organisation
DAD Disaster Assistance Database
DaLA Damage and Loss Assessment

DRFI Disaster Risk Finance and Insurance

DRI Disaster Risk Information
DRM Disaster risk management
DRR Disaster risk reduction

DRRM Disaster Risk Reduction Management

EC European Community

ECLAC Economic Commission in Latin American Countries

EIA Environmental Impact Assessments FAO Food and Agriculture Organisation

GFDRR Global Facility for Disaster Reduction and Recovery

HFA Hyogo Framework for Action

HRNA Human Recovery Needs Assessment

IDRL International Disaster Response Laws, Rules and Principles

IFRC International Federation of Red Cross and Red Crescent Societies

ILO International Labour Organisation

INGO International non-governmental Organisation
ISDR International Strategy for Disaster Reduction
IICA Japanese International Cooperation Agency

JRF Java Reconstruction Fund LIC Low-income country

MDF Multi Donor Fund for Aceh and Nias

MDTF Multi-Donor Trust Fund

MFI Multilateral Financial Institutions

MIRA Multi-Sector Initial Rapid Assessment
MLSW Ministry of Labour and Social Welfare

MOF Ministry of Finance

MOU Memorandum of Understanding
MPI Ministry of Planning and Investment

NCDPC National Committee for Disaster Prevention and Control), Lao PDR

NDF National Disaster Fund

NDMO National Disaster Management Organisation

NGO Non-governmental Organisation

NDRRMP National Disaster Risk Reduction and Management Plan

ODI Overseas Development Institution

OPARR Office of the Presidential Assistant for Rehabilitation and Recovery, Philippines

OpenDRI Open Data Resilience Initiative
PCI Property Catastrophe Insurance
PDNA Post disaster needs Assessment
PDP Philippines Development Plan
PFM Public Financial Management
PONIA Post-Nargis Joint Assessment

PONREPP Post-Nargis Recovery and Preparedness Plan
RENAKSI Action Plan for Rehabilitation and Reconstruction

SDGs Strategic Development Goals

SFDRR Sendai Framework for Disaster Risk Reduction

SIM Social Impact Monitoring

SOPs Standard Operating Procedures

TCG Tripartite Core Group

UNDAC UN Disaster Assessment and Coordination
UNDP United Nations Development Programme
UNDG United Nations Development Group

UNEP United Nation Environment Programme

UNISDR UN International Strategy for Disaster Reduction

UNICEF United Nations Children's Fund

USAID U.S. Agency for International Development

BIBLIOGRAPHY

The following documents may be useful to ASEAN Member States in planning for and managing Recovery Programmes.

Policy and Planning

ASEAN, 2010, ASEAN Agreement on Disaster Management and Emergency Response, http://www.asean.org/?static_post=asean-agreement-on-disaster-management-and-emergency-response-aadmer-work-programme-2010-2015-4th-reprint.

ASEAN, 2014, Strategy and Priorities for AADMER Work Programme 2013–2015. Concept Note 6, "ASEAN Disaster Recovery Toolbox."

BRR, 2009, BRR Book Series: Stimulating the Triggering Sector (Infrastructure). <a href="http://www.recoveryplatform.org/assets/publication/BRR%20Book%20Boo

BRR, 2009, BRR Book Series: Turning the Wheel of Life (Economy). http://www.recoveryplatform.org/assets/publication/BRR%20Book%20Series%20-%20Book%209%20-%20Economy.pdf">http://www.recoveryplatform.org/assets/publication/BRR%20Book%20Series%20-%20Book%209%20-%20Economy.pdf.

International Strategy for Disaster Reduction, 2004, Living with Risk: A global review of disaster reduction initiatives, Volume I. http://www.unisdr.org/files/657 lwr I.pdf

Jha, Abhas K., Jennifer Duyne Barenstein, Priscilla Phelps, and Stephen Sena, 2010, Safer Homes, Stronger Communities: A Handbook for Reconstructing after Natural Disasters, World Bank, Washington, DC. http://documents.worldbank.org/curated/en/2010/01/11702495/safe-homes-stronger-communities-handbook-reconstruction-after-natural-disaster

Republic of Indonesia, 2005, Master Plan for Rehabilitation and Reconstruction of the regions and communities of the province of Nanggroe Aceh Darussalam and the Islands of Nias, Republic of Indonesia. http://www.recoveryplatform.org/assets/submissions/200909020450_master_plan_for_reconstruction_government_of_indonesia_tsunami.pdf

Republic of Indonesia/National Disaster Management Agency (BNPB), 2010, "General Guidelines for the Conduct of Post disaster Rehabilitation and Reconstruction." Head of BNPB Regulation Number 17.

Republic of the Philippines, 2014, Yolanda Comprehensive Rehabilitation and Recovery Plan. http://yolanda.neda.gov.ph/wp-content/uploads/2015/11/Yolanda-CRRP.pdf

Republic of the Philippines/NEDA, 2013, Reconstruction Assistance on Yolanda (RAY): Build Back Better. http://yolanda.neda.gov.ph/reconstruction-assistance-on-yolanda-ray-build-back-better/ and Reconstruction Assistance on Yolanda (RAY): Implementation for Results. http://yolanda.neda.gov.ph/reconstruction-assistance-on-yolanda-ray-implementation-for-results/

Sendai Framework for Disaster Risk Reduction 2015-2030, http://www.unisdr.org/we/coordinate/sendai-framework.

Socialist Republic of Viet Nam, National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020, Hanoi, November 2007. http://www.isgmard.org.vn/VHDocs/NationalPrograms/National%20 Strategyfordisasterprevention2020.pdf

Sphere Project, Humanitarian Charter and Minimum Standards in Humanitarian Response (Sphere Standards). http://www.spherehandbook.org/en/how-to-use-this-chapter-2/

Tsunami Global Lessons Learned Project and Asian Disaster Preparedness Centre, 2015, Handbook for Disaster Recovery Practitioners. http://reliefweb.int/report/world/launch-disaster-recovery-toolkit-developed-tsunami-global-lessons-learned-project

UN Development Programme, 2011, Methodological Guide for Post disaster Recovery Planning Processes: Guidelines and Actions for National, Regional and Local Governments. http://www.preventionweb.net/files/32306 32306guametodolgicaparaprocesosdepl.pdf

UN Economic and Social Commission for Asia and the Pacific, 2016, Disasters without Borders: Regional Resilience for Sustainable Development, Asia-Pacific Disaster Report 2015. http://www.unescap.org/resources/asia-pacific-disaster-report-2015

UN International Framework Convention on Climate Change, "A Compendium of Methods and Tools to Evaluate Impacts of, and Vulnerability and Adaptation to, Climate Change" website. http://unfccc.int/adaptation/nairobi_work_programme/knowledge_resources_and_publications/items/5457.php

UN International Strategy for Disaster Reduction, 2014, How to Make Cities More Resilient: A Handbook for Local Government Leaders. http://www.unisdr.org/files/26462_handbookfinalonlineversion.pdf

World Bank, Multi Donor Fund for Aceh and Nias, and the Java Reconstruction Fund, 2012, REKOMPAK: Rebuilding Indonesia's Communities after Disasters.

World Bank/Global Facility for Disaster Reduction and Recovery /UN Development Programme/European Commission, 2015, Guide to Developing Disaster Recovery Frameworks: Sendai Conference Version. https://www.gfdrr.org/sites/gfdrr/files/publication/DRF-Guide.pdf

World Bank/Global Facility for Disaster Reduction and Recovery, 2014, Understanding Risk in an Evolving World - A Policy Note. World Bank. https://www.gfdrr.org/RAPolicyNote

Institutional Framework

American Red Cross (ARC)

BRR, 2009, BRR Book Series: Laying the Foundation of Good Government (Institutions). http://www.recoveryplatform.org/assets/publication/BRR%20 Book%20Series%20-%20Book%2012%20-%20Institution.pdf

BRR, 2009, BRR Book Series: Thousands of Paths toward Resolution (Conflict resolution). http://www.recoveryplatform.org/assets/publication/BRR%20Breakthrough.pdf

Disaster Recovery Partnership Indonesia , http://drpindonesia.org/. Information on coordination with the private sector.

International Organisation for Standards, 2012, ISO 22301:2012: "Societal security -- Business continuity management systems --- Requirements" and ISO 22313:2012: "Societal security, Business continuity management systems, Guidance." http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50050

International Strategy for Disaster Reduction, 2014, Global Assessment Report. http://www.preventionweb.net/english/hyogo/gar/2013/en/home/index.html

Oregon Emergency Management, [no date], COOP Planning Manual. https://www.oregon.gov/OMD/OEM/Pages/plans_train/COOP.aspx

Republic of Indonesia/Executing Agency for Rehabilitation and Reconstruction (BRR) of Aceh–Nias, 2009, Ten Management Lessons for Host Governments Coordinating Post disaster Reconstruction. http://www.recoveryplatform.org/assets/publication/BRR%2010%20Management%20Lessons%20for%20Host%20Governments.pdf

Republic of Indonesia/Executing Agency for Rehabilitation and Reconstruction (BRR) of Aceh–Nias, 2009, Ten Management Lessons for Host Governments Coordinating Post disaster Reconstruction. http://www.recoveryplatform.org/assets/publication/BRR%2010%20Management%20Lessons%20for%20Host%20Governments.pdf

Republic of Indonesia/National Disaster Management Agency (BNPB), "Government Regulation of the Republic of Indonesia Number 23 Of 2008 Concerning Participation of International Institutions and Foreign Nongovernmental Organisations in Disaster Management." http://www.ifrc.org/docs/idrl/877EN.pdf

Republic of Indonesia/National Disaster Risk Reduction and Management Councils, 2010, Disaster Risk Reduction and Management Act of 2010.

Republic of the Philippines, 2002, Government Procurement Reform Act, Republic Act No. 9184. http://www.bsp.gov.ph/downloads/procurement/ra9184.pdf

Republic of the Philippines, 2007, Guidelines on Non-Governmental Organisation Participation in Public Procurement, http://www.gppb.gov.ph/issuances/Guidelines/Participation%20of%20NGOs%20in%20 Public%20Procurement.pdf

Republic of the Union of Myanmar, 2009, Standing Order on Natural Disaster Management in Myanmar, http://www.recoveryplatform.org/assets/publication/SO%20Printing%20new.pdf

U.S. Federal Emergency Management Agency, Unified Federal Environmental and Historic Preservation Review Process, "Disaster-Specific Memorandum of Understanding." https://www.fema.gov/media-library-data/1416583062704-86cb8bebe23906b594ce14860d86f8af/Disaster-Specific%20MOU_updated%20weblinks.pdf

UN Development Programme and International Federation of Red Cross and Red Crescent Societies, 2014, Effective Law and Regulation for Disaster Risk Reduction: A Multi-Country Report. http://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/effective-law---regulation-for-disaster-risk-reduction.html

UN International Strategy for Disaster Reduction, 2015, Private Sector. https://www.unisdr.org/partners/private-sector.

UN Organisation for the Coordination of Humanitarian Affairs, Cluster Coordination website. http://www.unocha.org/what-we-do/coordination-tools/cluster-coordination

World Economic Forum, 2010, Engineering and Construction Disaster Resource Partnership: A New Private-Public Partnership Model for Disaster Response. http://www.preventionweb.net/publications/view/15714

Assessments

ASEAN, [no date], The ASEAM--Emergency Response and Assessment Team (ASEAN-ERAT) Deployment Guidelines. http://ahacentre.org/erat-guidelines

European Community, World Bank/GFDRR, UN Development Programme, 2013, PDNA Guidelines, Volumes A and B,.http://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/pdna.html

Food and Agriculture Organisation and International Labour Organisation, 2009, Livelihood Assessment Tool-kit: Analysing and responding to the impact of disasters on the livelihoods of people. http://www.fao.org/fileadmin/user_upload/emergencies/docs/LAT_Brochure_LoRes.pdf

International Federation of the Red Cross and Red Crescent Societies, 2000, Disaster Emergency Needs Assessment.

http://www.ifrc.org/en/what-we-do/disaster-management/responding/disaster-response-system/emergency-needs-assessment/

Prevention Web, various dates, PDNAs from previous disasters: http://www.preventionweb.net/ publications/ list/#hits=20&sortby=default&view=pw&filter=unisdrcontenttype%3A%5E%22Documents +%26+Publications%22%24

State of Maharashtra, India, Remote Sensing Applications, http://www.mrsac.gov.in/en/projects/software-development-project/dmis

UN, 2006, "Rapid Education Assessment," Section 1.3 in Education in Emergencies: A Resource Tool Kit. http://www.unicef.org/rosa/Rosa-Education in Emergencies ToolKit.pdf

UN Development Programme, 2013, A Comparative Review of Country-Level and Regional Disaster Loss and Damage Databases. http://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/loss-and-damage-database.html

World Bank and UN Development Programme, 2011, Analysing the Social Impact of Disasters, Volumes 1 and II. http://siteresources.worldbank.org/INTEAPREGTOPSOCDEV/Resources/PostDisasterSocialAnalysisToolsVolumell.pdf

World Bank, 2007, Tools for Institutional, Political, and Social Analysis of Policy Reform: A Sourcebook for Development Practitioners. https://openknowledge.worldbank.org/handle/10986/6652

World Bank/Global Facility for Disaster Reduction and Recovery, 2014, Open Data for Resilience Initiative Field Guide. https://www.gfdrr.org/sites/gfdrr/files/publication/opendri_fg_web_20140629b_0.pdf

World Bank/Global Facility for Disaster Reduction and Recovery, OpenDRI, American Red Cross, UNOCHA, UNISDR, USAID, 2014, Open Data for Resilience Initiative Field Guide. https://www.gfdrr.org/sites/gfdrr/files/publication/opendri-fg-web-20140629b-0.pdf

Recovery Finance

Asia Pacific Disaster Response Fund (APDRF) website: http://www.adb.org/site/funds/funds/asia-pacific-disaster-response-fund-apdrf

Asian Development Bank, 2015, Strengthening city disaster risk financing in Viet Nam. Mandaluyong City, Philippines: Asian Development Bank.

Consultative Group for International Agricultural Research, 2013, Scaling up Index Insurance for Smallholder Farmers: Recent evidence and insights, CCAFS Report No. 14. https://ccafs.cgiar.org/themes/index-based-insurance

Fengler, Wolfgang, Ahya Ihsan and Kai Kaiser, 2007, Managing Post disaster Reconstruction Finance, International Experience in Public Financial Management, World Bank Policy Research Working Paper 4475. http://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-4475

Financial Tracking Service web site. https://ftsbeta.unocha.org/

Gurenko, Eugene, Rodney Lester, Olivier Mahul, and Serap Oguz Gonulal. 2006. Earthquake Insurance in Turkey: History of the Turkish Catastrophe Insurance Pool. Washington, DC: World Bank. http://hdl.handle.net/10986/7142. Also see: http://www.tcip.gov.tr

Humanitarian Coalition, Cash Transfer website: http://humanitariancoalition.ca/info-portal/factsheets/cash-transfer-programming

International Federation of Red Cross and Red Crescent Societies and International Committee of the Red Cross, 2007, Guidelines for Cash Transfer Programming. https://www.icrc.org/eng/resources/documents/publication/pguidelines-cash-transfer-programming.htm

International Fund for Agricultural Development and World Food Program, 2011, Weather Index-based Insurance in Agricultural Development: A Technical Guide. https://www.wfp.org/content/weather-index-based-insurance-agricultural-development-technical-guide

Micro insurance Network, "Key Concepts." http://www.microinsurancenetwork.org/microinsurance/key-concepts

Multi Donor Fund, 2012, Sustainable Futures: A Legacy of Reconstruction (Multi Donor Fund Final Report, Volume 1). http://www.multidonorfund.org/doc/pdf/MDF report vol 01 ENG.pdf

Rauch, Egon and Helmut Scheuer, 2007, "SDC Cash Workbook: A practical user's guide for the preparation and implementation of Cash Projects," Swiss Agency for Development & Cooperation (SDC), https://www.shareweb.ch/site/Cash-Transfer-Programming/cash-workbook

Republic of Indonesia, 2010, The Indonesian Multi Donor Fund Facility for Disaster Recovery (IMDFF-DR) Operation Manual. http://mdtf.undp.org/document/download/5910

Republic of the Philippines/Philippines Insurance Commission, Regulations for the Provision of Micro insurance Products and Services. http://www.insurance.gov.ph/htm/..%5C_@dmin%5Cupload%5Creports%5CIMC%20 http://www.insurance.gov.ph/htm/...%5C_@dmin%5Cupload%5Creports%5CIMC%20 http://www.insurance.gov.ph/htm/...%5C_@dmin%5Cupload%5Creports%5CIMC%2

UN Development Group, Multi Donor Trust Funds, https://undg.org/home/guidance-policies/joint-funding-approaches/multi-donor-trust-funds/

World Bank Group, 2013, Financial Solutions for Disaster Risk Management. http://treasury.worldbank.org/web/documents/WBG_Cat_Risk_Brochure_2013_Feb.pdf

World Bank Group. 2014. Financial Protection Against Natural Disasters: An Operational Framework for Disaster Risk Financing and Insurance. Washington, DC. https://openknowledge.worldbank.org/handle/10986/21725

World Bank, [no date], Catastrophe Deferred Drawdown Option: Product Note. http://treasury.worldbank.org/documents/CatDDOProductNote_2015.pdf

World Bank, 2012, Advancing Disaster Risk Financing and Insurance in ASEAN Member States: Framework and Options for Implementation, Volume 1. Main report. Washington, DC. https://openknowledge.worldbank.org/handle/10986/12627

World Bank, 2015, Investment Project Financing--IDA Immediate Response Mechanism Guidance Note. http://siteresources.worldbank.org/PROJECTS/Resources/40940-1365611011935/Guidance_Note_IRM.pdf

Implementation

Asian Development Bank, 2010, Rebuilding Lives and Homes in Aceh and Nias, Indonesia. http://www.adb.org/sites/default/files/publication/27996/rebuilding-aceh-nias.pdf

Asian Disaster Preparedness Centre, UN Economic and Social Commission for Asia and the Pacific, and the European Community, "Community Based Disaster Risk Management" website. http://www.adpc.net/v2007/programs/CBDRM/.

BRR, 2009, BRR Book Series: Preparing Quality Generation (Education, Health, Women's empowerment). http://www.recoveryplatform.org/outfile.php?id=654&href=http://www.recoveryplatform.org/assets/publication/BRR%20Book%20Series%20-%20Book%2011%20-%20Education%20Health%20Women%20Empowerment.pdf

BRR, 2009, BRR Book Series: Roofing the Pillars of Hope (Housing). http://www.recoveryplatform.org/assets/publication/BRR%20Book%20Series%20-%20Book%207%20-%20Housing.pdf

BRR, 2009, BRR Book Series: The Scattered Beads (Case Study). http://www.recoveryplatform.org/outfile.php?id=649&href=http://www.recoveryplatform.org/assets/publication/BRR%20Book%20Series%20-%20Book%206b%20-%20Case%20Study%20-%20Addition.pdf

International Federation of Red Cross and Red Crescent Societies and International Committee of the Red Cross, 2010, Owner-Driven Housing Reconstruction guidelines. http://www.ifrc.org/PageFiles/95526/publications/E.02.06.%20ODHR%20Guidelines.pdf

Joint Board of Geospatial Information Societies and United Nations Office for Outer Space Affairs, 2010, Geoinformation for Disaster and Risk Management: Examples and Best Practices. http://www.un-spider.org/about/portfolio/publications/jbgis-unoosa-booklet and

Joint Board of Geospatial Information Societies and United Nations Office for Outer Space Affairs, 2013, The Value of Geo-Information for Disaster and Risk Management: Benefit Analysis and Stakeholder Assessment. http://www.un-spider.org/sites/default/files/VALIDPublication.pdf

Republic of the Philippines, 2014, Resolution No. 09-2014 Approving and Adopting the Community Participation Procurement Manual (CPPM) and the Implementing Guidelines. http://www.gppb.gov.ph/ issuances/Resolutions/09-2014.pdf

Republic of the Philippines, 2015, Guidelines for Accreditation of Civil Society Organisations as Implementing Entities of Government or Public Funds. http://www.dbm.gov.ph/wp-content/uploads/lssuances/2015/joint%20Resolution/JR_COA-DBM-DSWD.pdf

Republic of the Union of Myanmar, [no date], Guidance on Mainstreaming Disaster Risk Reduction in the Education Sector, Rural Settings, based on the Experiences Learned from Cyclone Nargis. http://www.themimu.info/files/documents/guidelines on mainstreaming drr in education sector myanmar-rural settings.pdf

Transparency International, 2015, Local-level Complaint Mechanisms in Developing Countries. http://www.transparency.org/files/content/corruptionqas/2014-17.pdf

Tsunami Global Lessons Learned Project, 2009, The Tsunami Legacy: Innovation, Breakthroughs and Change. http://www.alnap.org/resource/11497

Tsunami Global Lessons Learned Project, 2015, Training Manual. http://reliefweb.int/report/world/launch-disaster-recovery-toolkit-developed-tsunami-global-lessons-learned-project

UN Development Programme, 2008, Guidance Note on Early Recovery. https://docs.unocha.org/sites/dms/Documents/Guidance%20note%20on%20Early%20Recovery.pdf

United Nations Human Settlements Programme (UN-HABITAT), 2010, Land and Natural Disasters: Guidance for Practitioners. http://unhabitat.org/books/land-and-natural-disasters-guidance-for-practitioners/

World Bank, 2013, Social Accountability E-Guide: A Step-by-Step Approach to Integrating Social Accountability into Projects https://saeguide.worldbank.org/





