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RAPID SOCIAL RESPONSE



Social Protection & Labor - Disaster Risk Management

SPL-DRM Toolkit

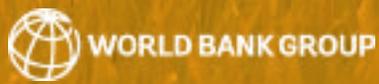


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1. SPL stands for "Social Protection and Labor", DRM, for "Disaster Risk Management."



List of Acronyms

ASP Adaptive Social Protection	GP Global Practice
BCP Business Continuity Plan	FEMA Federal Emergency Management Agency (US)
Cat-DDO Catastrophe Deferred Drawdown Option	HD Human Development
CCA Climate Change Adaptation	HSNP Hunger Safety Net Programme (Kenya)
CCRIF Caribbean Catastrophe Risk Insurance Facility	IBRD International Bank for Reconstruction and Development
CDD Community-Driven Development Project	IDA International Development Association
CDCP Citizens' Damage Compensation Programme (Pakistan)	IPCC International Panel on Climate Change
CoP Community of Practice	IRP International Recovery Platform
CODI Core Diagnostic Instrument (ISPA)	ISPA Inter-Agency Social Protection Assessments
CRED Centre for Research on the Epidemiology of Disasters	NATHAN Natural Hazards Assessment Network
CRW Crisis Response Window (IDA)	OCHA UN Office for the Coordination of Humanitarian Affairs
DaLA Damage and Loss Assessment	PCRAFI Pacific Catastrophe Risk Assessment and Financing Initiative
DRF Disaster Risk Financing	PDNA Post Disaster Needs Assessment
DRFI Disaster Risk Financing & Insurance	PET Programa de Empleo Temporal (Temporary Employment Program; Mexico)
DRFIP Disaster Risk Financing & Insurance Program	PSNP Productive Safety Net Project (Ethiopia)
DRM Disaster Risk Management	R2D2 Responding to Disasters Together
DRR Disaster Risk Reduction	RSR Rapid Social Response Program
ECLAC Economic Commission for Latin America and the Caribbean (UN)	SIF Social Investment Fund
EM-DAT The International Disaster Database	SP Social Protection
FEMA Federal Emergency Management Agency (US)	SPL Social Protection and Labor
FFF Food, Fuel, and Financial Crisis	SSLP South-South Learning Forum
FONDEN The National Disaster Fund (Mexico)	UNDAC United Nations Disaster Assessment and Coordination
GAR Global Assessment Report on Disaster Risk Reduction	UNISDR United Nations Office for Disaster Risk Reduction
GFDRR Global Facility for Disaster Reduction and Recovery	WBG The World Bank Group
GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit; German Corporation for International Cooperation	WCDRR World Conference on Disaster Risk Reduction

A. Primary Target Audience and Objectives

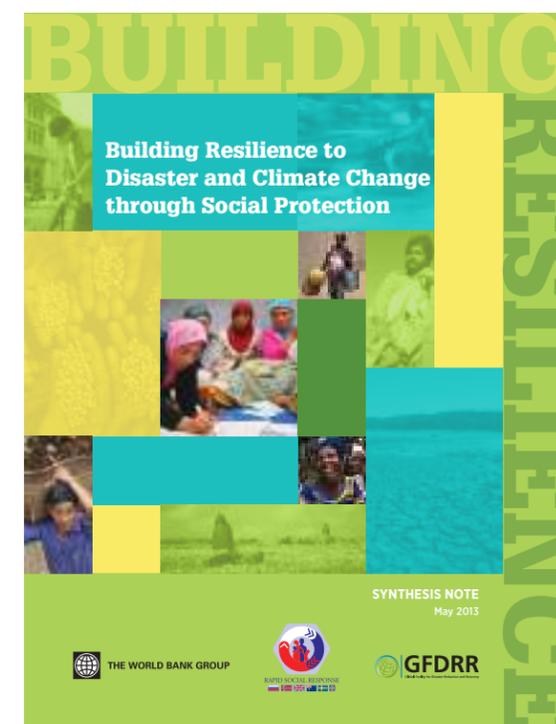
This toolkit was conceived for the use of two groups of World Bank Group (WBG) staff and consultants. The primary target users consist of social protection and labor (SPL) specialists who help WBG client countries to strengthen the natural-disaster responsiveness of SPL systems, or more broadly, to mainstream DRM in the country's SPL policies, programs, and service deliveries. The second most important target users are those who belong to either disaster risk management (DRM) or disaster risk financing (DRF) communities, those work closely with and support the first group, or those are interested in using SPL programs and services as a platform to support their objectives. It is our hope that the knowledge and insights contained in this toolkit will increase the effectiveness of the two target users in assisting their country clients. While some parts of this toolkit are relevant only to WBG staff and consultants, we hope many other parts will also be useful for their in-country counterparts.

SPL specialists in the WBG are typically trained in economics, political science, sociology, and other social sciences. In contrast, DRM specialists tend to be engineers, urban planners, and environmental scientists. Many in the DRF community have degrees in financial economics and business management.

It is also among our objectives to be able to answer questions like those below, which often come to the minds of WBG SPL specialists when they are asked about the linkage between their field and DRM:

- What SPL instruments are useful for DRM purposes?
- What are the financial options to make the country's SPL system ready for disasters?
- What are the difference between DRM and climate change adaptation (CCA), and how do they relate to each other?
- What DRM/DRF instruments are critical to SPL?
- What kind of information needs to be shared between SPL and DRM? E.g. How to integrate poverty maps (SPL) and hazard maps (DRM)?
- How can the most vulnerable people be identified to render most needed assistance to them?
- When to use in-kind transfer (e.g. school feeding programs) vs. cash-based approaches for DRM?
- How to best support specific groups of vulnerable populations, e.g. female-headed households, households with disabilities, and/or the elderly in preparation for disasters?
- What institutional mechanism is required to assist displaced persons in preparation for disasters?
- How should the division of labor and coordination mechanisms be organized between the SPL and DRM communities, and at what level (e.g. national, sub-national and local)?
- How can civil society and the private sector be effectively engaged for integrating SRM with DRM?
- What is the role that civil society and the private sector play in engaging in SRM and DRM activities?
- What kind of institutions, legal instruments, and regulatory arrangements need to be built to ensure the integration of SRM with DRM?
- Where does one find SPL and DRM experts who can offer advice?

It is not among our objectives to convert SPL specialists into DRM or DRF specialists, or vice-versa. However, our objective includes facilitating communication among the three groups of specialists. When people from different professional specializations come to work together, even a simple word like "risk" is interpreted differently. Engineers are likely to think of physical damage and destruction, where death and injury are the primary human impact to be minimized. SPL specialists, on the other hand, would think of loss of job and income, declining consumption (particularly food), and its long-term impact on human capital. This is what Robert Chambers called "Professional Biases" in his classic book, *Rural Development: Putting the Last First*.¹ However, to face cross-sectoral challenges, understanding the perspectives of partners from different disciplines is important.



There have been efforts to systematically answer these questions. One of them was another toolkit,

Building Resilience to Disaster and Climate Change through Social Protection (2013).

It proposed for the first time a framework to guide policy dialogue and operations that happen at the intersection of SPL and DRM, based on the 3 principles below.

Principle 1: Engagement in disaster and climate aware planning

Principle 2: Focusing interventions on livelihoods and assets

Principle 3: Building of the capacity to adapt and respond at the system level

Also proposed by the 2013 toolkit was the attention to the following five design features of disaster-responsive (or adaptive) social protection.

Design Feature 1: Coordination of institutional capacity

Design Feature 2: Scalability and flexibility

Design Feature 3: Targeting households that are most vulnerable to natural disasters and climate change-related risks

Design Feature 4: Ensuring good governance and accountability

Design Feature 5: Increasing adaptive capacity at the household and community level

This new SPL-DRM toolkit builds on the 2013 version, adding new information and knowledge gained during the last few years.

1. Chambers, Robert (1983). *Rural Development: Putting the Last First*. Pearson Education Limited.

This printed edition is not the final form of the SPL-DRM toolkit, but an intermediate prototype. The final production version will be an interactive app or eBook running on a tablet computer, with a corresponding website.

This portable form will:

- Help task team members to save luggage space and weight, both of which are at a premium during emergency situations
- Organize critical sets of information so that task team members can access the most needed information quickly
- Function as a presentation tool to help clients and partners to visualize important issues, concepts, and techniques by being able to display not only simple documents, but also presentations, pictures, and audio-visual materials.
- Help task team members address structured sets of critical questions, and digitally record, organize, and share the findings
- Enable modularized, automatic, and therefore cost-effective update of contents, ensuring that the most relevant and updated information and knowledge are always at the fingertip of task team members



The tablet edition is planned to be launched officially at the next Social Protection and Labor South-South Learning Forum (SSLF), scheduled to take place in fall 2017. SSLF is a large-scale international conference of SPL policy makers and practitioners from WBG client countries on specific topics. For example, during the most recent forum held in November 2015 in Beijing, China focused on urban social safety nets.¹ The fall 2017 event will focus on the role of SPL in relation to natural disasters and climate change. Each forum attracts approximately 250-300 participants from 50-70 countries worldwide. The SSLF series has been sponsored by the RSR, a partnership program formed among the Russian Federation, Norway, the United Kingdom, Australia, Sweden, and the World Bank.² GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit; German Corporation for International Cooperation) has also been an important sponsor during recent events.



B. Production Plan

1. For more information about the Beijing SSLF, visit <http://www.worldbank.org/en/events/2015/11/09/south-south-learning-forum-2015>.

2. RSR stands for "Rapid Social Response" Program. See <http://www.worldbank.org/rsr>.

In advance of the official launch, two pre-production editions are planned. The first is this printed edition, produced for the purpose of validating the overall design framework and key contents. It will be shared among WBG SPL specialists who are relatively experienced in DRM-related work, key partners in DRM and DRF communities within the WBG, and key sponsors such as the Government of Japan, RSR donors, and GIZ. Their feedback and suggestions will be reflected in the second pre-production edition.

The beta-testing version of the tablet edition—the 2nd pre-production edition—will be featured at the Human Development (HD) Week scheduled for May 3-11, 2017. The HD Week is the largest training event for the WBG’s Human Development practice group, which consists of the Education Global Practice (GP), the Health GP, and the SPL GP. About 700 WBG staff in the HD Practice Group, who are usually spread across many different country offices, will gather in the WBG Headquarters to acquire knowledge and skills critical to their work. The beta-testing version of this toolkit will be used as the learning material for a session during the HD Week for SPL-DRM linkage. It is also planned to ask for volunteers for the field-testing of the toolkit in real-life operational situations. Feedback on both technical contents and technological functionality will be utilized for the production of the operational tablet edition.

The emerging evidence suggests that policymakers need to be concerned about more than providing disaster relief in the wake of large, aggregate shocks such as floods, earthquakes, droughts, and other natural disasters. It is equally important to consider the needs of households that are facing losses due to adverse personal, economic, or other crises such as illness, poor (local) harvests, and temporary unemployment. (Morduch, 1999)

Beyond Disaster Relief: Forward-looking Insight on the Role of SPL in DRM

C. What Does SPL Have to Do with Disaster Risks?

Interest in and debates on the role of SPL in DRM, adaptive/disaster-responsive social protection programs and systems, and the complementarity between SPL and humanitarian assistance, etc. may all seem like recent phenomena.

However, they were present as early as the late 1990s, as seen in the quote below from a 1999 article on the World Bank Research Observer.¹ The WBG's first social protection strategy paper (published in 2001) starts its

first chapter with the following sentence, and mentions natural disasters first as a factor of risk and vulnerability.

For decades, public policy has been concerned with risk and vulnerability associated with factors such as natural disasters, crop failure, war and violence, illness and injury, old age and death, and job loss and business failure.²

The same strategy paper also mentions natural disasters as one of the most serious shocks to society:

Economic crises, natural disasters, and civil conflicts are the three most important causes of aggregate shocks to society, and each leads to sharp increases in the incidence of poverty. Between 1990 and 1997, more than 80 percent of all developing countries experienced at least one year of negative per capita output growth as a result of these phenomena.³



Brazil's The Bolsa Familia Program:
January 2011 flooding disaster in-kind aid
and cash benefits within **10 days**

162,000 in **279**
Families Municipalities

1. Morduch, Jonathan (1999). "Between the State and the Market: Can Informal Insurance Patch the Safety Net?" The World Bank Research Observer, Vol. 14, no. 2 (August 1999), pp. 187-207.
2. World Bank (2001). Social Protection Strategy: From Safety Net to Spring Board.
3. Ibid, Chapter 4.

As seen from these materials, **DRM has always been a major concern of the SPL community.** In fact, SPL instruments have frequently been used to mitigate the economic and social impact of disasters. In particular, since the 1990s, social investment funds (SIFs), community-driven development projects (CDDs), and public works programs have played a vital role in post-disaster livelihood protection (see for example, the case of Hurricane Mitch in 1998 that devastated Central America, as well as the drought and floods that hit Tanzania in 2008). In Ethiopia, the Productive Safety Nets Project (PSNP) also shielded poor households from the impact of droughts, as well as the Food Fuel and Financial (FFF) Crisis of 2008-2010. The Bolsa Familia Program provided in-kind and cash benefits to 162,000 families in 279 municipalities within 10 days of the floods that ravaged Brazil in January 2011. In recent years, some SPL programs, such as Pakistan's Citizens' Damage Compensation Programme (CDCP), have been established specifically to mitigate the economic impact of floods.

However, it is relatively recent that the WBG's SPL community started to make efforts in systematically framing and operationalizing the role of SPL for DRM purposes. Except for a few, such as Ethiopia's PSNP and Pakistan's CDCP, most SPL programs supported by the WBG do not explicitly include DRM in their operational design. Nonetheless, many of those have been pulled into disaster-response and livelihood recovery situations, being among a limited number of viable national platforms capable of: i) reaching out for affected populations (particularly poor and vulnerable populations) and ii) executing a large amount of funds, much of which are provided by bilateral and multilateral aid sources for humanitarian objectives. In fact, systems are rarely set up ex ante to mobilize appropriate post-disaster response in the fastest and most efficient way. In spite of some highly successful experiences, such as the transfer of repair allowances through Turkey's Social Solidarity Fund following the 1999 Marmara earthquake, and the damage payment system developed by the Maldives government after the 2004 Asian tsunami and earthquakes, responses

have been mostly ad hoc and reactive to a particular disaster, which has led to delayed response, lower-than-expected impact, and inadequate coordination.⁴ As an answer to those observations, *Building Resilience to Disaster and Climate Change through Social Protection* was developed in 2013 as the first SPL-DRM toolkit through a collaborative effort of SPL and DRM communities, with financial support from RSR⁵ on the SPL side, and GFDRR⁶ on the DRM side. Another joint SPL-DRM activity with joint RSR-GFDRR financing was a conference on Strengthening Social Protection Systems to Manage Disaster and Climate Risk in Asia and Pacific, in Manila, Philippines in November 2014. While the primary objective of the conference was awareness raising and the sharing of good practice; it also brought the DRF community into the discussion. Since then, a group of staff and consultants interested in the intersection of DRM and SPL formed a community of practice (CoP), named "Responding to Disasters Together (R2D2)". It has drawn members primarily from SPL, DRM, and DRF communities, and works as a platform for knowledge sharing and learning.⁷

4. Elder, John A. (2012). Concept note: Preparing Social Protection Systems for Disaster Response (P126834).
5. RSR (Rapid Social Response Program) is an umbrella partnership/multi-donor trust fund program of SPL Global Practice. It is funded by the Russian Federation, Norway, the United Kingdom, Australia and Sweden. For more information, see <http://www.worldbank.org/rsr>.
6. GFDRR stands for "Global Facility for Disaster Reduction and Recovery", a partnership program hosted in the WBG's Climate Change Cross-Cutting Solution Area. It has been funded by 24 donors, the top three of which are EU (\$133.6 million; 22.4%), Japan (\$117 million; 19.4%), and the United Kingdom (\$96.9 million; 16%). For more information, see <http://www.gfdr.org>.
7. For more information visit <http://globalpractices.worldbank.org/gsg/RDRM/Pages/FocusAreas/R2D2.aspx>. The formal business units corresponding to the three communities are SPL GP (Global Practice for Social Protection and Labor), GSURR (Global Practice for Social, Urban and Rural Resilience) and DRFIP (Disaster Risk Financing and Insurance Program team) under the Global Practice for Finance and Market.

Efforts to make SPL policies, systems, and programs adaptable and ready for natural disasters and climate change would take many SPL specialists out of their natural comfort zones. The work requires understanding, communicating, and cooperating with partners and stakeholders who are not familiar with SPL terms and concepts, and whom SPL specialists normally do not interact with.

1. Not All Disasters Are Equal

The country's disaster-profile is a critical parameter to determine the desirable degree of adaptability, scalability, and flexibility of the country's SPL system. During 2000-2015, Ethiopia experienced 7 droughts, more than twice as many as Haiti or the Philippines (3 each). A total of 43 million Ethiopians were affected as a result, in comparison to 4.6 million in Haiti and 182,000 in the Philippines. On the other hand, 131 storms hit the Philippines during the same period, killing 19,000 and making 321,000 homeless, although Ethiopia experienced no storm-related disasters. Pakistan, which is well known for its Citizen Damage Compensation Programme (CDCP, a safety net program for flood-affected populations), was also hit by 14 major earthquakes, resulting in 74,000 deaths, 132,000 injuries, and made more than 5 million people homeless.¹ While the discussion and literature within the SPL community tend to bundle together all types of natural disasters and climate change under adaptive (or scalable, flexible, disaster-responsive) SPL, SPL adaptation to drought risks and storm risks require different policies, operational arrangements, and financial planning. One cannot copy the Ethiopia PSNP model and apply it to Nepal, nor the Philippines 4P model to Uzbekistan.

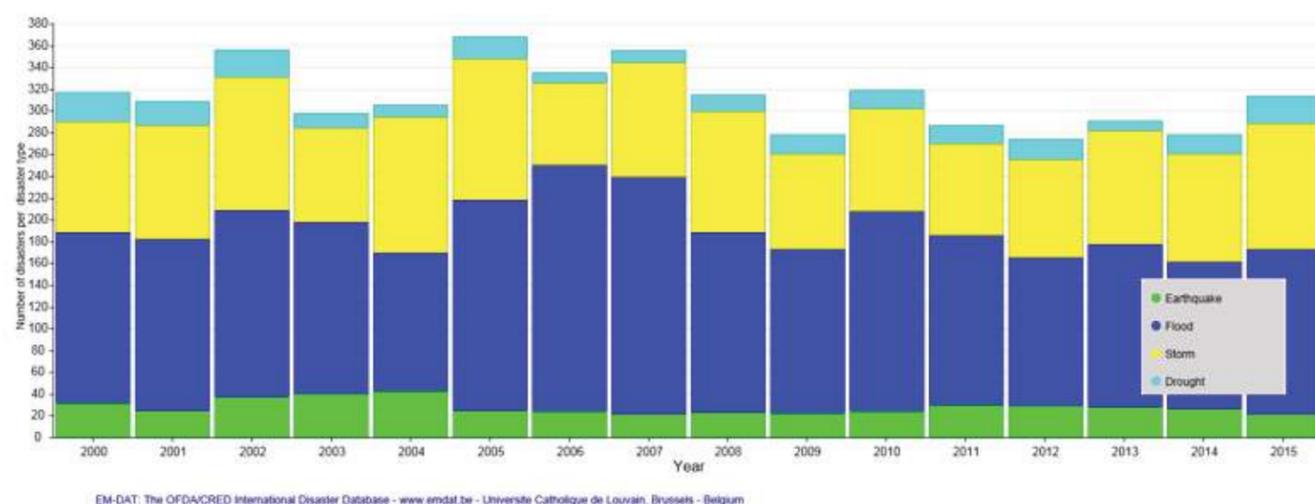
To further illustrate that different types of natural disasters require different risk management strategies, let us examine the frequency of different types of disasters, in relation to the death tolls of each type. The figure "Number of Natural Disasters by Type" on the next page shows the incidence of droughts, storms, floods, and earthquakes in the world during the 2000-2015 period. Weather-climate related disasters (droughts, storms, and floods) occur far more frequently than geophysical disasters (earthquakes). However, when it comes to death-toll, earthquakes cause far more fatalities and were more damaging than the three weather-climate related disasters combined, as shown by the figure "Number of Deaths Caused by Type of Natural Disasters" on the next page.

Earthquakes comes less frequently than floods, but when they do, the resulting human tolls tend to be higher. Floods, on the other hand, do not result in a large number of deaths but comes more frequently. It likely is sensible and cost-effective to differentiate the SPL adaptation strategy based on the thorough examination of the country's disaster profiles rather than searching for a universal model.

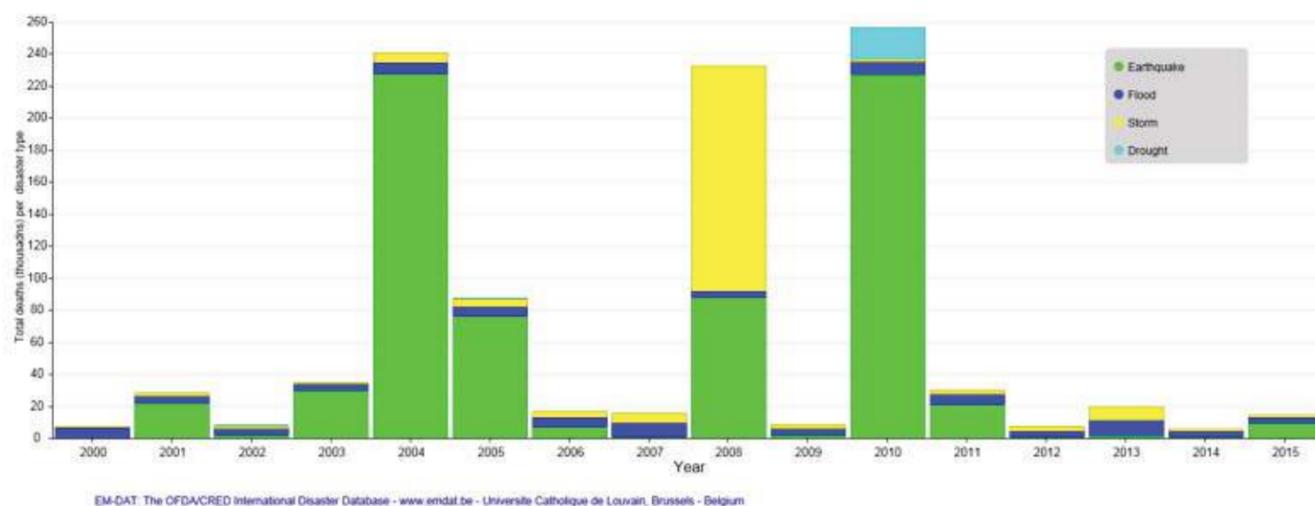
D. How Non-SPL Specialists Approach Disasters and Risk Management

1. Data from EM-DAT: The International Disaster Database (<http://www.emdat.be>).

Number of Natural Disasters by Type



Number of Deaths Caused by Type of Natural Disasters



2. Disaster Category Classification

Because efforts to adapt SPL systems to natural disaster risks requires cooperation and coordination with DRM/DRF specialists, as well as engineers and scientists, it is important to be familiar with the basic terms and concepts commonly used in the DRM community to minimize miscommunications.

Organizations specializing in disasters like FEMA (United States Federal Emergency Management Agency) and the Centre for Research on the Epidemiology of Disasters (CRED) group natural disasters into five categories: geophysical (or geological), meteorological, hydrological, climatological, and biological. See the table below for definitions and the main types of disasters under each category.

Natural Disaster Categories²

Natural Disaster Category	Definition	Disaster Main Type
Geophysical	Events originating from solid earth	Earthquake, Volcano, Mass Movement (dry)
Meteorological	Events caused by short-lived/small to meso scale atmospheric processes (in the spectrum from minutes to days)	Storm
Hydrological	Events caused by deviations in the normal water cycle and/or overflow of bodies of water caused by wind set-up	Flood, Mass Movement (wet)
Climatological	Events caused by long-lived/meso to macro scale processes (in the spectrum from intra-seasonal to multi-decadal climate variability)	Extreme Temperature, Drought, Wildfire
Biological	Disaster caused by the exposure of living organisms to germs and toxic substances	Epidemic, Insect Infestation, Animal Stampede

Hydrological, meteorological, and climatological categories are often grouped together and called “Hydro-Meteorological” or “Hydromet.” The figure “Natural Disaster Types” on the next page shows which types of natural disasters belong to which category.

Not all natural disasters are related to climate change even though discussions within the SPL community often put natural disasters and climate change in the same sentence as if they were synonyms, or the latter were to be blamed for all of the former. Some types of natural disasters in the Hydromet category, such as floods, storms, and droughts, etc. are climate and weather-related, and therefore may be caused by climate change. However, geophysical disasters like earthquakes and resulting tsunamis, volcanic eruptions, and dry mass-land movements are not caused by climate change.

not been considered. For instance, following the devastating 2004 Indian Ocean tsunami, some housing in Aceh, Indonesia, was reconstructed in flood-prone areas, meaning families were exposed to future hazard events. Hazards can also interact. The 1991 eruption of Mt. Pinatubo in the Philippines was accompanied by Typhoon Yunya, which soaked the accumulating volcanic ash-fall with rainfall. The heavy weight of the wet ash caused the roofs of homes and businesses to collapse, resulting in most of the 300 deaths directly associated with the eruption. As this example shows, the interaction between hazards can result in the overall impact being greater than if these hazards had occurred at separate times, which has major implications for risk assessment.³

Finally, many countries are exposed to multiple hazards. It is therefore essential to consider the risk related to the full range of hazards that might affect people or assets. Unfortunately, there have been a number of cases where the full range of hazards has

2. Regina Below, Angelika Wirtz, and Debarati GUHA-SAPIR (2009). “Disaster Category Classification and Peril Terminology for Operational Purposes.” <http://www.preventionweb.net/risk/hazard>.
 3. <http://www.preventionweb.net/risk/hazard>.

Natural Disaster Types

Natural Disaster			
	Biological		
	Epidemic Viral Infectious Disease Bacterial Infectious Disease	Parasitic Infectious Disease Fungal Infectious Disease Prion Infectious Disease	Insect Infestation Animal Stampede
	Geophysical		
	Earthquake Volcano	Mass Movement (Dry) Rockfall Landslide	Avalanche Subsidence
	Hydrological - (Hydro-Meteorological)		
	Flood General Flood Flash Flood Storm Surge/Coastal Flood	Mass Movement (Wet) Rockfall Landslide	Avalanche Subsidence
	Meteorological - (Hydro-Meteorological)		
	Storm Tropical Cyclone Extra-Tropical Cyclone	Local Storm	
	Climatological - (Hydro-Meteorological)		
	Extreme Temperature Heat Wave Cold Wave Extreme Winter Condition	Drought	Wildfire Forest Fire Land Fire

3. Intensity, Speed, Duration, and Spatial Coverage of Disasters

Some researchers and practitioners claim that natural disasters, despite the adjective, are not “natural.” Earthquakes, droughts, floods, and storms are natural hazards; it is human acts of omission and commission that make them disasters. Every disaster is unique, but each exposes actions—by individuals and governments at different levels—that, had they been different, would have resulted in fewer deaths and less damage.⁴

Whether you fully subscribe to this view or regard it as just semantics, adaptive SPL requires reflection on the attributes of a specific set of natural hazards (or disasters) that a country’s poor and vulnerable populations face. Particularly important attributes are: a) magnitude (intensity), b) speed of onset, c) duration, and d) spatial coverage.

a) Magnitude⁵

Hazards occur at different intensities (or magnitudes) over different time scales. Scientists study the occurrence of hazards of different intensities in terms of probabilities or return periods—also known as recurrence intervals—within the context of uncertainty. Less frequent hazards often come with greater intensity. Because of these long return periods, some communities and societies may have no memory

of the potential threat of a high intensity hazard. This was the situation in the eruption of Mt. Pinatubo in the Philippines in 1991 (the second largest volcanic eruption of the 20th century), which displaced 20,000 indigenous peoples living in its foothills and triggered large mudslides (known as ‘lahars’) which affected people for several years after the eruption.

b) Speed of Onset⁶

Hazards that arise suddenly, or whose occurrence cannot be predicted far in advance, trigger fast-onset (or rapid-onset, sudden-onset) disasters. Earthquakes, cyclones and other windstorms, landslides and avalanches, wildfires, floods, and volcanic eruptions are usually categorized as fast-onset events. The warning time ranges from seconds, or at best, a few minutes in the case of earthquakes and many landslides, to several days in the case of most storms and floods. Some volcanic eruptions may be preceded by weeks or months of activity, but predicting volcanoes’ behavior remains very difficult and the warning time for the eruption itself may be only days or hours.

Most discussion of slow-onset (or creeping) disasters concentrates on one hazard: drought. It can take months or sometimes years for the results of drought to become disastrous, in the form of severe water and food shortages and ultimately famine. Drought is not the only relevant hazard, though. Pollution of the environment can also be considered a slow-onset disaster, particularly in cases of growing concentrations of toxic wastes, which may build up over years. Human activities that degrade the environment and damage ecosystems, deforestation for instance, also contribute to disasters. Their cumulative impact may not be felt for decades, although the hazards that they make more likely, such as flash-floods and landslides, may be sudden-onset events.

4. World Bank and the United Nations (2010). Natural Hazards, Unnatural Disasters: The Economics of Effective Prevention.

5. <http://www.preventionweb.net/risk/hazard>.

6. Adopted from John Twig (2004). Good Practice Review No.9-Disaster Risk Reduction: Mitigation and preparedness in development and emergency programming. The Humanitarian Practice Network at ODI.

c) Duration

Some hazards like avalanches and earthquakes have very short duration of impact (seconds-minutes), while others like droughts may last months (see table below).

Classification of hazards by duration of impact and length of forewarning

Type of hazard	Duration of impact	Length of forewarning (if any)
Lightning	instant	seconds-hours
Avalanche	seconds-minutes	seconds-hours
Earthquake	seconds-minutes	minutes-years
Tornado	seconds-hours	minutes
Landslide	seconds-decades	seconds-years
Intense rainstorm	minutes	seconds-hours
Hail	minutes	minutes-hours
Tsunami	minutes-hours	minutes-hours
Flood	minutes-days	minutes-days
Subsidence	minutes-decades	minutes-years
Windstorm	hours	hours
Forest or ice storm	hours	hours
Hurricane	hours	hours
Snowstorm	hours	hours
Environmental fire	hours-days	seconds-days
Insect infestation	hours-days	seconds-days
Fog	hours-days	minutes-hours
Volcanic eruption	hours-years	minutes-weeks
Coastal erosion	hours-years	hours-decades
Accelerated erosion	hours-millennia	hours-decades
Drought	days-months	days-weeks
Crop blight	weeks-months	days-months
Expansive soil	months-years	months-years
Desertification	years-decades	months-years

Source: D.E. Alexander (1993). Natural Disasters. Kluwer Academic Publishers

d) Spatial Coverage

Hazards occur at different geographical (spatial) scales. For instance, the occurrence and impact of tornadoes tends to be quite localized, whereas droughts can occur over several tens of thousands of kilometers.

4. Factors Contributing to Disaster Risks

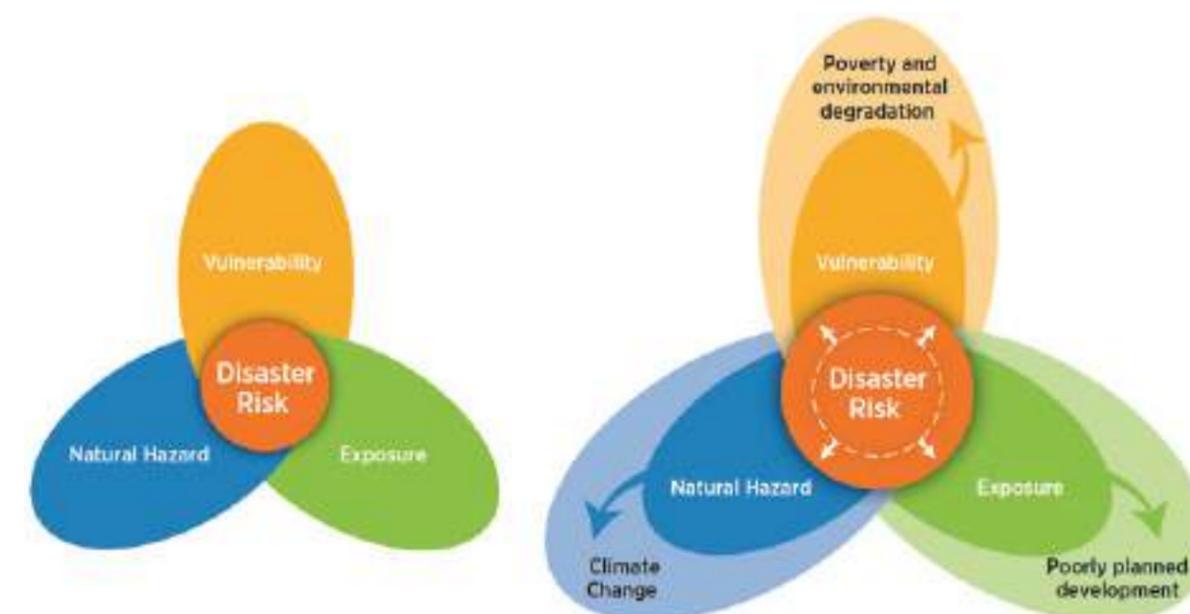
The members of DRM/DRF communities tend to see disaster risk as the product of natural hazards, exposure, and vulnerability. The figure below appears

on PreventionWeb, a project of United Nations Office for Disaster Risk Reduction (UNISDR).⁷

UNISDR/PreventionWeb's View - Disaster Risk and Contribution Factors



Contributing Factors to Disaster Risk, from GFDRR (2013). Building Resilience: Integrating Climate and Disaster Risk into Development-The World Bank Group Experience.



The figure above is WBG/GFDRR adaptation of the same concept; an earlier form of this framing was used in the 2012 specialist report of the International Panel on Climate Change (IPCC).⁸ Because this conceptual framing is broadly used outside the SPL community, familiarity with it would be useful when discussion the

role of SPL with a broader stakeholders and partners, including those in DRM, DRF, and humanitarian assistance communities both within the WBG and outside, for example, what SPL can do to reduce each of the three risk factors.

7. For example, <http://www.preventionweb.net/risk/disaster-risk>.

8. IPCC (2012). Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX).

a) What Could SPL Do to Reduce Natural Hazards?

It is probably unrealistic and naïve to believe that SPL can do anything to control natural hazards, i.e. reducing the intensity, frequency, and spatial scopes of storms, earthquakes, and droughts. SPL may be able to make very small contributions to greenhouse gas reduction, and thus to the slow-down of climate

change by affecting the consumption pattern of poor and vulnerable populations in low/middle income countries. However, considering how small the carbon footprint of those populations is comparing to richer populations,⁹ the contribution is more symbolic than real.

b) What Could SPL Do to Reduce Poor People's Exposure to Natural Hazards?

SPL may be able to play a more meaningful role in reducing poor people's exposure to natural hazards. Exposure refers to the location, attributes, and value of assets that are important to the various communities, such as people, buildings, factories, farmland, and infrastructure, and that are exposed to the hazard.¹⁰ Location is the most significant determinant.

Poor people are often more exposed to natural hazards. They settle in risky areas for many reasons. Sometimes, they lack information about the level of risk, or they do not account for this information in their decisions. But at-risk areas are often attractive in spite of the risk because they offer economic opportunities, public services, or direct amenities, and higher productivity and incomes. In some rural areas, proximity to water offers cheaper transport, and regular floods increase agricultural productivity. People settle in risky areas to benefit from opportunities—such as coastal areas

with export-driven industries or cities with large labor markets and agglomeration spillovers. While these factors apply to rich and poor alike, local land and housing markets (or the availability of land) often push poorer people to settle in riskier, but more affordable, areas.¹¹

Permanently resettling poor and vulnerable people from a risk area to a safer place requires a very thorough analysis, careful planning, and cautious implementation. It is debatable whether SPL can or should support preemptive resettlements. The World Bank has a strict policy on involuntary resettlement,¹² as well as technical and operational guidelines.¹³

However, SPL can and should help temporary preemptive resettlement, or more simply, evacuation. SPL systems know—at least in theory—where poor and vulnerable people live, and who among them are not likely to be able to evacuate on their own because of small or advanced age, disability, or health issues. By sharing the information on such people, SPL can help evaluation planning and as a result, save many lives. In addition, SPL programs may be used as a vehicle to deliver disaster preparedness education.¹⁴ Furthermore, field-level SPL program staff and social workers are familiar with local realities, and are familiar faces to local residents. Therefore, their knowledge and insights would signal search and rescue operations to save lives.

Unlike economic crisis and shocks familiar to SPL community members, natural disasters can kill and injure a large number of people during a short period of time. Prevention of deaths and injuries or ensuring physical safety may not be among the primary objectives of SPL. However, it is an important objective and SPL systems and programs should support it when and where possible.

c) What Could SPL Do to Reduce Poor People's Vulnerability?

SPL's comparative advantage is in the reduction of vulnerability, the last of the three risk factors. In absolute terms, wealthier people lose more assets or income from nature's destructive forces, which is expected because they have more assets and higher incomes. In relative terms, however, poor people always lose more than the non-poor. It is these relative losses rather than the absolute numbers that matter more for livelihoods and well-being.¹⁵

Furthermore, the very fact that they are poor makes poor people less able to cope with income losses. Losing half of its income has very different consequences for a household living on \$30,000 a year and a household living on \$1,000 a year. In particular, poorer households cannot cut back on luxury consumption or delay consumption the way wealthier households can, and in many countries they are close to the subsistence level, which means that reducing consumption can have

immediate negative impacts on health (if food intake is reduced or medical care becomes unaffordable), education (if children are taken out of school), or economic prospects (if essential assets have to be sold).¹⁶

Moreover, poor people struggle more than others to cope with natural hazards. Not only are they more exposed and vulnerable to shocks but the support they receive from families, communities, financial systems, and government is also weaker, and they are often not granted a voice in decision-making processes. Financial inclusion, insurance, SPL (particularly social safety nets), and remittances complement each other in protecting different populations against different types of shocks. Given the limits to how much protection the financial system can offer, especially to the poorest, social safety nets are needed to provide effective protection to poor households.¹⁷

9. See for example, Oxfam (2015). "EXTREME CARBON INEQUALITY: Why the Paris climate deal must put the poorest, lowest emitting and most vulnerable people first", Oxfam Media Briefing, 2 December 2015.

10. GFDRR (2014). Understanding Risk in An Evolving World: Emerging Best Practices in Natural Disaster Risk Assessment.

11. World Bank (2016). Shock Waves: Managing the Impacts of Climate Change on Poverty.

12. Operational Policy 4.12 – Involuntary Settlement / Bank Procedure 4.12 – Involuntary Settlement.

13. Elena Correa with Fernando Ramirez and Haris Sanahuja (2011). Populations at Risk of Disaster: A Resettlement Guide. GFDRR.

14. See for example, https://www.fema.gov/media-library-data/1392389804915-75460345a2f4adcc5418a1da7cb25eef/2014_PrinterFriendly_ReadyAmerica.pdf as an educational material. See also Bowen, Thomas (2015). "Social Protection and Disaster Risk Management in the Philippines: The Case of Typhoon Yolanda (Haiyan). World Bank Policy Research Working Paper 7482.

15. World Bank (2016). Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters.

16. Ibid.

17. World Bank (2016). Shock Waves: Managing the Impacts of Climate Change on Poverty.

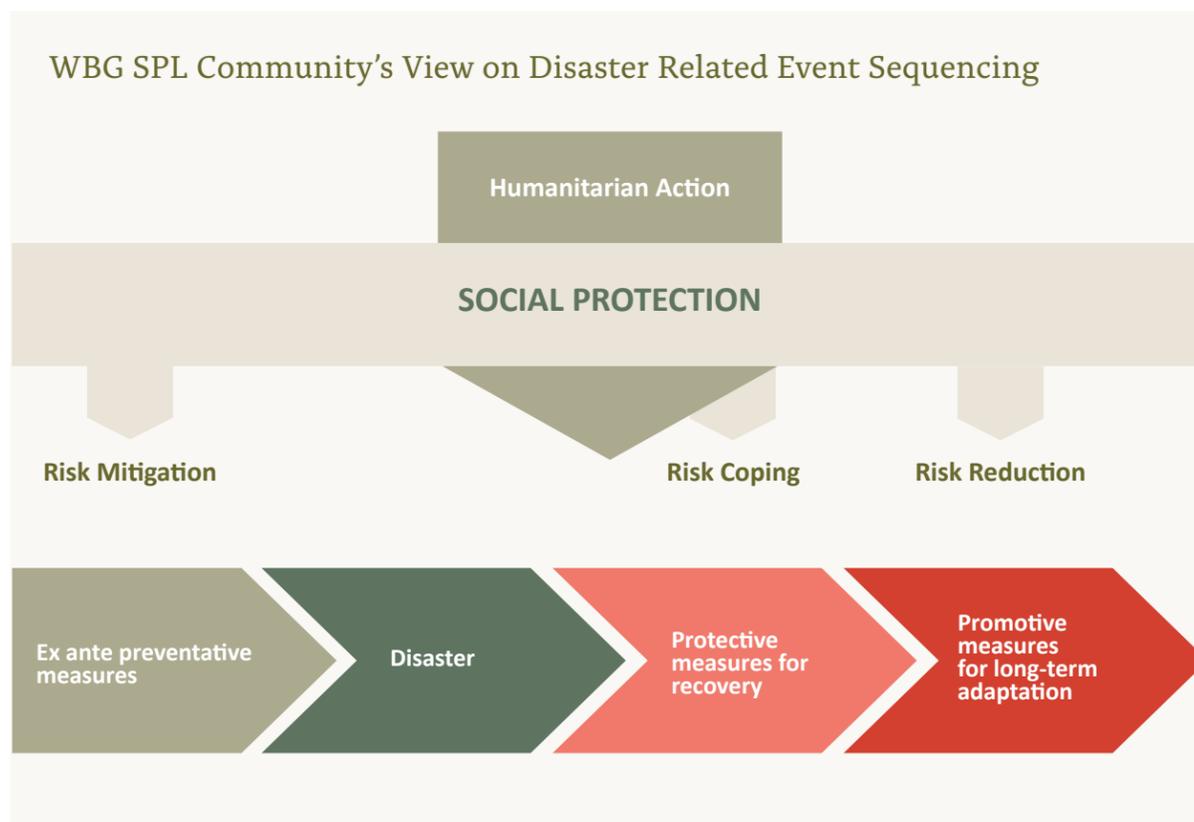
Three Factors of Disaster Risks and How SPL Can Reduce Them

Disaster Risk Factors	What SPL Could Do to Reduce the Risk Factor to the Poor
Natural Hazards	None
Exposure	Support of temporary evacuation through information/data/knowledge sharing
Vulnerability	Counteracting of: a) asset and income losses that are proportionally higher than those experienced by the rich; b) weaker support they receive from families, communities, financial system and government.

5. Disaster Risk Management Cycle: SPL vs the Rest of Disaster-Minded People

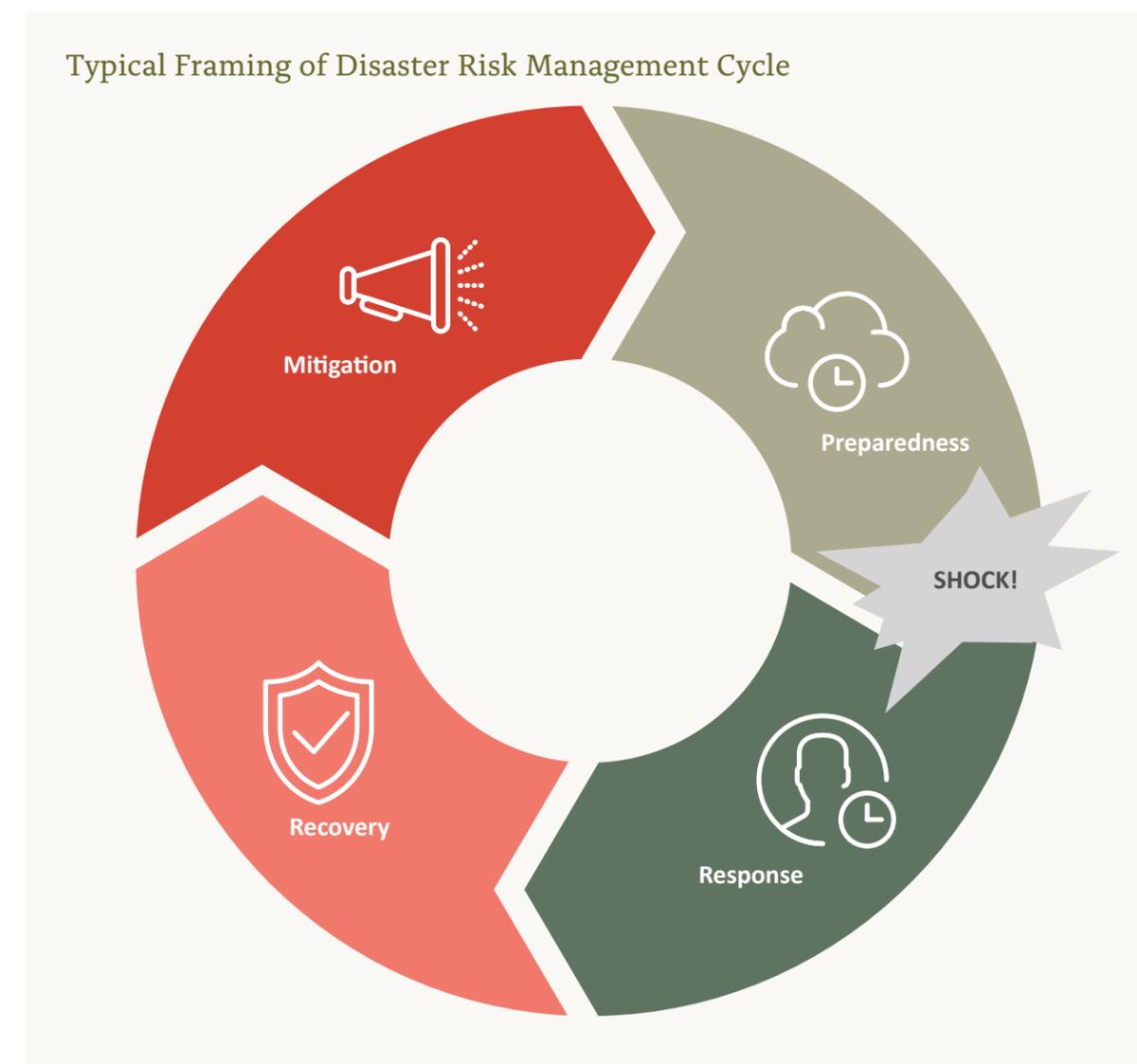
The figure below is a reproduction of a graphic presented in from the 2013 SPL-DRM toolkit, Building Resilience to Disaster and Climate Change through Social Protection, illustrating the role that SPL may play before and after a natural disaster. The same graphic was used in the presentation during a GFDRR Donor

Advisory Meeting in February, 2015, and also in a public seminar, “Protecting Poor and Vulnerable Families from the Economic Shocks of Disasters: the Role of Social Protection” during the 3rd UN World Conference on Disaster Risk Reduction (WCDRR) in March, 2015.



This schema may resonate strongly with some WBG SPL specialists. However, it is not what is commonly used by agencies that have a long history of dealing with disasters, including the UN Office for the Coordination of Humanitarian Affairs (UN-OCHA)¹⁸ and US Federal Emergency Management Agency (FEMA).¹⁹ Those agencies use variants of the disaster risk management cycle concept, a recurrent process consisting of 4 phases: Response, Recovery, Mitigation, and Preparedness.²⁰ Typically, response and recovery are considered as post-shock events, and mitigation and preparedness, pre-shock events. Some use “prevention” instead of

“mitigation”, and others add steps like “development” or “protection.” There are also those who combine mitigation and preparedness. In fact, while there are many variants of the cycle, the four basic elements—preparedness, response, recovery, and mitigation—are most commonly included. For example, Jamaica’s Office of Disaster Preparedness and Emergency Management uses the cycle concept (see <http://www.odpem.org.jm/DisastersDoHappen/DisasterManagementinJamaica/TheDisasterManagementProcess/tabid/240/Default.aspx>).



18. United Nations Office for the Coordination of Humanitarian Affairs (<http://www.unocha.org>).

19. US FEMA.

20. The origin of the cycle is as old as in the 1930s. This cycle concept gained its popularity in 1979 US FEMA was created by President Jimmy Carter based on the recommendation of the National Governors Association. See Malcolm E. Baird (2010), “The ‘Phases’ of Emergency Management”, a background paper prepared for Intermodal Freight Transportation Institute (ITFI), University of Memphis.

a) Response Phase

Response is considered as a set of actions taken during an emergency to save lives, property, and environment. Those actions are designed to provide emergency assistance for casualties, for example, search & rescue, medical care, and mass care including emergency sheltering, feeding, distribution of emergency supplies, family reunification services, health (including emotional and spiritual) services, and

access to information. They also seek to: a) reduce the probability of secondary damage, for example, shutting off contaminated water supply sources and cordoning off and patrolling looting-prone areas, and b) speed recovery operations, for example, damage assessment.

Lost In Translation

The DRM/humanitarian assistance community may consider SPL responses as part of “Recovery”, and preparedness such as “SPL system building and institutional coordination” essentially as “Mitigation” rather than “Preparedness.”

Role of SPL

This phase is what the 2013 toolkit called the “relief” phase, to be “covered by the humanitarian sector as well as by the national civil protection systems.” SPL agencies and practitioners typically do not take leading roles in the response phase. However, SPL could make

critical contributions to mass care planning and search & rescue operations through the provision of the information of their beneficiaries to humanitarian relief organizations and national civil protection systems.

b) Recovery Phase

Recovery actions are after an emergency to restore and resume normalcy, and to return the community’s systems and activities to normal. They begin right after the emergency, and continue until all systems return to normal or better. Some recovery activities may be concurrent with response efforts. Two sets of activities are included in this phase. Short-term recovery activities return vital life-support systems to

minimum operating standards (for example, cleanup, temporary housing). Long-term recovery includes restoring economic activity and rebuilding community facilities and housing, and may continue for a number of years after a disaster.

Role of SPL

The recovery phase is where Adaptive SPL will be used to its maximum capacity. Ideally, the country—with the help from you and your partners both within the WBG and outside—has built the necessary capacity before this phase comes. Realistically, however, the chances are that you were called for duty after a disaster has already struck, i.e. either during the response phase or the recovery phase, and that you do not have the luxury

to discuss long-term development strategy with your government counterparts. Hopefully, the subsequent sections of this toolkit will provide you with some useful insights regarding what to do in such a situation.

c) Mitigation Phase

Mitigation refers to activities that are designed to reduce or eliminate risks to persons or property, or lessen the actual or potential effects or consequences of an incident. Such activities provide a critical foundation in the effort to reduce the loss of life and property from natural and/or man-made disasters by avoiding or

lessening the impact of a disaster and providing value to the public by creating safer communities. Mitigation seeks to fix the cycle of disaster damage, reconstruction, and repeated damage. These activities or actions, in most cases, will have a long-term sustained effect.

Role of SPL

The mitigation phase is in a way a “peace time,” and ideally this is when you and your partners within and outside the WBG would like to work with your country to strengthen the adaptation capacity of its existing SPL system, or add a new module specifically designed for DRM purposes to it.

Conceptually, the mitigation phase is a preparatory phase of the recovery phase, and the use of adaptive SPL during the recovery phase is a SPL “response” to natural disasters. However the use of these notions require caution when you communicate with non-SPL specialists as it may confuse them, considering the DRM cycle concept also includes “response” and “preparedness” phases.

d) Preparedness Phase

Preparedness is defined as the range of deliberate, critical tasks and activities necessary to build, sustain, and improve the operational capability to prevent, protect against, respond to, and recover from incidents. Preparedness is a continuous process involving efforts at

all levels of government and between government and private-sector, and non-governmental organizations, and local communities to identify threats, determine vulnerabilities, and identify required resources.

Role of SPL

This is the phase to ensure actions to be taken during the response (or “relief” as defined by the 2013 toolkit) phase. Because SPL roles are relatively limited, as described earlier, this phase may not appear very important. Nonetheless, there are some critical things to do. First is the development of a business continuity plan (BCP) for the country’s SPL system itself. What separates natural disasters from economic crisis is that physical damages occur to humans as well as infrastructure. Earthquakes, storms, floods, and tsunamis may kill, injure, and disable the staff of SPL service delivery offices. Therefore, a backup plan is needed to mobilize replacement staff from neighboring offices or elsewhere. Similarly, computer workstations, servers, communication lines used for social registries,

beneficiary lists, and payment processing can be severely damaged and even destroyed. If this happens and there is not backup plan, the SPL system will not be able to carry out its functions. Second, it is of course to train personnel for the understanding and implementation of BCP. Sources like US FEMA (<https://www.ready.gov/business/implementation/emergency>) and Public Safety Canada (<https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/bsnss-cntnt-plnng/index-eng.aspx>) have useful insights and examples regarding what to be included in a BCP and how to conduct necessary training.

1. Not All Disasters Are Equal

The Bank's first social protection strategy in 2001 already recognized economic crises, natural disasters, and civil conflicts as the three most important shocks that SPL should be concerned about.¹ Most countries, particularly low-income countries, did not have social protection schemes, and were busy building systems against the first type, economic crisis.

Today, however, many countries have social protection programs; and even access to contributory schemes has improved. The number of countries with conditional cash transfers has increased dramatically, from 27 in 2008 to 64 in 2014, and the number of countries with public works programs grew from 62 in 2011 to 94 in 2014.² In fact, social safety net programs are now present in practically all countries in the world, and many were used as the first-line response (or "recovery," in the DRM cycle language).³ Even if these programs are not designed to protect people against natural disasters—and even if they cannot be adjusted or scaled up in response to a shock—they increase

the fraction of income from transfers, especially for the poor, and thereby increase their resilience to localized shocks. In Bangladesh, the Chars Livelihood Programme protected 95 percent of recipients from losing their assets after the 2012 floods.⁴ And in Mexico, beneficiaries of Prospera (previously Oportunidades and Progresa) are less likely to withdraw their children from school after a shock.⁵

As SPL systems develop everywhere, so has the interest of the DRM community in SPL. Only a few years ago, very few documents produced by the DRM community mentioned SPL or even social safety nets. However, recent reports like *Unbreakable* by GFDRR⁶ devote many pages to the discussion of SPL, particularly Adaptive SPL.

2. Key Operational Characteristics of Adaptive SPL Systems

Adaptive SPL is also referred to as Scalable SPL or Disaster-Responsive SPL. The adjectives—adaptive, scalable, and disaster-responsive—reflect the thinking that:

Countries do (or should) have a functional SPL system that protects poor and vulnerable populations against income and consumption fluctuations caused by "normal" economic shocks, both idiosyncratic and covariate;

Against a natural disaster, which is a large, severe, incremental and co-variate shock, the system does (or should) strengthen its protective shield; and

The strengthening of the protective shield does (or should) happen swiftly and preferably, automatically, because natural disasters add stress to already stressed poor and vulnerable populations.

E. How Can SPL Be Adapted Against Natural Disasters?

1. World Bank (2001). Social Protection Strategy: From Safety Net to Spring Board.

2. World Bank (2015). The State of Social Safety Nets 2015.

3. Section I.C.5 Disaster Risk Management Cycle: SPL vs the rest of disaster-minded people to large natural disasters.

4. Kenward, S., L. Cordier, and R. Islam (2012). "Chars Livelihoods Programme: A Study to Assess the Performance of CLP Raised Plinths, Low Cost Latrines and Access to Clean Water during the July 2012 Flood." Chars Livelihoods Programme and Maxwell Stamp PLC, Dhaka, Bangladesh.

5. de Janvry, A., A. del Valle, and E. Sadoulet. 2016. "Insuring Growth: The Impact of Disaster Funds on Economic Reconstruction in Mexico." Policy Research Working Paper 7714, World Bank, Washington, DC; Fiszbein, A., N. R. Schady, and F. H. Ferreira. 2009. "Conditional Cash Transfers: Reducing Present and Future Poverty." World Bank, Washington, DC; Gertler, P. 2004. "Do Conditional Cash Transfers Improve Child Health? Evidence from PROGRESA's Control Randomized Experiment." *American Economic Review* 336–41.

6. Hallegatte, Stephane, Adrien Vogt-Schilb, Mook Bangalore, and Julie Rozenberg. 2017. *Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters*. Climate Change and Development Series. Washington, DC: World Bank.

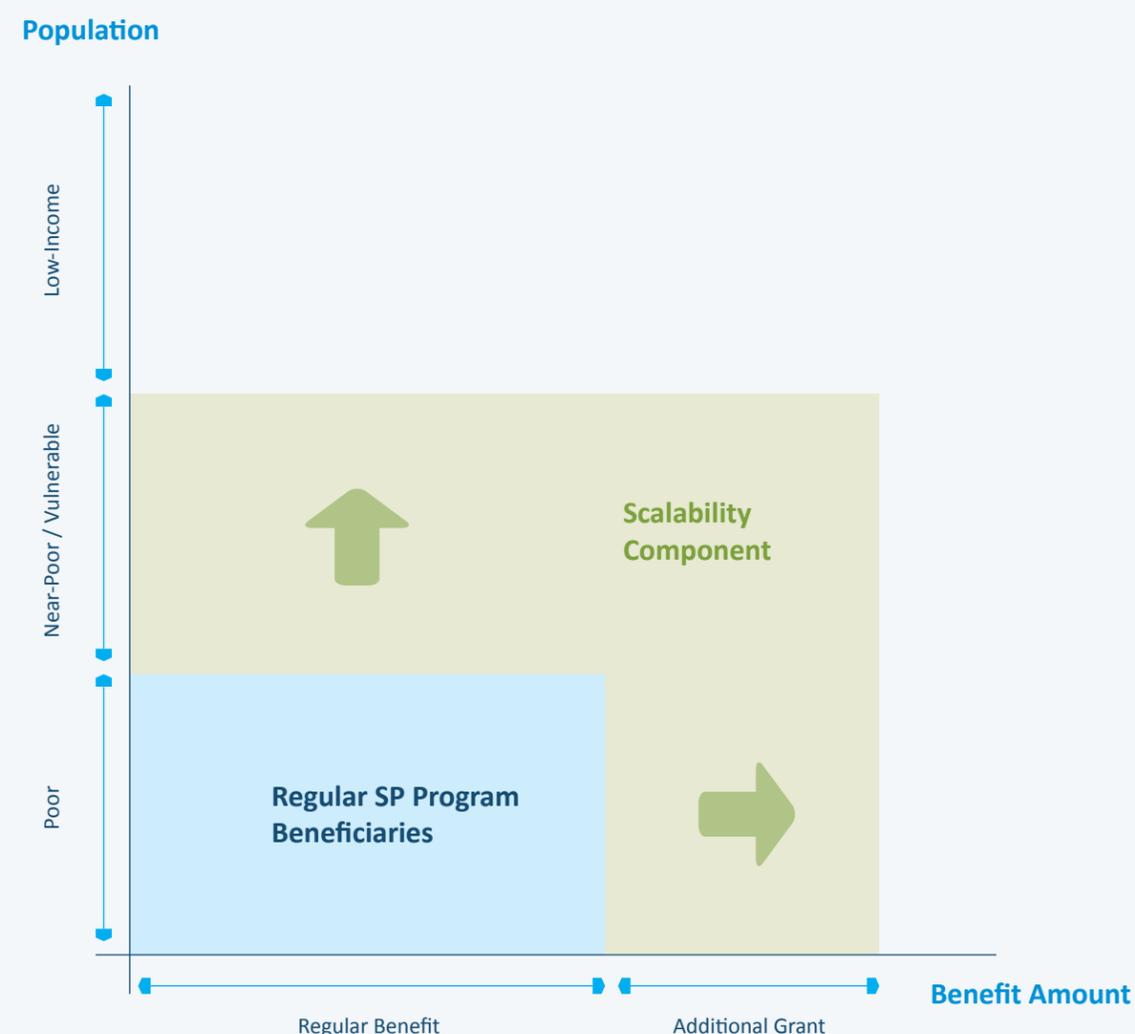
In other words, the existence of a functional SPL system, or at least a program, is a prerequisite for Adaptive SPL. If the country has no base system, it is in theory possible to construct a new SPL system (program) with built-in adaptability from the conception. However, this strategy would be a challenging option where technical and institutional capacity is weak. On the other hand, responding to a mega-disaster could serve as a powerful motive to build a new, or reform the existing, SPL system.



In the eyes of SPL service beneficiaries, the system adaptation would appear as a combination of the three changes below:

- a. **Increased value of benefits per payment cycle (or additional benefits per payment cycle)**
- b. **Inclusion of new beneficiaries into the beneficiary pool**
- c. **Extension of the end-payment date / payment cycle.**

A Typical Diagram Used to Illustrate How Adaptive SPL Works



The figure on the adjacent page is a typical diagram used to illustrate how Adaptive SPL works. Similar drawings appeared in the presentation during a GFDRR Donor Advisory Meeting in February, 2015, and also in a public seminar, “Protecting Poor and Vulnerable Families from the Economic Shocks of Disasters: the Role of Social Protection” during the 3rd UN World Conference on Disaster Risk Reduction (WCDRR) in March, 2015.

The diagram clearly communicates points a. (increased value) and b. (new beneficiaries), but not c. (extended time). Perhaps “extended time” is implicitly included in “increased value” as the total value of benefits increases as beneficiaries keeps receiving benefits through additional rounds of payments. Nonetheless, it would be useful to be explicit about the time dimension considering that a number of programs use this method. For example:

- Mexico’s Programa de Empleo Temporal (PET) limits the number of days an individual can work per year. When responding to a disaster, however, implementing ministries have the flexibility to adjust the number of days each beneficiary is entitled to work, the length of the work day, and hence the total benefit per household. Beneficiaries can work as long as the state of emergency is in place (up to three or four months in some instances).
- Ethiopia’s Productive Safety Net Project (PSNP) provides cash benefits in exchange for temporary work up to 6 months a year. However, in case of severe droughts, it extends the duration of benefit period to 9 month a year.

The three system-adaptation results (in the eyes of SPL service beneficiaries) can be delivered through either the existing set of programs or a new program. The “existing set” option is often preferred because the challenge is larger when responding to a disaster or a crisis with immediate and urgent needs: creating and rolling out a new program takes time. However, there are examples of durable programs created while facing a major crisis. Programa de Asignación Familiar (Honduras) and Familias en Acción (Colombia) were launched in 1990 and 2001, respectively, during recessions and macroeconomic adjustment periods. They later became permanent programs as part of the national SPL system. In Guatemala, the food and fuel crisis in 2008 prompted the introduction of a new program, Mi Familia Progresá.

3. Speed vs. Accuracy – Key Policy Trade-Off⁷

To extend support to new beneficiaries—whether through an existing or a new program—a country must be able to identify them rapidly. A challenge is to strike a balance between providing rapid support when needed and targeting precisely those in most need. Case studies suggest that the cost of a drought to households can increase from \$0 to about \$50 per household if support is delayed by four months, and to about \$1,300 if support is delayed by six to nine months.⁸ This rapid increase is due to the irreversible impacts of drought on children and distressed sales of assets, especially livestock.

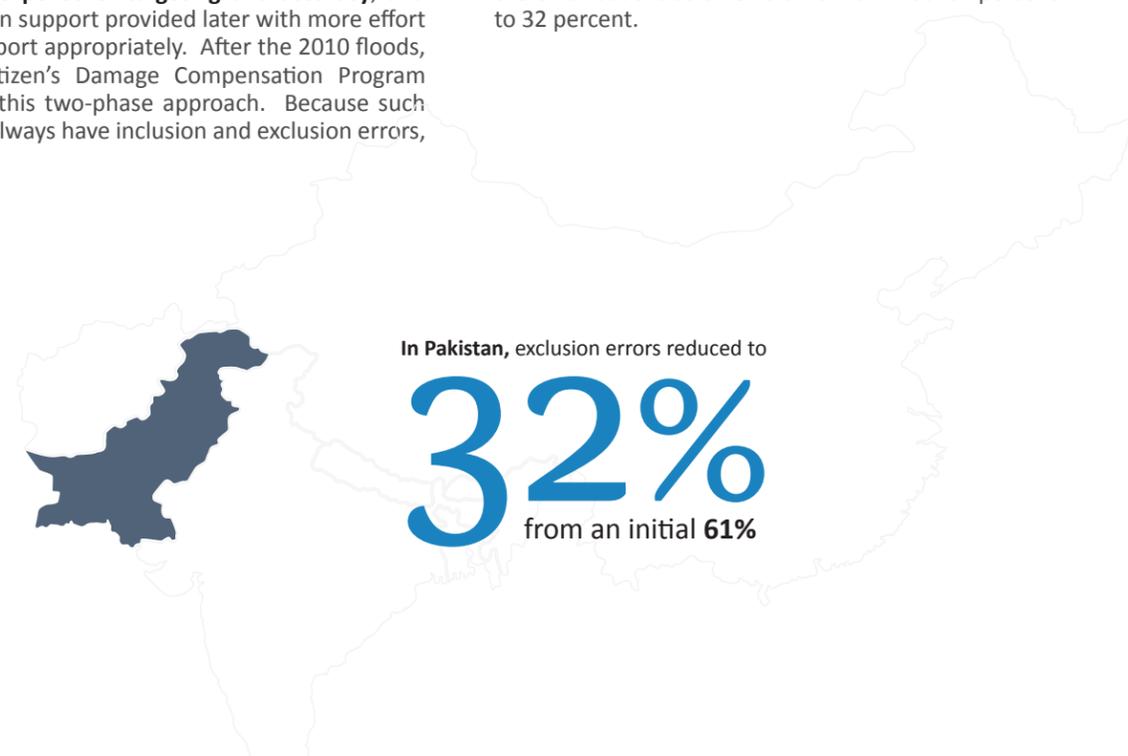
Five options for striking the right balance are:

1. Two-Phase Targeting with Grievance Redress
2. Social Registries
3. Geographic Targeting + Community Targeting
4. Self-targeting under Public Works Programs
5. Subsidies

a) Two-Phase Targeting with Grievance Redress

Post-disaster responses can have multiple stages, **with the initial (survival-related) support delivered quickly, even at the expense of targeting and accuracy**, and reconstruction support provided later with more effort to target support appropriately. After the 2010 floods, Pakistan's Citizen's Damage Compensation Program (CDCP) took this two-phase approach. Because such approaches always have inclusion and exclusion errors,

grievance appeal mechanisms are critical. In Pakistan, the grievance redress system in the second phase of the CDCP cut exclusion errors from an initial 61 percent to 32 percent.



7. Adapted from Hallegatte, Stephane, Adrien Vogt-Schilb, Mook Bangalore, and Julie Rozenberg. 2017. *Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters*. Climate Change and Development Series. Washington, DC: World Bank.

8. Clarke, D. J., and R. V. Hill. 2013. "Cost-Benefit Analysis of the African Risk Capacity Facility." Discussion Paper 01292, International Food Policy Research Institute, Washington, DC.

b) Social Registries

If the country had already developed social registries before being hit by a disaster, they can be used to quickly identify households that are vulnerable to being pushed into poverty by a disaster. Such registries typically include demographic, socioeconomic, and location information on households that could potentially be supported by a social program.

Brazil's Cadastro Unico includes households with a per capita income of less than half the national minimum wage—a threshold that is higher than the income eligibility threshold of existing social programs. Consequently, Cadastro includes households that are not currently beneficiaries of social protection but are considered to be vulnerable to economic shocks or disasters. Moreover, individuals can register at any time based on self-reported income, thereby reducing transaction costs.⁹ Such a design ensures that Bolsa Familia can be rapidly adjusted when shocks occur, thereby acting as an insurance facility for vulnerable households.

In Kenya, all households from the four counties covered by the Hunger Safety Net Programme (HSNP) are preregistered, and have been provided with bank accounts to ensure quick delivery of cash transfers after an emergency or a crisis.

Large social registries make it possible to introduce dynamic targeting in which potential beneficiaries are segmented—before a disaster or a crisis—into multiple categories based on their income, assets, location, or occupation (such as farmer or fisherman). This method is known as categorical targeting. The categories then receive varying levels of support, depending on the situation. For example, potential beneficiaries can be ranked, starting from the poorest, and the number of people provided with support (how far a government goes down the list) can depend on the situation—for example, more people would have to receive support during a drought. The level of support in each category can even be based on an objective rule or a weather index (such as using cumulative rainfall or a trigger based on wind speed).

c) Geographic Targeting + Community Targeting

When social registries are not available, an alternative is to combine geographical targeting (to concentrate resources on the most affected municipalities or communities) and community targeting (to use local knowledge to concentrate resources on the most affected households). This method is also widely used during peace time in many countries. Pakistan adopted this approach in the first phase of the CDCP after the 2010 floods, when timeliness was a priority and there were no reliable data on the distribution of losses. The second phase—less urgent but with larger transfers—placed a stronger emphasis on targeting, using housing damages as a proxy for livelihood losses.

9. Bastagli, F. 2009. "From Social Safety Net to Social Policy? The Role of Conditional Cash Transfers in Welfare State Development in Latin America." Working Paper, International Policy Centre for Inclusive Growth, Brasilia, Brazil.

d) Self-targeting Under Public Works Programs

This approach, which does not require much institutional capacity, can be carried out using work programs. These programs provide jobs and income by putting in place public works projects (such as road construction, maintenance, irrigation infrastructure, reforestation, and soil conservation) or, especially in post-disaster situations, reconstruction tasks. Such programs usually offer a below-market wage, and people join only if alternative income sources are lacking (Cazes, Verick, and Heuer 2009). In Côte d'Ivoire, the Highly Labour Intensive Works Program was created to support and rehabilitate 35,000 former combatants through road building and reconstruction work.

The key drawback is that work programs fail to reach those who face constraints that prevent them from working (such as disabilities, sickness, and exclusion) and who are often the poorest. Also in some countries, the judiciary system may consider benefit payments under public works programs as wage and thus impose a level of benefits that attract non-poor. Colombia's public works program in the early 2000s, Empleo en Acción, encountered this legal problem.

The use of public work programs as a social protection measure in post-disaster situations depends on being able to readily identify cost-effective and socially beneficial projects before a crisis strikes. In practice, however, extreme natural events, such as storms or floods, are typically associated with obvious and significant labor needs. Rebuilding public infrastructure and clearing rubble are examples of needs that can be met by work programs, which can benefit affected poor and vulnerable people (even those with low skills), as well as the wider community.



e) Subsidies

This approach is used widely to help poor people, especially in the absence of other social protection programs, and not least because subsidies can be simple and quick to implement. The Egyptian food subsidy program was expanded in 2008 to include 15 million additional beneficiaries,¹⁰ thereby avoiding an increase in the poverty rate because of increases in food prices. Indonesia used a system of generalized subsidies as a safety net during the 1997 financial crisis.

That said, subsidies have many drawbacks. For one thing, they can lead to waste and corruption. For example, analyses of India's Public Food Distribution Program, which provides subsidized food and fuel, uncovered a number of operational challenges, including underprovided entitlements as a result of "leakages" of food through the supply chain, diverted commodities, underweighted food, overcharged beneficiaries, closed shops, and food falsely being declared out of stock.¹¹

Also, subsidies are often difficult to end when a crisis is over. They are an expensive and inefficient tool for supporting poor people because often a large portion of the funds goes to those who do not need the funds the most. Fossil fuel subsidies, for example, are typically implemented and publicly justified by the rationale of helping poor people gain access to energy and energy services. However, even though low energy prices do reduce poverty by reducing the cost of energy services, they do so in an extremely inefficient way because energy is overwhelmingly consumed by the wealthier.¹²



10. Jones, N., C. Harper, S. Pantuliano, S. Pavanello, K. Kyunghoon, S. Mitra, and K. Chalcraft. 2009. Impact of the Economic Crisis and Food and Fuel Price Volatility on Children and Women in the MENA Region. London and New York: Overseas Development Institute and UNICEF.

11. See for example, Drèze, J., and R. Khera. 2015. "Understanding Leakages in the Public Distribution System." *Economic and Political Weekly* 50: 39.; Government of India. 2011. Report of the Working Group on Urban Poverty, Slums and Service Delivery System. Delhi.; World Bank. 2011. *Climate-Smart Agriculture: Increased Productivity and Food Security, Enhanced Resilience and Reduced Carbon Emissions for Sustainable Development—Opportunities and Challenges for a Converging Agenda: Country Examples*. Washington, DC: World Bank.

12. Fay, M., S. Hallegatte, A. Vogt-Schilb, J. Rozenberg, U. Narloch, and T. Kerr. 2015. *Decarbonizing Development: Three Steps to a Zero-Carbon Future*. Washington, DC: World Bank.

4. Financing Adaptive SPL

Adaptive SPL means that social expenditures become highly variable from one year to the next. While there are a number of ways to manage this volatility, **the most important step for SPL specialists to take is to consult colleagues at the Disaster Risk Financing & Insurance Program (DRFIP)**, who leads the dialogue on financial resilience as a component of the World Bank Group's support to countries on better managing disasters and climate shocks (see Module I, Annex A).

Below are brief descriptions of popular options:¹³

1. Reserve Funds
2. Insurance and Catastrophe Bonds
3. Regional Risk-sharing Facilities
4. Contingent Credit
5. International Aid
6. IDA Crisis Response Window (CRW)

a) Reserve Funds

In the Philippines, the National Disaster Risk Reduction and Management Fund finances a range of disaster-related expenditures, but it is not able to disburse rapidly in response to a crisis. For that reason, the government created the Quick Response Fund, which focuses on an emergency response. In Mexico, FONDEN (the National Disaster Fund) was created as a budgetary tool to rapidly allocate federal funds for the rehabilitation of public infrastructure affected by disasters.

However, reserve funds have limited capacities and cannot be designed to cope with the rarer and more extreme events. In the Philippines, Typhoon Yolanda raised questions about the adequacy of the Quick Response Fund volume and the process to replenish it if emptied by a major event (or a series of smaller disasters). Thus, additional instruments have been developed to protect public finances.

b) Insurance and Catastrophe Bonds

The contingency fund FONDEN in Mexico leverages private sector financing as part of a strategy that combines risk retention and risk transfers. In 2006, FONDEN issued a \$160 million catastrophe bond to transfer Mexico's earthquake risk to the international capital markets—the first parametric catastrophe bond issued by a national government. Even though they

are costly, these financial schemes are able to disburse funds rapidly—indeed, more rapidly than would be possible with public budgets. By predefining payout rules for allocating post-disaster support, formal insurance and financial products can reduce political economy biases.¹⁴

c) Regional Risk-sharing Facilities

The Caribbean Catastrophe Risk Insurance Facility (CCRIF) currently pools disaster risk across 16 countries. It was the world's first regional catastrophe insurance facility, using parametric insurance to provide participating governments with quick, short-term liquidity for financing responses and early recovery from major earthquakes or hurricanes. The Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) and African Risk Capacity are other, more recent examples of donor-supported regional mechanisms that offer quick-disbursing, index-based coverage against tropical cyclones and earthquakes.

In response to Cyclone Pam in March 2015, PCRAFI rapidly provided Vanuatu with \$1.9 million to support immediate post-disaster needs. This payout was limited compared with the total losses and reconstruction needs—estimated at \$184 million—but it was still eight times the size of the annual emergency relief fund held by the government and seven times more than the annual insurance premium (which is largely subsidized by international donors).

In Vanuatu, the PCRAFI offered

\$1.9m

in rapid response support.

x8 more than the country emergency relief fund

x7 more than the annual insurance premium

13. Adapted from Hallegatte, Stephane, Adrien Vogt-Schilb, Mook Bangalore, and Julie Rozenberg. 2017. *Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters*. Climate Change and Development Series. Washington, DC: World Bank.

14. Clarke, D., O. Mahul, R. Poulter, and T. Ling Teh. 2016. "Evaluating Sovereign Disaster Risk Finance Strategies: A Framework." Policy Research Working Paper 7721, World Bank, Washington, DC.

d) Contingent Credit

In 2007, the World Bank introduced Catastrophe Deferred Drawdown Options (Cat-DDOs), a new financing instrument that allows countries eligible to borrow from the International Bank for Reconstruction and Development (IBRD) to access budget support in the immediate aftermath of a disaster. A contingency loan can be rapidly disbursed if a state of emergency is declared, and thus it can help governments finance the upscaling of social protection. Other institutions such as the Inter-American Development Bank and the Japan International Cooperation Agency have since introduced similar instruments. Countries not eligible for IBRD loans are using other instruments in innovative ways to finance disaster response. For instance, the Government of Uganda is using US\$10 million of their International Development Association (IDA) allocation as a contingent line of credit to finance the scale up of their safety net, the Northern Uganda Social Action Fund.

Cat-DDOs have proven to be an effective instrument for implementing disaster risk management strategies and supporting post-disaster responses. However, experience has shown that, facing a finite financing envelope, governments tend to favor cash in hand over contingency instruments. As a result—and despite strong interest from client countries—the uptake of Cat-DDOs has been limited. One option to improve access to contingent finance and build the resilience of developing countries would be to remove the trade-off between cash in hand and contingent finance by separating the budget allocated to contingency instruments from the budget allocated to traditional lending.

e) International Aid

When a country exceeds its capacity to cope with a disaster, international aid and humanitarian emergency measures can be critical. Foreign aid includes essential in-kind support (including emergency equipment such as water treatment stations, reconstruction material, equipment and machinery, and relief goods such as food, blankets, and clothes), as well as financial aid for social protection and reconstruction costs.

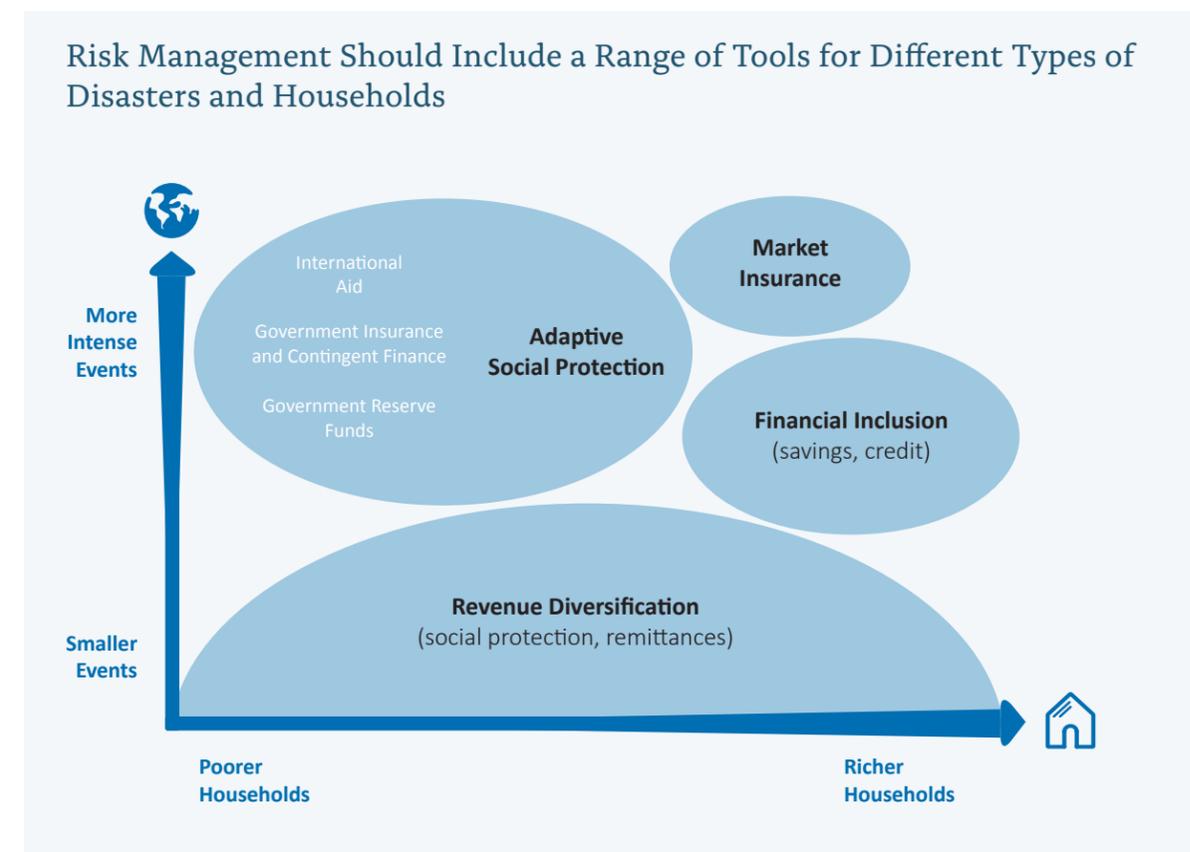
In the past, however, increases in foreign aid in response to a disaster have been small, averaging only a small percentage of the total economic losses stemming from a disaster.¹⁵ Generally, studies have found that increases in financial aid are larger for more severe disasters and for particularly poor countries

with limited disaster management capacities. This finding suggests that these resources are relatively well targeted and not politically biased.¹⁶ Nonetheless, increases in foreign aid in response to disasters remain sensitive to media coverage, are hardly predictable, and can be slow to arrive—all of which make it ever more difficult to prepare contingency plans based on available resources. Foreign aid should thus be regarded as a resource of last resort.

f) IDA Crisis Response Window (CRW)

To improve the timeliness, transparency, and predictability of post-disaster or crisis international aid, and to provide additional financing, a special Crisis Response Window (CRW) was created in 2011 as part of the International Development Association, the World Bank Group's fund for the poorest countries. Its primary objective is to (1) provide poor countries with extra resources in a timely manner; (2) help them respond to severe economic crises, price shocks, and major natural disasters; and (3) return to their long-term development paths. In Malawi, the CRW provided \$40 million in post-disaster support after the large floods that affected the country in January 2015. As illustrated through the discussion on different

financing options as well as previous sections, the financing strategies for households and governments would change depending on the income level of the household and the intensity (also frequency) of the expected natural hazards (see figure below¹⁷).



15. Becerra, O., E. Cavallo, and I. Noy. 2013. "Where Is the Money? Post-Disaster Foreign Aid Flows." *Environment and Development Economics* 1–26.

16. Ibid.

17. Adapted from Hallegatte, Stephane, Adrien Vogt-Schilb, Mook Bangalore, and Julie Rozenberg. 2017. *Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters*. Climate Change and Development Series. Washington, DC: World Bank.

SPL system adaptation to disaster risks implies:

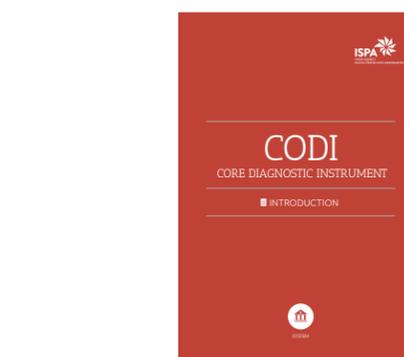
1. **Increased operational transactions**
2. **Temporary or permanent procedural, regulatory, and policy change**
3. **Increased needs for coordination, communication, and information sharing**
4. **Change in skill sets and staffing levels**
5. **Investments in infrastructure**
6. **Increased financial needs**

Some of these issues are already discussed in earlier sections but handling them requires a solid diagnosis of the country's **base SPL system-capacity and good understanding of its disaster risk profile.**

1. Diagnose the Country's Base SPL System Capacity using ISPA Tool's CODI

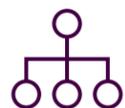
a) What is ISPA? What is CODI?

ISPA stands for "Inter-Agency Social Protection Assessments". ISPA tools are the result of a multi-agency initiative that aims to put forth a unified set of definitions, assessment tools, and outcome metrics to provide systematic information for a country to assess its SPL system, schemes, programs, and implementation arrangements. Assessments are done with the goal of improving performance and analyzing trends over time. The ISPA tools are part of a free and publicly available platform, building on existing work by the United Nations system, the World Bank, bilateral donors, and other development agencies. The entire ISPA tools suite can be found ispatools.org.



CODI stands for Core Diagnostic Instrument, and is a tool to assess the overall SPL system performance in a coherent manner through a consistent set of outcome metrics building on existing knowledge. Its "What Matters" Guidance Note, Questionnaire, Assessment Matrix, Country Report Outline, and Implementation Guidelines can be found online at ispatools.org/core-diagnostic-instrument.

F. First Things First – Do Diagnosis

CODI is specifically designed to:

Map the key elements of a social protection system in a given country, including national objectives, strategies, policies, programs, and schemes of the social protection system



Analyze social protection system performance against national social protection objectives and track progress against a standardized set of Performance Criteria over time.



Serve as an evidentiary base for country dialogue on how to strengthen a social protection system and identify a set of entry level policy reform options.



Promote exchange and coordination between national and international partners.

**CODI is structured to assess 19 key areas in 3 Modules:
Policy, Program Design, and Program Implementation:**

Module 1. Policy

Key Area 1: Legal & Policy Framework
Key Area 2: Alignment of Policies with Needs of Population
Key Area 3: Policymaking Process
Key Area 4: Policy Implementation & Capacity
Key Area 5: Public Expenditure & Financing
Key Area 6: Information Dissemination & Raising Awareness
Key Area 7: Monitoring & Evaluation Systems

Module 2. Program Design

Key Area 8: Eligibility Criteria
Key Area 9: Benefit Design
Key Area 10: Expenditures & Financing
Key Area 11: Incentives

Module 3. Program Implementation

Key Area 12: Identification
Key Area 13: Eligibility Verification
Key Area 14: Enrollment
Key Area 15: Benefit Delivery
Key Area 16: Monitoring & Evaluation
Key Area 17: Complaint & Appeals Mechanism
Key Area 18: Information Dissemination & Raising Awareness

b) Recommended Steps

The task team should contact info@ispatools.org to see if CODI has been conducted recently in their country, and if so, obtain the report. If not, consider immediate CODI implementation. ISPA Secretariat are prepared to help an interested task team identify and mobilize the necessary technical and financial resources.

If the circumstances do not allow CODI implementation due to time and/or resource constraints, the team should at least keep in mind the following 10 performance criteria for Adaptive SPL systems:

1. Inclusiveness

Social protection system should guarantee that everyone is protected along the life cycle, including persons in the informal economy, and throughout the risk chain. This entails ensuring nondiscrimination, gender equality, availability of and accessibility (e.g., distance, literacy, information awareness, and transaction costs) to social protection programs and benefits, as well as designing schemes and programs to respond to the special needs of persons with different characteristics, circumstances, and vulnerabilities. The goal is to eliminate coverage gaps and secure the inclusion of the poorest and most vulnerable, building resilience prior to any crises and being able to respond more effectively when a covariate shock occurs.

2. Adequacy

The programs and schemes that make up the system provide regular and predictable benefits and quality services that are adequate to meet the social protection needs of the population and achieve national/program objectives. In times of shock, this is likely to mean that the duration of receiving regular and predictable benefits are extended and/or that the size of the benefits are increased to keep pace with inflation or scarcity of basic commodities. At a minimum and during 'normal times', benefits contribute to poverty reduction, equity, ensure income security (for contributory benefits: income replacement), access to health and other services along the life cycle, and promote productive economic activity. During times of shock, benefits can be life and livelihood saving and adequacy plays an important part in a households' ability to be resilient. There are clearly defined standards for the delivery of benefits and services.

3. Appropriateness

At the system level, appropriateness means the system, as a whole, ensures optimal protection to fulfill the social protection needs of the population. At a policy level, it means the formulation of clear and realistic targets and timeframes to better address social protection needs over time, taking into account financing and institutional capacities. In shock-prone contexts it also means being able to better address social protection needs throughout the risk chain, taking into account financing and institutional capacities. Policy decisions are guided by evidence.

4. Respect for Rights & Dignity

National law and regulations prescribe the entitlements to benefits, specifying the range, qualifying conditions, and levels of the benefits. The general public is well informed about measures. Programs and benefits design and their delivery are in line with human rights standards and principles to avoid humiliation of the persons covered. Enforcement mechanisms should be in place to ensure an exercise of public authority. Efficient and accessible complaint and appeal procedures are available. Furthermore, private individual information contained in administrative data systems needs to be secured and protected by law.

5. Governance & Institutional Capacity

Clear internal rules, regulations, reporting mechanisms, and operating procedures specify the relationships, roles, and responsibilities of bodies and actors involved in social protection. Structures and processes for stakeholder participation are institutionalized and well-functioning. Social protection stakeholders are informed and able to participate in the design, implementation, and monitoring of social protection programs even during shocks. Accurate, reliable, accountable, and transparent financial and delivery systems exist and minimize errors, fraud, and mismanagement (both internally and externally), building the confidence of people in the system and its administration. This requires sufficient ex ante investments in institutional capacity (including appropriate equipment and an adequate number of staff with the right set of skills and training), a diversity of financing and delivery mechanisms, high quality public services, and effective enforcement mechanisms. In particular, it means that there is ex ante agreements between Sectors relating to risk triggers and thresholds of response (adequacy an appropriateness for example), as well as ex ante agreements on decision making practices and actions between Sectors before, during and after a shock.

6. Financial & Fiscal Sustainability

The financial resources raised and allocated are aligned with actual and expected program outcomes, demographic patterns, and economic development. Contributions are designed based on beneficiaries' contributory capacity. Budgets are executed as planned to allow for full implementation and monitoring of social protection schemes and programs. There is a clear plan for phasing in external support and also phasing out external financial support, including humanitarian support in shock-prone contexts. These additional development and humanitarian funding streams need to be sequenced and layered with social protection programs, to ensure efficient use of resources during times of shock. Legal and institutional frameworks should articulate the long term financial requirements to ensure long term funding commitments.

7. Coherence & Integration

Social protection policies are balanced with related social, economic, and sectoral policies (external coherence). They are also aligned to ensure that the set of existing programs complement each other (internal coherence). Institutional arrangements promote coordination across institutions responsible for the design, administration, and delivery of social protection programs. Common/shared delivery systems minimize the administrative resources required to implement individual programs. In addition to common or shared delivery systems within Government, humanitarian agencies, private sector actors and other stakeholder engaged in the delivery of services and benefits should be encouraged to use common delivery systems wherever possible to realize efficiency gains. As a result, fragmentation, overlaps, and duplication are minimized.

8. Responsiveness

The social protection system is flexible enough to evolve and adapt to the balance and scale of programs in light of changing social protection needs. Changes in social protection needs may arise from socioeconomic, sociodemographic, natural or political developments. These may require short term rapid responses and/or longer term adjustments. Responsiveness requires regular monitoring and periodic evaluation of these developments as well as of the social protection programs and schemes. Adjustment or changes in the system need to be effectively communicated and contingency funds created, to respond rapidly to emergencies or crises. Adoption of a wide range of data sources (beyond poverty and vulnerability data) need to be considered in order to allow for a rapid response to a variety of shocks.

9. Cost-effectiveness

Delivery systems are in place to implement existing programs with the minimum resources required to achieve the desired impact and reduce the cost for beneficiaries to access social protection programs, especially during times of stress or shocks. Cost-effectiveness refers both to the efficiency of service delivery from the system and beneficiary perspective (how efficiently inputs are employed to produce outputs) & to the effectiveness (changes in system outcomes per unit of input).

10. Incentive Compatibility

Programs are designed in a way to create incentives for persons of working age to work, save, participate in risk-pooling arrangements; incentives for employers to register their workers in the social protection system and pay the required contributions; for tax authorities to collect the required contributions; for social protection service providers to enroll all eligible beneficiaries and provide good quality services and for eligible beneficiaries to become a member of a scheme and take up benefits. Overall, the balance of changes in household, individual, employers', and providers' behaviors should be positive and it should offset disincentives to work, save and contribute or incentives to remain on long term humanitarian support.

2. Check if Post Disaster Needs Assessment (PDNA) Exists For Your Country

The International Recovery Platform¹ is the curator of the guidelines for "Post Disaster Needs Assessments" (PDNAs). The last of the 19 volumes is "Employment, Livelihood and Social Protection". More than 60 country/disaster-specific PDNAs have been produced so far, starting with Turkey Marmara Earthquake in 1999 and most recently, Cyclone Winston in Fiji (2016).² Recent assessments such as those on Fiji, Myanmar (2015), and Nepal (2015) have sections on social protection, and may serve as useful benchmarks for WBG task teams as well as government counterparts regarding what to assess and how to do it.

PDNAs can be found at:

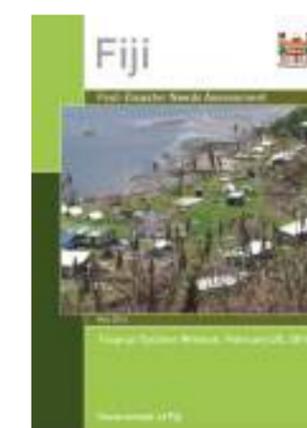
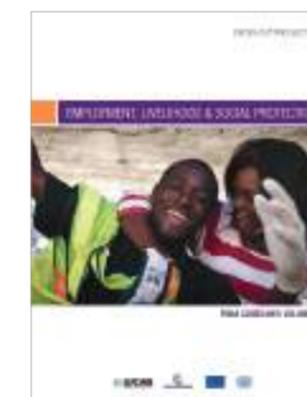
- **Newer PDNAs (2007 and later) on the GFDRR site:** <https://www.gfdr.org/post-disaster-needs-assessments>
- **Older PDNAs (1999-2006) on the GFDRR site:** <http://go.worldbank.org/KWCRRCKA20>
- **IRP Collection:** http://www.recoveryplatform.org/pdna/key_documents

For the complete set of PDNA Guidelines, please visit: <http://www.recoveryplatform.org/pdna/>.

PDNAs are carried out using the Damage and Loss Assessment (DaLA) Methodology, which was initially developed by the UN Economic Commission for Latin America and the Caribbean (UN-ECLAC) in 1972. It has since been improved through the close cooperation of WHO, PAHO, World Bank, Inter-American Development Bank, UNESCO, and ILO to capture the closest approximation of damage and losses due to disaster events. It is a flexible tool that can be adapted to specific disaster types and government ownership requirements.

3. Know The Country's Disaster Risk Profile

As mentioned under Section E.1 Not All Disasters Are Equal, countries have different disaster risk profiles. SPL adaptation in a country like Ethiopia where the major concern is drought is fundamentally different



from another country like the Philippines, which is hit by hurricanes, earthquakes, and tsunamis. There are a range of tools to help you understand the country's disaster risk profiles.

1. IRP (<http://www.recoveryplatform.org>) is affiliated with the United Nations Office for Disaster Risk Reduction (UNISDR; <http://www.unisdr.org>) and the Government of Japan.

2. As of November 2016.

a) ThinkHazard!

ThinkHazard! (<http://www.thinkhazard.org>) is a web-based tool developed by GFDRR for the purpose of enabling non-specialists to consider the impacts of disasters on new development projects. Users can quickly and robustly assess the level of river flood, earthquake, drought, cyclone, coastal flood, tsunami, volcano, and landslide hazard within their project area to assist with project planning and design.

The system is a simple flagging tool to highlight the hazards present in a project area. As such, a user is only required to enter their project location – national, provincial, or district name. The results interface shows a user whether they require high, medium, or low awareness of each hazard when planning their project.

ThinkHazard! provides recommendations and guidance on how to reduce the risk from each hazard within the project area, and provides links to additional resources such as country risk assessments, best practice guidance, and additional websites. ThinkHazard! also highlights how each hazard may change in the future as a result of climate change.



b) EM-DAT: International Disaster Database

The International Disaster Database is known as EM-DAT (<http://www.emdat.be>). It is a global database on natural and technological disasters, containing essential core data on the occurrence and effects of more than 21,000 disasters in the world, from 1900 to present. EM-DAT is maintained by the Centre for Research on the Epidemiology of Disasters (CRED) at the School of Public Health of the Université catholique de Louvain located in Brussels, Belgium. EM-DAT includes all disasters from 1900 until the present, conforming to at least one of the following criteria:

- 10 or more people dead
- 100 or more people affected
- The declaration of a state of emergency
- A call for international assistance



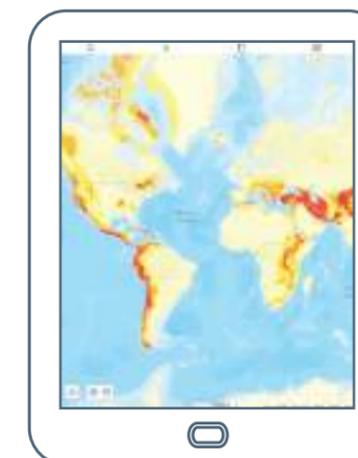
c) Global Assessment Report on Disaster Risk Reduction (GAR)

The Global Assessment Report on Disaster Risk Reduction (GAR) (<http://www.preventionweb.net/english/hyogo/gar/2015/en/home/>) is a biennial global assessment of disaster risk reduction and comprehensive review and analysis of the natural hazards that are affecting humanity. The GAR contributes to achieving the Hyogo Framework of Action (HFA) through monitoring risk patterns and trends and progress in disaster risk reduction while providing strategic policy guidance to countries and the international community.



d) NATHAN Light by Munich Reinsurance Company

NATHAN (Natural Hazards Assessment Network) Risk Suite is a paid-service available through Munich Insurance Company for natural hazard analyses. NATHAN Light (<http://nathanlight.munichre.com>) is a free demo version.



A Task Team may be fortunate enough to be mobilized during a peace time (or the Mitigation phase of the DRM cycle—see Section D.5), and have sufficient time and resources to carry out a thorough diagnosis (Section F) and planning work.

However, it is more likely that the team is called upon during either “response” or the early phases of “recovery” when time and resources are highly constrained. If you find yourself in such a situation, the quick checklist below may be helpful. The list consist of 7 categories of work, highlighted below:

7 Categories of Work:

- I. Basic Information on the Disaster & Country Context
- II. Country’s Disaster Management System
- III. Country’s Institutional Arrangements for Disaster Management
- IV. Identified Functionality of Social Protection in Disaster Management
- V. Country’s Social Protection System
- VI. Coordinating with The Bank
- VII. Coordinating with Other Partners

G. Time Constrained Task Team’s Quick Checklist

I. Basic Information on the Disaster & Country Context

This first subsection summarizes a list of key questions and resources that can be used to properly assess the initial conditions and requirements both in a post-disaster and pre-disaster scenario.

Country Profile

- Economic & Social Profile:** <http://data.worldbank.org/country/> and, if available, the “Country at a Glance” section of the Inter-Agency Social Protection Assessments (ISPA).
- Disaster Profile:**
 - ThinkHazards! <http://www.thinkhazard.org>
 - EM-DAT – International Database of Disasters: <http://www.emdat.be>
 - NATHAN Light: <http://nathanlight.munichre.com/>
- Does the country have a recent post disaster needs assessment (PDNA)?**
 - Newer PDNAs (2007 and later) on the GFDRR site: <https://www.gfdr.org/post-disaster-needs-assessments>
 - Older PDNAs (1999-2006) on the GFDRR site: <http://go.worldbank.org/KWCRRCKA20>
 - International Recovery Platform collection: http://www.recoveryplatform.org/pdna/key_documents

Characteristics of Actual/Anticipated Disaster

- Location:** Where did the disaster hit? Where are disasters likely to hit?
 - Is the disaster contained (or are they likely to be contained) in one administrative unit, or
 - Has it affected (or are they likely to affect) multiple municipalities, states or provinces?
- Other characteristics of the impacted area / other characteristics of the are expected to be impacted**
 - Urban/rural
 - Plain/Mountainous/Costal
 - Socioeconomic characteristics of the affected households. Identify vulnerable and poor neighborhoods.

Damage Assessment

- Follow the International Recovery Platform’s Post Disaster Needs Assessment Guidelines** (<http://www.recoveryplatform.org/pdna/>). Look specifically for the *PDNA Guidelines for Employment, Livelihood and Social Protection* (http://www.recoveryplatform.org/assets/publication/PDNA/PDNA_VolumeB/PDNA%20GUIDELINES%20VOLUME%20B%20-%20Employment,%20Livelihood%20and%20Social%20Protection.pdf)

II. Country’s Disaster Management System

- Has the country adopted a Disaster Management Cycle Approach?**
 - How does the previous experience compare to this one in terms of damage and geography?
 - Were these other experiences documented?
- What government agency is responsible for coordinating the disaster management system?**
 - Does it have a dedicated/specialized agency (e.g. FEMA)?
 - If not, which national government agency or ministry is responsible for Disaster Management?
 - Identify the political leadership and the technical/operational leadership.
- Has the country sustained similar disaster experience?**
 - How often?
 - When was the last one?
- What government and non-government agencies have participated in similar experiences?**
- How much has the country depended on foreign aid?**
- What international agencies have participated in these experiences?**
- What were the timeframes for the response and recovery stages?**
- What is the legal framework for the disaster management system?**
 - Identify the laws, regulations, and acts.
 - Identify English versions of these documents.

III. Country’s Institutional Arrangements for Disaster Management

- What is the role of the central, provincial/state, and local/municipal governments in terms of disaster management?**
 - In terms of coordination.
 - In terms of service delivery.
 - In terms of communication with the population.
 - In terms of financing.
- What is the main coordination mechanism (e.g. State Disaster Coordination Committee)?**
- Who coordinates and supervises the NGO and INGO’s work?**

IV. Identified Functionality of Social Protection in Disaster Management

Annex 6 of the *PDNA Guidelines for Employment, Livelihood and Social Protection* provides some guidance in terms of appropriate interventions from the social protection side in disaster management cases. (http://www.recoveryplatform.org/assets/publication/PDNA/PDNA_VolumeB/PDNA%20GUIDELINES%20VOLUME%20B%20-%20Employment,%20Livelihood%20and%20Social%20Protection.pdf)

- Has the country identified the specific function to be played by social protection in disaster management in this context?**
- What programs are currently used for disaster management and how?**

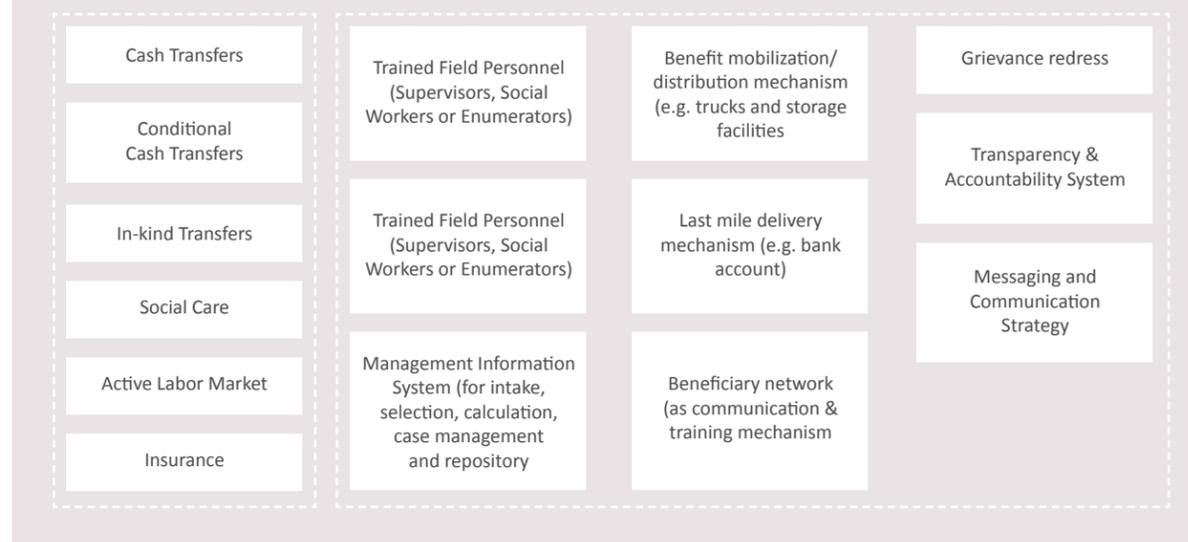
V. Country’s Social Protection System

What are the things I need to know from the Social Protection System?

To answer this question, it is important to address what Social Protection brings to the table in terms of disaster management. The answer can be summarized in two main categories. The first category is the *policy instruments*. These are the actual benefits/services that the social protection system provides: Cash Transfers, Conditional Cash Transfer, In-kind Transfers, Social Care, Active Labor Market, Insurance. The second category is the *implementation infrastructure* for these policy instruments. These are the sum of resources, procedures, and technology used to identify and select beneficiaries, calculate, distribute, and deliver benefits, as well as manage beneficiary cases and grievances.

Why separate the policy instruments from their respective implementation infrastructure? This is because, for the purpose of contributing to the disaster management system, each can potentially be used separately.

Policy Instruments vs. Implementation Infrastructure



There will be cases where the policy instrument has no use in terms of disaster management, but the implementation infrastructure, or parts of it, are temporarily borrowed to deliver a benefit to beneficiaries (example a housing reconstruction relief subsidy).

Resulting from this dichotomy, there may be three scenarios in terms of the functional relationship of social protection with disaster management:

- A. When a program as a whole is used for disaster management:** That is, when the policy instrument with its respective implementation infrastructure are used for disaster management. This normally is implemented in three different manners:
- **Vertical Expansion:** Increasing the benefit value or duration of an existing program (see figure on page 34)
 - **Horizontal Expansion:** Adding new beneficiaries to an existing program (see figure on page 34)
 - **Refocusing:** Adjusting the social protection system to refocus assistance on groups most vulnerable to the shock

- B. When only implementation infrastructure is used:** This is very common and it takes place when the implementation structure, or parts of it, is mobilized to deliver a service different from the one it was originally intended to perform. For example, in a preparation phase of the disaster management cycle, the beneficiary network is used one or several times as part of an information campaign to communicate potential hazards or relief procedures in a disaster situation.

- C. When the policy instrument is used through a different implementation infrastructure:** This happens frequently when governments, in the intent of avoiding redundancies and creating efficiencies, decide to integrate all the potential disaster benefits into one single ad hoc service delivery mechanism.

The information required to properly diagnose the social protection system, from the functional linkage to DRM perspective, can be found in the country's Inter-Agency Social Protection Assessment (ISPA).

The following subsection guides the user towards an effective way of using the ISPA Core Diagnostic Instrument (CODI) as central tool for analyzing the social protection system from the DRM needs perspective.

Identify the most suitable program or programs to address disaster management needs

There are three sections of the CODI Questionnaire that help with this task (see <http://ispatools.org/wp-content/uploads/2016/02/CODI-Questionnaire.xlsx.zip>):

- Module 1: Program Inventory Table to list and describe the programs, as well as the Alignment of Policies with Social Protection Needs and Populations Risks
- Module 1: Vulnerability Profile table
- Module 2: Program Design
- Module 2: SP Programs at a Glance - Coverage of Beneficiaries (active, legal, and benefit recipients)

Here are the basic questions that will help identify the program or programs that provide the best fit:

- 16. Does the country have a flagship social protection program?**
- 17. Which program or programs offer the best policy instrument/benefits in terms of the needs (cash transfer, public works, In-kind transfer, social care, social insurance, active labor market)?**
- 18. Which program or programs have the best coverage in terms of the needs?**
- In terms of population.
 - In geographic coverage terms.

Assess the regulatory flexibility and adaptability of the program

Use the programs' operations manual/guidelines, as well as the following sections of the CODI questionnaire to assess this issue. Specifically, the following sections:

- Module 1: Legal and Policy Framework
- Module 2: General Description
- Module 2: Program Design

19. Does the program formally state its use in terms of Disaster Management?

- If so, is it a regular benefit? or a specific disaster related benefit?
- How are the disaster-specific benefit triggered?

20. Does this program offer a different set of criteria for disaster management purposes (in terms of target population, eligibility criteria, geographic targeting, benefit amount, benefit frequency, accountability, or transparency measures)?

21. Which program has the most adaptability capacity in terms of rules, guidelines, or acts?

22. Does the program or programs have any additional legal constraints to be used for disaster management purposes?

Assess the program's financial capacity to address disasters

For this task, use the program's guidelines, as well as the following sections from the CODI questionnaire:

- Module 1: Public Expenditure and Financing
- Module 2: SP Programs at a Glance - Spending Level

23. Can the program spend its budget on disaster management components?

24. Does the program keep a security budget to be used only for disaster management?

25. Is the program eligible to receive and operate disaster funds?

- What are the triggers?
- How fast can these funds be available?

26. Is it viable to comply with the program's financial accountability requirements in a disaster management scenario?

Assess the program's implementation infrastructure

Use the following CODI diagnoses tools:

- Module 1: Policy Implementation and Capacity
- Module 3: Program Implementation Design

Additionally, to understand the potential service delivery requirements, look at the following documents:

- USAID Field Operations Guide for Disaster Assessment and Response (https://www.usaid.gov/sites/default/files/documents/1866/fog_v4_0.pdf)
- The United Nations Disaster Assessment and Coordination Field Handbook (https://docs.unocha.org/sites/dms/Documents/UNDAC%20Handbook%202013_english_final.pdf)

27. Which program has the most robust implementation infrastructure?

28. Which program has the capacity of scaling-up its capacity in the short run?

29. Which program has the most adaptable implementation infrastructure?

Key questions in assessing each of the identified programs' implementation infrastructure:

30. How strong is the field operations capacity of the program?

- Can this capacity be utilized and easily mobilized to address a disaster?

31. Can the program's registration and intake capacity be used for disaster management purposes?

- Can it be scaled up for disaster management purposes?
- How flexible/adaptable is it to serve other identification needs outside the regular program's scope?

32. Can the MIS functionalities (intake, de-duplication, ID authentication, eligibility analysis, PMT estimation, benefit calculation, payroll lists creation, GRM management, etc.) be harnessed for disaster management purposes?

- Can these functionalities be adapted to serve disaster management process?
- How fast can this be done?
- Is their in-house capacity to make the necessary changes?

33. In the case of in-kind transfers, can the program's benefit mobilization capacity be used for disaster management purposes (look at storage facilities, distribution channels, vehicles, personnel, etc.)?

34. Is the program's service delivery mechanism (e.g. payment service provider, bank accounts, etc.) flexible and adaptable enough to serve as a delivery tool in disaster management situations?

- In cash transfer cases, look at the contractual arrangement with the payment service provider.
- Can it be scaled-up to serve a larger number of potential beneficiaries (look at capacity)?

35. If the program has a beneficiary social marketing network, can it be used for disaster management purposes? How?

36. Can the program's grievance redress mechanism be used outside of the scope of the regular program?

37. Can the program's transparency and accountability controls be used/adapted to a disaster management situation?

VI. Coordinating with The Bank

38. Has the Bank decided to apply "OP 8.00 Rapid Response to Crisis and Emergencies" to the country?

39. Who leads the Bank's DRM team, and who are their key members?

40. Who leads the Bank's DRF team, and who are their key members?

41. Has there been a timeline set in terms of the bank intervention? (Post-disaster scenario)

- Will the Bank participate in recovery?
- Will the Bank's participation be limited to reconstruction?

VII. Coordinating with Other Partners

42. See section D of the aforementioned *United Nations Disaster Assessment and Coordination Field Handbook* entitled "Coordination."

Responding to Disasters Together (R2D2)

<http://globalpractices.worldbank.org/sur/Lists/Calendar/DispForm.aspx?ID=248&OwnershipUnit=Social Urban Rural and Resilience GP&InitialTabId=Ribbon.Read>

R2D2 is a Community of Practice that focuses on bringing together World Bank staff from across three separate Global Practices: Social Protection and Labor; Social, Urban, Rural, and Resilience (specifically the Disaster Risk Management (DRM) team); Finance and Markets (specifically the Disaster Risk Financing and Insurance Program (DRFIP) team).

DRM Specialist Roster

<http://isearch.worldbank.org/skillfinder?qterm=Disaster+Risk+Management>

DRFI Specialist Roster

<http://isearch.worldbank.org/skillfinder?qterm=Disaster+Risk+Financing+and+Insurance>

List of DRM-SPL Activities Supported by RSR, ASPP, and Joint RSR/GFDRR Programs

Countries/ Areas 20	Projects 28	TTLs 17
Grants 33	Total Amount \$58,007,528	
Programs 3		

H. Who to Call for Help

Country	Project ID	Grant Name	TTL	TTL	Group ID	Amount	Exec. by	Program
Africa	P150143	Supporting Knowledge and TA for Adaptive Social Protection in the Sahel	Carlo Del Ninno	Carlo Del Ninno	TF017299	\$3,000,000	Bank	ASPP
Africa	P150143	Livelihoods experiment	Carlo Del Ninno	Carlo Del Ninno	TF0A2522	\$500,000	Bank	ASPP
Burkina Faso	P153352	Adaptive SP in the Sahel – Burkina Faso country program	Rebekka E. Grun	Rebekka E. Grun	TF019174	\$1,500,000	Bank	ASPP
Chad	P151966	Chad Social Safety Nets Assessment - Cofinancing of P151966 activities	Giuseppe Zampaglione	Giuseppe Zampaglione	TF018933	\$262,928	Bank	ASPP
Chad	P153910	Chad - support to Government in establishing an adaptive, efficient, and responsive national SSN	Giuseppe Zampaglione	Giuseppe Zampaglione	TF0A0449	\$1,335,000	Bank	ASPP
Chad	P156479	Chad Safety Nets Trust Fund	Giuseppe Zampaglione	Giuseppe Zampaglione	TF0A2801	\$5,000,000	Recipient	ASPP
Colombia	P162273	Strengthening Social Protection Interventions and Systems as a Disaster Risk Mitigation Mechanism	Edmundo Murrugarra	Edmundo Murrugarra	TF0A3705	\$440,000	Bank	RSR/GFDRR
Dominica; Grenada	P159285	Building Blocks for Disaster-Responsive Social Protection Systems in Dominica and Grenada	Snjezana Plevko	Snjezana Plevko	TF0A2510	\$440,000	Bank	RSR/GFDRR
EAP	P148849	Strengthening Social Protection Systems To Manage Disaster and Climate Risk in East Asia and the Pacific	Oleksiy Ivaschenko	Oleksiy Ivaschenko	TF016173	\$450,000	Bank	RSR
Ethiopia	P106228	Strengthening the Early Warning System in Ethiopia	Ziauddin Hyder	Ziauddin Hyder	TF098859	\$300,000	Bank	RSR
Ethiopia	P106228	Strengthening the Nutrition Information and Early Warning System in Ethiopia	Ziauddin Hyder	Ziauddin Hyder	TF010724	\$98,600	Bank	RSR
Ethiopia	P106228	Strengthening the Nutrition Information and Early Warning System in Ethiopia	Ziauddin Hyder	Ziauddin Hyder	TF010247	\$650,000	Recipient	RSR
Fiji; Tonga; Vanuatu	P159592	Disaster Responsive Social Protection in the Pacific	Oleksiy Ivaschenko	Oleksiy Ivaschenko	TF0A2408	\$450,000	Bank	RSR/GFDRR
Haiti	P128403	Women and Girls in Haiti & Reconstruction: Addressing and Preventing Gender Based Violence (P128403)	Maria Beatriz Orlando	Maria Beatriz Orlando	TF098780	\$81,000	Bank	RSR
Haiti	P128403	Women and Girls in Haiti & Reconstruction: Addressing and Preventing Gender Based Violence (P128403)	Maria Beatriz Orlando	Maria Beatriz Orlando	TF010631	\$500,000	Bank	RSR
Jamaica	P159232	Strengthening Jamaica's Social Protection System for Disaster Preparedness and Response	Junko Onishi	Junko Onishi	TF0A2499	\$430,000	Bank	RSR/GFDRR

Country	Project ID	Grant Name	TTL	TTL	Group ID	Amount	Exec. by	Program
Lesotho; Swaziland	P161098	Building Social Protection's Role in Disaster Response and Resilience in Swaziland and Lesotho	Lucilla Maria Bruni	Lucilla Maria Bruni	TF0A3667	\$360,000	Bank	RSR/GFDRR
Malawi	P162379	Malawi: Building a Shock Responsive Safety Net	Colin Andrews	Colin Andrews	TF0A3772	\$450,000	Bank	RSR/GFDRR
Mali	P153426	Adaptive Social Protection for Resilience in Mali	Phillippe George Pereira Guimaraes Leite	Phillippe George Pereira Guimaraes Leite	TF018997	\$935,000	Bank	ASPP
Mali	P157892	Safety Nets Project (Jigisemejiri) Additional Financing (ASPP)	Phillippe George Pereira Guimaraes Leite	Phillippe George Pereira Guimaraes Leite	TF0A2384	\$10,000,000	Recipient	ASPP
Mauritania	P150430	Adaptive Social Protection for Mauritania - Supervision	Aline Coudouel	Aline Coudouel	TF018883	\$450,000	Bank	ASPP
Mauritania	P150430	Adaptive Social Protection Support to Mauritania	Aline Coudouel	Aline Coudouel	TF019374	\$4,000,000	Recipient	ASPP
Mauritania	P153182	Adaptive Social Protection for Mauritania - NLTA	Aline Coudouel	Aline Coudouel	TF018934	\$800,000	Bank	ASPP
Niger	P123399	Adaptive Social Safety Nets Project	Carlo Del Ninno	Carlo Del Ninno	TF0A2304	\$8,500,000	Recipient	ASPP
Niger	P153374	Adaptive Social Protection for Resilience in Niger	Carlo Del Ninno	Carlo Del Ninno	TF019115	\$2,100,000	Bank	ASPP
Niger	P154888	Enhancing Household Resilience Through CCT/WASH Integrated Community-led Interventions in Niger	Taibou Adamou Maiga	Taibou Adamou Maiga	TF0A2608	\$500,000	Bank	ASPP
Niger	P155846	Bank Supervision for Adaptive Social Safety Nets Project	Carlo Del Ninno	Carlo Del Ninno	TF0A2521	\$400,000	Bank	ASPP
Philippines	P159824	Developing an Emergency Cash Transfer For Increased Household Resilience to Disasters in the Philippines	Pablo Ariel Acosta	Pablo Ariel Acosta	TF0A2514	\$400,000	Bank	RSR/GFDRR
Senegal	P133597	Senegal Adaptive Social Protection - Support to Senegal	Aline Coudouel	Aline Coudouel	TF0A2849	\$11,050,000	Recipient	ASPP
Senegal	P153183	Senegal Adaptive Social Protection - NLTA	Aline Coudouel	Aline Coudouel	TF0A0945	\$1,500,000	Bank	ASPP
Senegal	P156160	Senegal Adaptive Social Protection - Supervision	Aline Coudouel	Aline Coudouel	TF0A2884	\$450,000	Bank	ASPP
St. Vincent and the Grenadines	P161103	Strengthening Social Protection System For Disaster Preparedness and Response in Saint Vincent and the Grenadines	Snjezana Plevko	Snjezana Plevko	TF0A3763	\$300,000	Bank	RSR/GFDRR
World	P126834	Preparing Social Protection Systems For Natural Disasters and Climate Change	Mirey Ovadiya	Mirey Ovadiya	TF010079	\$375,000	Bank	RSR/GFDRR

20 Countries/ Areas	28 Projects	17 TTLs	33 Grants	\$58,007,528	3 Programs
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Unlike “normal” WBG SPL activities, missions and field operations related to natural disasters could expose team members to unfamiliar challenges, including heightened safety/security issues, health risks, and working with unfamiliar partners. Unfortunately,

the WBG does not have manuals or guidelines for its staff members to face such challenges. However, the materials mentioned in this section may be useful for planning and executing missions and field work.

UNDAC Field Handbook (6th Edition) 2013

https://docs.unocha.org/sites/dms/Documents/UNDAC%20Handbook%202013_english_final.pdf

The United Nations Disaster Assessment and Coordination (UNDAC) Handbook is intended to serve as an easily accessible reference guide for members of an UNDAC team before and during a mission to a disaster or emergency. The Handbook is not an authoritative instruction, but rather represents an accumulation of institutional memory related to processes and procedures for coordination, as seen in the scope of the UNDAC Standard Terms of Reference. Its focus is on the “how to,” but also includes sufficient context to ground the user in the mandate of the Office for Coordination of Humanitarian Affairs (OCHA).

on core UNDAC functions: Coordination (including USAR coordination and the OSOCC), Assessment (including the MIRA methodology), and Information Management (including situational reporting). Chapters G through J cover the information needed to successfully and safely perform UNDAC activities – from implementing security measures to survival skills and telecommunications. Chapter Z is a collection of reference materials, including the UNDAC Team Leader guide (Z.8). Although the chapters are written as stand-alone documents, they are intended to be read as a whole as they reference material across chapters. The sequence of chapters generally follows the progression of typical UNDAC missions. *(Quoted from “Introduction to the Handbook”)*

The Handbook contains four main groupings of chapters. Chapters A through C present UNDAC’s context, mandate, and core methodology. Chapters D through F provide more in-depth information

USAID Field Operations Guide For Disaster Assessment and Response (Version 4.0: September 2005)

https://www.usaid.gov/sites/default/files/documents/1866/fog_v4_0.pdf

This Field Operations Guide (FOG) for Disaster Assessment and Response has been developed by the U.S. Agency for International Development/Bureau for Democracy, Conflict, and Humanitarian Assistance/Office of U.S. Foreign Disaster Assistance (OFDA) as a reference tool for individuals sent to disaster sites to undertake initial assessments or to participate as members of an OFDA Disaster Assistance Response Team (DART).

The FOG contains information on general responsibilities for disaster responders, formats and reference material for assessing and reporting on populations at risk, DART position descriptions and duty checklists, descriptions of OFDA stockpile commodities, general information related to disaster activities, information on working with military in the field, and a glossary of acronyms and terms used by OFDA and the other organizations with which OFDA works. *(Quoted from “Introduction”)*

I. Guidance Materials for Missions and Field Operations

This printed edition of SPL-DRM toolkit is accompanied by several scenario write-ups to provide the reader with an insight about what to expect based on the following criteria.

Readers may find that some descriptions are simply repeated across the timeline, i.e. before, during, and after. However, this is intentional and for the purpose of helping the reader only go through the time scenario he or she is most interested in.

The type of onset of the natural disaster the country is likely to face:

 **Rapid Onset**
like earthquakes, floods, storms

 **Slow Onset**
like drought

Country capacity, either roughly:

 **High Capacity**
like Japan and Mexico

 **Low Capacity**
like Mali and Nepal

When the task team is brought in:

 **Before Disaster**
mitigation to early preparation phase

 **During Disaster**
late preparation to early response phase

 **After Disaster**
late response to recovery phase

J. Brief Introduction to Scenario Write-ups



»» Rapid Onset

☀ Before Disaster

⤴ High Capacity

Case of Japan

- Depending on the nature of the rapid onset disaster (frequent: typhoon, flood or less frequent: earthquake, volcano, tsunami, etc.), people's perception of the risk is different. This leads to different approaches to preparedness measures.
- The existence of disaster risk management and proper governance systems assist preparedness for both social protection and disaster risk reduction.
- It is important to identify and recognize the change agents in the community (civil society or volunteer organizations) to promote pre-disaster preparedness activities.

1. Introduction

1.1 About The Scenario

This scenario describes the issues and experiences of a rapid onset disaster, like an earthquake or tsunami, which is a low probability and high consequence event. This scenario is about the pre-disaster situation, especially focusing on preparedness and mitigation. The scenario draws experiences from the lessons of past disasters in Japan, and describes how some of the pre-disaster preparedness measures are implemented.

1.2 Key Issues of Rapid Onset Disaster

The following are some of the key characteristics of a rapid onset disaster.

- Usually rapid onset disasters have a short response time.
- Highly visible impacts in terms of damages (both physical and environmental.)
- In case of frequent disasters, there may be prior experiences. If not so frequent, several new issues appear, and often the people and local governments are left at a loss.
- People's mindset is different based on the nature of the disaster, whether it is frequent or non-frequent. Thus, the level of preparedness may be different.
- Urban/rural settings will have different impact due to the differential level of business interruption and livelihood losses. This will also depend on the nature of the hazard (like earthquake or typhoon or flood.)
- Different types of pressure exist in a post-disaster scenario, including media/political pressure for better and faster recovery.

2. Institutional Setting

2.1 Institutions and Legislation

2.1.1 Key DRM legislation linked to social protection

- Disaster risk management (DRM) in Japan is conducted on the basis of the Disaster Countermeasures Basic Act. This act formulates a comprehensive and strategic disaster management system. It also addresses all of the disaster phases of prevention, mitigation, preparedness, and emergency response, as well as recovery and rehabilitation. Social protection in DRM also follows this act.
- The Disaster Relief Act protects the victims of disaster and maintains social order by causing the Central Government to provide needed relief services on an emergency basis, in cooperation with Local Public Entities and the Japan Red Cross, other entities, and the people of Japan. Relief activities noted in the act include the setup of shelters and temporary housing and the distribution of food and drinking water, provided in-kind. As a preparedness measure, food and water can be purchased for emergency stores.
- The Act on Earthquake Insurance designates insurance in case of earthquakes.
- One of the important challenges of social care services in the time of disaster is retrofitting social welfare facilities for more disaster-resilience. Based on the Act for Promotion of the Earthquake Proof Retrofit of Buildings, which was amended in 2013, the implementation of seismic diagnoses and the announcement of their results has been required for buildings used as an evacuation shelter for vulnerable people, such as a school or elderly nursing home.

2.1.2 Key institutions / ministries involved

- Disaster risk reduction is usually handled by local government. Depending on the nature and scale of the disaster, the city/district and province/state are the first responders. It is important to know key disaster and social protection/social welfare related departments at the local level. In addition, different disaster assistance and social protection schemes are formulated at national level, so it is also important to know the national institutional mechanisms.

- In the Cabinet Office, which is responsible for securing cooperation and collaboration among related government organizations in wide-ranging issues, the Director-General for Disaster Management is mandated to undertake the planning of basic disaster management policies and response to large-scale disasters, as well as conducting overall coordination.
- In terms of social protection, while the Ministry of Health, Labor, and Welfare (MHLW) at the central government designs and oversees social policies, local governments are involved in almost every aspect of social policy, except public pensions. However, the Disaster Management Operation Plan for the MHLW mentions that the social welfare council (SWC) and the Japan Red Cross Society are the main responders for volunteer coordination, as well as for providing social services. Japan Pension Service is the main responder for social insurance, and SWC is the main responder for emergency loans to affected families.
- As far as specific laws and acts for the protection of affected people and their livelihood, administrative operations of the Disaster Relief Act and Act on Provision of Disaster Condolence Grant had been conducted by MHLW until 2013. However, these have currently been conducted by the Cabinet Office for comprehensive disaster management, linked to the Disaster Countermeasures Basic Act. Administrative operation for the Act on Support for Livelihood Recovery of Disaster Victims and Act on Special Financial Support to Deal with Extremely Severe Disasters is also conducted by the Cabinet Office. National operation based on the Act on Earthquake Insurance is conducted by the Ministry of Finance.

2.1.3 National and local government responsibilities

- According to the Disaster Countermeasures Basic Act, in the event of a disaster occurring, municipalities will primarily be engaged in emergency countermeasures, as they are the closest to residents. Prefectural administration occurs when comprehensive, wider-area measures are necessary. In the event of a large-scale disaster beyond the capability of local public entities, the national government will step in to support the local entity and coordinate mutual support among local entities.

- In particular, the welfare department of the municipality will be needed to set up evacuation shelters and temporary housing, as well as the provision of health and welfare services to those who need assistance. In the Disaster Management Operation Plan for MHLW, human resources for the response to post-disaster responsibilities should be considered.
- Responsibility for the operation of the acts regarding the protection of affected people during and after disasters are as follows:
 - A) Disaster Relief Act: Prefectural governments.
 - B) Act on Provision of Disaster Condolence Grant: Municipal governments.
 - C) Act on Support for Livelihood Recovery of Disaster Victims: Prefectural government.
 - D) Act on Earthquake Insurance: The Ministry of Finance, through insurance companies.

2.2. Finance

2.2.1 Financing schemes

- According to the Disaster Countermeasures Basic Act, as a principle, responsibility for the payment of costs related to disaster preparedness and emergency responses should be on the implementing governments. According to the act, in order to devote the immediate expenses required for disaster response, local governments are supposed to create a disaster management fund. In addition, the issuance of local bonds can be accepted for gathering financial resources for local governments. The budget from the fund and the bonds can be utilized as a source of revenue for emergency response and recovery, as well as preparedness and mitigation.
- Financial resources for the operation of the Disaster Relief Act are from prefectural government. The government has a duty to reserve the equivalent of 0.5% of the average amount of annual prefectural general tax revenues determined in the past three years as a Disaster Relief Fund.
- Regarding the Act on Earthquake Insurance, the amount of damages caused by a huge earthquake greater than the responsibility of private insurance companies are born by the national government.

- The subsidy systems for a building schools or elderly nursing homes have an obligation to implement seismic diagnoses. A maximum of 50% of the costs from the national government and 50% of the costs from the prefectural government are provided for seismic diagnosis and designing of the retrofit, and maximum of one third of the costs from the national government and one third of the costs from the prefectural government are provided for the implementation of the retrofit.

2.2.2 Financial governance

- Profits from the disaster management fund, which is established based on the Disaster Countermeasures Basic Act, can be utilized for preparedness and mitigation. Budgets from the bond, in accordance with the act, have limitations on usage by the national government.
- Financial governance for the operation of Disaster Relief Act is handled by prefectural government. Disaster Relief Fund reserves by prefectural government can be managed to purchase foods, water, and goods for storage in case of emergency.
- The amount of contribution for earthquake insurance by the national government is determined in the parliament every fiscal year.
- Subsidies from the national government for seismic diagnosis, the design of the retrofit, or the implementation of the retrofit, based on the Act for Promotion of the Earthquake Proof Retrofit of Buildings, are conducted by the National Treasury.
- There is the case where local governments establish mutual aid systems for disaster response and recovery. This system means that the government regularly collects a small amount of money from subscribers during normal times, and the money collected is utilized as financial resources to support the affected subscribers during a disaster.
- There is a case when a donation to affected local governments called as “Furusato Nozei” is used for their recovery projects.

Donation System for Local Governments (Furusato Nozei in Japanese)

“Furusato Nozei” is a donation system for local governments introduced in 2009. People can donate to their favorite prefectures and/or municipalities. A part of the donation amount is deducted from their income tax and resident tax. There is a case where a gift of appreciation is delivered from the municipalities to people who donated. An online donation system for Furusato Nozei has been established by each prefecture and/or the private sector. Generally, once a municipality has received a donation, a certification of donation receipt is generated. In the Kumamoto Earthquake of 2016, 37 local governments across the country supported the office works on behalf of donation acceptance. As a result, as of June 14, donations to the affected municipalities of the Kumamoto Earthquake exceeded three billion.

2.3 Capacity and Coordination

2.3.1 Human resources and capacities

- The welfare department of municipalities will be needed to conduct huge business works regarding the setup of evacuation shelters and temporary housing, the provision of health and welfare services to those who need assistance, and more. Additionally, human resources for the response of such huge business endeavors should be considered.
- It is necessary to care for people affected by disaster, as well as who have been provided social care services during normal times. To respond to their needs, the utilization of human resources such as social care service providers, social welfare councils, welfare commissioners, neighborhood associations, voluntary organizations for DRR, firefighting companies for rapid discovery, and social care facilities will be needed.
- Mental healthcare and privacy at evacuation shelters and temporary housing are required. It is needed to increase the number of experts such as public health nurses, psychiatric social workers, clinical psychologists, and human resources related to social welfare. Non-profit organizations and volunteers can be utilized for the management of evacuation shelters, as well as the provision of food, water, and care activities in temporary housing. Capacity development opportunities for organizations/volunteers will be also important.
- Collaboration with expert associations that conduct consultation services, like legal advice (Japanese Legal Support Center), mental health advice (mental health centers at prefectures), or advice on human rights (Human Rights Counseling Service by the Ministry of Justice) is an effective way to supplement social services.

2.3.2 Institutional/local government collaboration

- An on-site disaster management headquarters may be set up to promptly coordinate among the affected local entities and collect information and requests from relevant prefectures. The headquarters will conduct the emergency response activities in consideration to the needs for the affected people. Through joint meetings held in collaboration with disaster response headquarters organized by the local entities in the affected areas, the national government and the local entities will coordinate based on their shared awareness. This is the government’s closest one-stop contact point for requests from the affected local entities.
- The Disaster Countermeasures Basic Act mentions that local governments should cooperate with their efforts for disaster response. For this to occur, a mutual support agreement between local governments is made, sending support officials upon the request of affected governments. An example is the Regional Support Agreement during Disasters for Prefectures and the Mutual Support Agreement for Disasters by 21 cities.
- According to the Disaster Management Operation Plan for MHLW, requests based on the mutual support agreement should be done immediately, due to the great needs of affected people after disasters. Costs for their support should be covered by the affected government.
- The Disaster Countermeasures Basic Act also mentions that national and local governments should make an effort to cooperate with volunteers. For the coordination with volunteers during disasters, social welfare councils set up a disaster volunteer center.

3. Instruments

Regarding preparedness for disaster, cash transfers or in-kind transfers are not utilized often in Japan. Instead, social care services are utilized. However, the Disaster Relief Fund provides provisions to store relief goods, food, water, etc. in the evacuation center before disaster as a preparedness measure.

3.1 Social Care Services

- Providing care services to specific vulnerable groups as children, the elderly, single mother households, and physically and mentally disabled people is done through managing voluntary groups.
- In particular, for the social protection of people requiring special help, it is important to prepare in the following ways:
 - Enhancement of DRM for social welfare facilities: These facilities can provide social care services in the time of disaster to the same people who they service during ordinary times.
 - Enhancement of community-based DRM in terms of welfare: So the elderly, the disabled, and people who receive care at home on a daily basis can evacuate safely and smoothly.
 - Enhancement of DRM for the buildings and facilities as evacuation shelters, in terms of welfare: These buildings and facilities can provide care services to the people who need special help, store necessary goods, and make connections with relevant agencies on a daily basis.

Social Care Services by Non-Profit Organization (Nishi Suma Danran)

The Welfare Division of the Union of Tukimiyama Neighborhood Associations in Suma ward, Kobe city launched “Freai Lunch”, a kind of lunch meeting targeting the elderly, and “Welfare Class” to learn elderly care. “Welfare Network Nishisuma Danran” was established in 1998 by 30 people. They responded to the call for the establishment of a Non-Profit Organization which supported home welfare, aiming help the elderly live through support activities based on the effects of the Great Hanshin-Awaji Earthquake of 1995. Service in the field of home welfare by Nishisuma Danran is not free of charge. Contents of the service include of cleaning, gardening, rough work, cooking, watching, hearing, assistance to move out, trips to the hospital, and feeding. The service charge of Nishisuma Danran is 800 yen per hour. 75% of the total charge is delivered to actual workers, and 25% of the total charge will be income of the organization.

3.2 Role of Insurance Mechanisms

- There can be different types of insurance mechanisms available to apply for after disasters: 1) Employment insurance. 2) Health insurance. 3) Pensions. 4) Life insurance. 5) House/property/asset insurance. In Japan employment insurance, health insurance, and pensions are public insurances.
- Unemployment benefits by employment insurance is generally conducted in the case that the worker retires and not in case of taking a day off. However, by the Act on Special Financial Support to Deal with Extremely Severe Disasters, exceptional measures to provide benefits to the insurance to workers who take a day off or temporarily leave a job can be conducted. It is necessary to consider the preparedness required to respond these situations before a disaster.
- In regards to health insurance, considering the difficulty to have a health insurance card and money during disasters, measures for victims to be able to receive medical care with insurance by only presenting their name and address should be taken. In addition, health insurance requires 10% to 30% of the cost to be covered by the user in normal times. However, this expense can be exempted in case that the Disaster Relief Act is applied. Dissemination of these facts to medical providers before disasters is necessary for the smooth coordination of payment during disasters.
- Beneficiaries can receive the benefits of their pension even during disasters. It is necessary to consider preparation for this before disasters to be able to provide payment without delay during a disaster.
- In Japan, fire insurance does not apply to damages by earthquakes and/or tsunamis caused by earthquakes. Only earthquake insurance can provide the benefit, depending on the degree of damages. Earthquake insurance is an insurance that is applied for buildings and household belongings. The amount of the benefit is 100% of the contract amount in case of total loss, 50% of contract amount in case of a half loss, and 5% of contact amount in case of partial damage.



4. Delivery System

4.1 ID System

- In Japan, many programs for the protection of affected people are conducted based on damage certificates of household issued by municipal government. Therefore, household ID schemes implemented for social protection and DRM are needed.
- ID for social protection is useful to gain information on the targets of social protection before and after disaster, such as recipients of long-term care insurance. Therefore, standardization of ID strategy among relevant agencies to link ID to taxpayers, recipients of social insurances, and beneficiaries of disaster is effective. In Japan, the number system for social protections and taxes launched in 2016. This links information about social protection and taxes by an identification number. This number will also be linked to a beneficiary ID for smooth disbursement of public services after disasters.

4.2 Targeting

- Earthquake insurance is an optional insurance, so only those who are insured have a right to receive the benefit. It is delivered based on the degree of damage to the house and household belongings (total loss, half loss, and a part of loss). The targets of funds or mutual aid systems created by local governments depend on the guidelines set by those local governments.

4.3 Enrollment

- An official information database on the victims (Hisaiha Daicho) can be developed to assist the protection of the disaster victims comprehensively and effectively. Information such as name, birthday, gender, residence address, the degree of housing damage by official damage certificate (Risai Shomei,) assistance conducted, and necessity of consideration for assistance is registered in the database. The official damage certificate is widely utilized as the standard for providing assistance to affected people such as cash transfers, loans, tax reduction and exemption, postponement of public charges, and in-kind transfers. Making rules for the development and the management of this database during normal times is important.

4.4 Payment Mechanisms

- To deliver social care services appropriately to those who are in need during and after disasters, it is necessary to conduct some of the measures below:
 - To provide social care services at social welfare facilities during disasters to the same people who the services are provided during ordinary time: The retrofit of social welfare facilities for earthquake-resilience is necessary so that the facilities can provide the same services before and after disasters. Subsidies to retrofit the facilities can be received from the National Treasury based on Act for Promotion of the Earthquake Proof Retrofit of Buildings. Capacity building for the staff of these facilities, such as trainings or evacuation drills, are also necessary to respond to those who need social care during disasters. Building relationships with surrounding residents is also important in the case the users of these facilities need to be evacuated.
 - To support the safe and smooth evacuation of the elderly, the disabled, and people who receive care at home on a daily basis: Community members can become supporters for the evacuation of these groups. The promotion of community-based disaster risk management is important to provide additional help during evacuation.



5. Information

5.1 Information on Disaster Risk

- Information on hazards, vulnerability with different characteristics: physical, social, economic, etc., and capacities (resources) are needed to measure the disaster resilience of communities, especially during disasters.
- Mapping this information is useful prior to community-based disaster risk management.
- Based on the Disaster Countermeasures Basic Act, a list of those who need special care for their evacuation during disaster, such as the elderly, the disabled, and infants has been required to be developed since 2013. The list is utilized for evacuation support and confirmation of the listed people's safety. The agreement for the utilization of the list, including privacy protection, should be made before disaster if the list is to be shared with other agencies.

5.2 Information on Social Protection

- The Social Protection Management Information Systems are, most of the time, continuously used, updated, and operationally proven. The Social Protection MIS can be an important DRM tool.
- Information on social protection and its members have different schemes, which are temporal and spatial in scale. Quick information on the number and position of a person who requires social protection, and what support is needed should be clarified from the evacuees during disaster. It is required for livelihood support after disaster to utilize basic information, residence addresses, degree of housing damages, and needed support to help the affected people.
- Information on social protection, such as the recipients of long-term insurance overlays and information on disaster risk prior to disaster, should be used so that effective measures to help people can be conducted.

5.3 Local Information Flow: System, Agent, Process and Challenges

- Disaster risk information and social protection information are gathered and managed from different departments. Therefore, information sharing between different departments with different systems, both pre-disaster and post-disaster, is an issue and challenge. The solution is to link their information using the My Number system launched in 2016.
- Another big issue when it comes to sharing information is privacy. It is necessary to gain prior agreement before sharing private information. An agreement between agencies who share private information should cover confidentiality and utilization of the information.
- It will be difficult to know where affected people move during evacuation. The development of a registration system and database to identify affected people is necessary. To solve this issue, an official information database on victims (Hisaisha Daicho) was developed to assist in their protection. The database of beneficiaries can also be shared with support staff from government and organizations to support the assistance of stakeholders. Otherwise, support staff will find it difficult to identify and locate affected people. The database is developed after disaster, however, making rules for the development and the management of the database during normal times is important to be able to use the database promptly in the time of disaster. It is also important for the database to consult relevant departments, such as the department for collecting data, disseminating necessity information, receiving application for the consensus of sharing information, and developing the information system. Furthermore, it is recommended to have trainings and simulations of the management of the database beforehand.
- It can be effective to have community activities linking together to share information, including indigenous knowledge on disaster risks and the individuals who need support during disasters in the community.



- To provide care services to people who need special help at evacuation shelters/temporary housing: It is necessary to prepare for the needs of the elderly and the disabled, such as wheelchairs, mobile toilets and diapers for the disabled, guide helpers, and sign language interpreters. It is effective to send expert teams composed of social workers and nurses for the implementation of screening and triage of the elderly and the disabled at evacuation shelters. An agreement with associations of these experts should be made before disasters. Also, it is effective to send teams composed of psychiatrists, psychologists, and nurses to evacuation shelters and temporary housing for mental health care. Moreover, the matching of volunteer services, such as salon activities, exchange activities, and door-to-door activities for the prevention of isolation in evacuation shelters and temporary housing should be addressed before disaster.
- The benefits of social insurances, funds, or mutual aid systems created by local governments are delivered depending on their conditions. It is important to disseminate these conditions to relevant agencies before disaster.

Bosai Fukushi Community (BOKOMI) in Kobe City

BOKOMI is the short name of the “Bosai Fukushi Community” (disaster preparedness and welfare community,) where disaster preparedness is linked to the daily welfare of elderly people. It was understood that the needs of the aged community require daily welfare. Therefore, to continue disaster preparedness activities, it was required to link this to welfare activities. BOKOMIs are established based on municipal elementary school districts in Kobe City. The total number of municipal elementary schools is 191. The reason why BOKOMIs are based in elementary school districts is because ‘welfare-community’ groups were already established in each elementary school district and thus, disaster prevention activities could be integrated into these existing groups. BOKOMI is a community-based organization comprised of local residents’ associations, women’s associations, elderly associations, child committee members, youth associations, PTAs, local fire companies, and local business entities. In order to support the activities of BOKOMIs, the Kobe City Government provides various support measures like small funding, materials for community activities, rescue tools, training by fire professionals, etc.

6. Communication

6.1 Communication Management

- Communication management is needed to connect social care needs to external organizations, to share information quickly between the administrative and the affected people, and between stakeholders to provide efficient social care services. Communication systems should be able to effectively reach affected people who need social care.
- Sometimes it will be hard for the elderly to understand administrative documents. It is necessary to have face-to-face communication with them to inform them of important issues. Local dialects can also be troublesome for communication. To address this issue, the establishment of face-to-face communication systems using local social workers and/or local volunteers can be effective.

6.2 Social Network and Social Media

- Many local governments and schools in the country have introduced email distribution systems to deliver emergency information quickly and efficiently.

6.3 Local Communication: Community FM Radio

- Community radio plays an important role in providing custom information for local affected people. During disaster time, it can be used for emergency calls to evacuees. After disaster, it can be used as a communication tool to enhance community activities for the recovery.

6.4 Volunteer and Other Formal/Informal Communication Networks

- Coordination among stakeholders is needed to prevent overlap and in support. Therefore, coordination with volunteer centers, informal health care networks, and other occupations is needed.
- There are volunteer registration systems both at the national and local government level, where interested people can register with their specialties and skills, and expected duration of their volunteer work.

Emergency Broadcasting by Community FM in Disaster Time (AMAMI FM)

On October 20, 2010, Amami city in Kagoshima Prefecture had enormous damages as a result of record breaking heavy rains. Traffic networks, electricity, telephone lines for both landline and mobile, as well as disaster administrative wireless networks were cut by floods or landslides cause by the heavy rain. The municipal government faced difficulty to collecting and disseminating information. In this situation, a community FM radio station “AMAMI FM DAY! WAVE” in the city conducted emergency broadcasting throughout the night by the dispatch of administrative officials beginning on the day the disaster happened. 24 hour broadcasting was conducted for five days. Emails from the audience to Amami FM are usually less than 10 in one day. However, over 700 emails were received from the audience during the five days. Also, during the subsequent recovery and rehabilitation period, the station continued community-based broadcasting.

➤ Rapid Onset

⚡ During Disaster

⬆ High Capacity

Case of Japan

- High capacity countries have better data and information systems, existing schemes, and it is often easier to make a positive impact on the affected people.
- Rapid onset disaster provides a relatively shorter timeslot for quick response, and therefore pre-disaster preparedness is important.
- Depending on the nature of the rapid onset disaster (frequent: typhoon, flood or less frequent: earthquake, volcano, tsunami etc.), people’s perception of the risk is different. This also leads to different response times.
- For certain disasters like volcanic eruptions, the “during disaster” time can be long lasting, sometimes even for months, which often poses complex social scenarios affecting people’s lives and livelihoods. In the case of major earthquakes, there are often large aftershocks (which are equivalent to large earthquakes), which continue for a longer duration.

1. Introduction

1.1 About The Scenario

This scenario describes the issues and experiences of a rapid onset disaster, like an earthquake or tsunami, which is a low probability and high consequence event. This scenario is about the during disaster situation, especially focusing on immediate relief and response issues. The scenario draws experiences from past disasters in Japan.

1.2 Key Issues of Rapid Onset Disaster

The following are some of the key characteristics of a rapid onset disaster.

- Usually rapid onset disasters have a short response time.
- Highly visible impacts in terms of damages (both physical and environmental.)
- In case of frequent disasters, there may be prior experiences. If not so frequent, several new issues appear, and often the people and local governments are left at a loss.
- Urban/rural settings will have different impact due to the differential level of business interruption and livelihood losses. This will also depend on the nature of the hazard (like earthquake or typhoon or flood.)
- Different types of pressure exist in a post-disaster scenario, including media/political pressure for better and faster recovery.

2. Institutional Setting

2.1 Institutions and Legislation

2.1.1 Key DRM legislation linked to social protection

- Disaster risk management (DRM) in Japan is conducted on the basis of the Disaster Countermeasures Basic Act. This act formulates a comprehensive and strategic disaster management system. It also addresses all of the disaster phases of prevention, mitigation, preparedness, and emergency response, as well as recovery and rehabilitation. Social protection in DRM also follows this act.
- The Disaster Relief Act protects the victims of disaster and maintains social order by causing the Central Government to provide needed relief services on an emergency basis, in cooperation with Local Public Entities and the Japan Red Cross, other entities, and the people of Japan. Relief activities noted in the act include the setup of shelters and temporary housing and the distribution of food and drinking water, provided in-kind.

2.1.2 Key institutions / ministries involved in DRR

- In the Cabinet Office, which is responsible for securing cooperation and collaboration among related government organizations in wide-ranging issues, the Director-General for Disaster Management is mandated to undertake the planning of basic disaster management policies and response to large-scale disasters, as well as conducting overall coordination.
- In terms of social protection, while the Ministry of Health, Labor, and Welfare (MHLW) at the central government designs and oversees social policies, local governments are involved in almost every aspect of social policy, except public pensions. However, the Disaster Management Operation Plan for the MHLW mentions that the social welfare council (SWC) and the Japan Red Cross Society are the main responders for volunteer coordination, as well as for providing social services. Japan Pension Service is the main responder for social insurance, and SWC is the main responder for emergency loans to affected families.

- As far as specific laws and acts for the protection of affected people and their livelihood, administrative operations of the Disaster Relief Act and Act on Provision of Disaster Condolence Grant had been conducted by MHLW until 2013. However, these have currently been conducted by the Cabinet Office for comprehensive disaster management, linked to the Disaster Countermeasures Basic Act.

2.1.3 National and local government responsibilities

- According to the Disaster Countermeasures Basic Act, in the event of a disaster occurring, municipalities will primarily be engaged in emergency countermeasures, as they are the closest to residents. Prefectural administration occurs when comprehensive, wider-area measures are necessary. In the event of a large-scale disaster beyond the capability of local public entities, the national government will step in to support the local entity and coordinate mutual support among local entities.
- In particular, the welfare department of the municipality will be needed to set up evacuation shelters and temporary housing, as well as the provision of health and welfare services to those who need assistance.
- Responsibility for the operation of the Disaster Relief Act is held by the prefectural government.



2.2. Finance

2.2.1 Financing schemes

- According to the Disaster Countermeasures Basic Act, as a principle, responsibility for the payment of costs related to disaster preparedness and emergency responses should be on the implementing governments. Necessary costs to be spent after the disaster are budgeted immediately.
- Financial resources for the operation of Disaster Relief Act during from prefectural government. However, if the cost becomes more than 1 million yen, a part of the cost can be contributed by the national government. 1) For less than 2% of the part of the general tax revenue, estimated amount is 50% of that amount. 2) For 2% to 4% of the part of the general tax revenue, estimated amount is 80% of that amount. 3) More than 4% of the part of the general tax revenue, estimated amount is 90% of that amount. Special grant tax measures and/or prefectural bonds issued based on the Disaster Countermeasures Basic Act can be devoted as financial resources by prefecture.

2.2.2 Financial governance

- Financial governance for the operation of the Disaster Relief Act is made by prefectural government. The distribution of food and water to victims can be done by municipal governments and/or volunteers. In this case, the municipal governments or volunteers through the municipal governments can apply for the cost of the distribution, and the prefectural government will carry out the liquidation process. Contribution by the national government is conducted based on an application from prefectural government.

2.3 Capacity and Coordination

2.3.1 Human resources and capacities

- The welfare department of municipalities will be needed to conduct huge business works regarding the setup of evacuation shelters and temporary housing, the provision of health and welfare services to those who need assistance, and more. Additionally, human resources for the response of such huge business endeavors should be considered.

- It is necessary to care for people affected by disaster, as well as who have been provided social care services during normal times. To respond to their needs, the utilization of human resources such as social care service providers, social welfare councils, welfare commissioners, neighborhood associations, voluntary organizations for DRR, firefighting companies for rapid discovery, and social care facilities will be needed.
- Mental healthcare and privacy at evacuation shelters and temporary housing are required. It is needed to increase the number of experts such as public health nurses, psychiatric social workers, clinical psychologists, and human resources related to social welfare. Non-profit organizations and volunteers can be utilized for the management of evacuation shelters, as well as the provision of food, water, and care activities in temporary housing.

2.3.2 Institutional/local government collaboration

- An on-site disaster management headquarters may be set up to promptly coordinate among the affected local entities and collect information and requests from relevant prefectures. The headquarters will conduct the emergency response activities in consideration to the needs for the affected people. Through joint meetings held in collaboration with disaster response headquarters organized by the local entities in the affected areas, the national government and the local entities will coordinate based on their shared awareness. This as the government's closest one-stop contact point for requests from the affected local entities.
- The Disaster Countermeasures Basic Act mentions that local governments should cooperate with their efforts for disaster response. For this to occur, a mutual support agreement between local governments is made, sending support officials upon the request of affected governments. An example is the Regional Support Agreement during Disasters for Prefectures and the Mutual Support Agreement for Disasters by 21 cities.
- The Defense Force starts their disaster relief operations upon request from prefectural governments. Before starting the operation, both parties make an agreement on the contents and the expenses, sharing responsibility for the operation. Generally, the expenses related to the operation are obligated by prefectural government.

- According to the Disaster Management Operation Plan for MHLW, requests based on the mutual support agreement should be done immediately, due to the great needs of affected people after disasters. Costs for their support should be covered by the affected government.
- The Disaster Countermeasures Basic Act also mentions that national and local governments should make an effort to cooperate with volunteers. For the coordination with volunteers during disasters, social welfare councils set up a disaster volunteer center.



Kansai Region Network and Its Disaster Management Plan

The Union of Kansai Governments was established in 2010 to respond to regional administrative issues in the field of disaster risk management (DRM), tourism, culture and sports promotion, industry, medicine, environmental conservation, tests, and licenses. The union consists of seven prefectures and four city governments in Kansai region as of December, 2015. Based on lessons learned from the Kobe Earthquake of 1995 and the East Japan Earthquake and Tsunami of 2011, the Disaster Management Plan prescribes policy and procedure against large-scale disasters by the union. Also, guidelines for providing and receiving support during disasters was developed based on the disaster management plan. The guidelines show implementation systems and procedures to provide and receive support in the fields such as in-kind transfers, dispatch of support staff, evacuation, and temporary housing so that disaster responses can be conducted smoothly in cooperation among member governments of the union, as well as other agencies/organizations. When a large-scale disaster occurs, the union assigns roles for governments. As a rule, support is carried out by assigning a particular affected government using a “counterpart system.” In the Kumamoto Earthquake of 2016, Hyogo Prefecture became a chief and organized a support team to give assistance in the affected prefectures and cities. Hyogo Prefecture became in charge of logistics, education, health and sanitation, and temporary housing. Shiga Prefecture became in charge of volunteers. Tottori Prefecture became in charge of shelter management. Wakayama Prefecture became in charge of rubble processing. Nara and Kyoto Prefectures became in charge of information collection.

3. Instruments

3.1 Cash Transfer

- Cash transfer is the most direct means of assistance, which requires caution at different levels to reduce corruption and enhance transparency and legitimacy. However, the Japanese system of protection of people during disaster is principally by in-kind transfer, based on the Disaster Relief Act.

3.2 In-kind Transfer

- The types of relief activities by in-kind transfer based on Disaster Relief Act include: 1) Provision of accommodations (including emergency temporary housing). 2) Distribution of cooked rice and other foods, as well as supplies of drinking water. 3) Distribution and/or loan of clothing, bedding, and other basic necessities. 4) Medical and natal care. 5) Rescue of disaster victims. 6) Emergency repairs of housing subject to disaster. 7) Distribution and/or loan of funding, equipment, and materials required to maintain livelihoods. 8) Distribution of school supplies. 9) Interment. 10) Other matters including those in preceding sub-paragraphs, as specified by government ordinance.



3.3 Social Care Services

- Providing care services to specific vulnerable groups as children, the elderly, single mother households, and physically and mentally disabled people is done through managing voluntary groups.
- Social care services to protect the elderly or the disabled after disasters include:
 - To support the rapid discovery of the elderly or the disabled who remain at their home. Tsunamis after an earthquake or flood sometimes come soon after the warning. The systemization of support for the elderly and the disabled among community residents is necessary.
 - To respond to the needs of the elderly or the disabled, which increase due to damage to social care facilities, including nursing care facilities, or providing human resources for social care to evacuation shelters.
 - In case that emergency evacuation takes place across a wide area, due to disasters like tsunamis, volcanic eruption, or landslides, the duration of the evacuation will be long. In this situation, careful consideration will be necessary for the evacuees to keep community relationship strong before disasters.
 - To open evacuation shelters with social care facilities for the evacuees. Establishment of consultation systems on the needs of the elderly or the disabled, such as wheelchairs, mobile toilets and diapers for the disabled, guide helpers, and sign language interpreters.
 - To send expert teams composed of social workers and nurses for the implementation of screening and triage of the elderly and the disabled at evacuation shelters.
 - To send teams composed of psychiatrists, psychologists, and nurses for mental health care at evacuation shelters and temporary housing.

Distribution of Rear Cars to Communities for Evacuation Support of the Elderly and the Disabled by Municipality (Owase City)

In Owase city in Mie Prefecture, it is predicted that tsunamis come around 10 minutes after earthquake happens, therefore, quick evacuation is needed by citizens. In particular, it is important to support the elderly and the disabled, due to the short time between the time an earthquake occurs and the time tsunamis come. Consequently, the municipal government of Owase city distributed rear cars to neighborhood associations to support evacuation. The rear cars are utilized to transport vulnerable people to safer places by members of the community.

Evacuation From Prolonged Volcanic Eruptions (Miyakejima Island in 2000)

The volcanic eruptions of Mount Oyama in the Miyakejima Island of Tokyo started on June 26, 2000. At that time, a maximum of 1,857 people evacuated. After that, the eruptions seemed to end, but became active again in July. The evacuations of islanders were repeated each time there was an eruption. Continuous eruptions and mudslides made supplying care services difficult, so the decision to evacuate people in need of home nursing off the island was made on August 23. The next day, elementary and junior high school students were ordered to evacuate the island as well. Finally, the large-scale eruption on August 29 resulted in the decision on September 1 to order all residents to leave the island. Four years and five months had passed till the full-island evacuation order was lifted.

During evacuation, students had to board in a dormitory separated from their parents. It became longer than expected, and it was difficult especially for children in the lower grades of elementary school. As they had to be away from their parents, some children became emotionally unstable, while others became physically unwell or started craving physical contact. However, there were cases where parents had no choice but to leave their children at the dormitory, due to the environment at their own evacuation location, employment issues, and so on. Many of the evacuated elderly people were not familiar with the neighborhood and were perplexed with how to use the public transportation system. Additionally, the large scale apartment complexes, city noise, and lack of relationships with neighbors all contributed to great anxiety among the elderly people.

4. Delivery System

3.4 Role of Insurance Mechanisms

- There can be different types of insurance mechanisms available to apply for after disasters: **1) Employment insurance. 2) Health insurance. 3) Pensions. 4) Life insurance. 5) House/property/asset insurance.** In Japan employment insurance, health insurance, and pensions are public insurances. In regards to health insurance, considering the difficulty to have a health insurance card and money during disasters, measures for victims to be able to receive medical care with insurance by only presenting their name and address should be taken. In addition, health insurance requires 10% to 30% of the cost to be covered by the user in normal times. However, this expense can be exempted in case that the Disaster Relief Act is applied.



4.1 ID System

- ID for social protection is useful to gain information on the targets of social protection before and after disaster, such as recipients of long-term care insurance. Therefore, standardization of ID strategy among relevant agencies to link ID to taxpayers, recipients of social insurances, and beneficiaries of disaster is effective. In Japan, the number system for social protections and taxes launched in 2016. This links information about social protection and taxes by an identification number. This number will also be linked to a beneficiary ID for smooth disbursement of public services after disasters.

4.2 Targeting

- Targeting to provide in-kind transfers based on Disaster Relief Act, including those who evacuate at evacuation shelters, as well as outdoors, in a car, or at a damaged house, is done in the field.

4.3 Enrollment

- Regarding the registration of evacuees, a list of evacuees, including ones at evacuation shelters, as well as at damaged houses, should be developed for the clarification of the number of people who need assistance, such as the provision of food and water. Gathering information on gender, age, and what support is needed is recommended to connect to necessary social care services to the evacuees.

4.4 Payment Mechanisms

- The payment process will be required in the field during disasters, therefore, preparedness and flexibility of the process are both necessary.
- Service delivery should have flexibility. If service delivery is outsourced (example: a public or private payment service provider,) the contract or agreement should consider disaster service delivery provisions, costing, additional capacity, and processing time guarantees.
- The integration of payment mechanisms can be effective, for example, at consolidating the payment of several subsidies through one payment mechanism, improving efficiency and beneficiary experience.

- Regarding in-kind transfer programs provided after disasters, the provision of food and water is delivered at evacuation centers based on the number of evacuees. Providing services to evacuees who are not at evacuation shelters can be solved by registering the list of evacuees, or calling for volunteers and non-profit organizations to support the delivery to evacuees.
- One of the challenges of the provision of social care services is to identify the elderly and the disabled who need care at evacuation shelters/temporary housing without adequate facilities for social welfare services. It is important to conduct a survey and share information on the elderly and the disabled with volunteers, non-profit organizations, local welfare commissioners, and more.
- Affected people have various social protection needs where comprehensive support by multiple experts and agencies can be effective. Establishing one stop services by local governments, social welfare councils, and expert associations allows affected people to receive social protection benefits effectively.
- To supplement social care services, consultation by telephone or email, as well as opening a consultation counter at back and/or field offices can be considered. In addition, delivery services for consultation can be effective for vulnerable affected people who have limitations on their moving.

5. Information

5.1 Information on Disaster Risk

- Based on the Disaster Countermeasures Basic Act, a list of those who need special care for their evacuation during disaster, such as the elderly, the disabled, and infants has been required to be developed since 2013. The list is utilized for evacuation support and confirmation of the listed people's safety. The agreement for the utilization of the list, including privacy protection, should be made before disaster if the list is to be shared with other agencies.

5.2 Information on Social Protection

- The Social Protection Management Information Systems are, most of the time, continuously used, updated, and operationally proven. The Social Protection MIS can be an important DRM tool.
- Information on social protection and its members have different schemes, which are temporal and spatial in scale. Quick information on the number and position of a person who requires social protection, and what support is needed should be clarified from the evacuees during disaster. It is required for livelihood support after disaster to utilize basic information, residence addresses, degree of housing damages, and needed support to help the affected people.
- Information on social protection, such as the recipients of long-term insurance overlays and information on disaster risk prior to disaster, should be used so that effective measures to help people can be conducted.

5.3 Local Information Flow: System, Agent, Process and Challenges

- Disaster risk information and social protection information are gathered and managed from different departments. Therefore, information sharing between different departments with different systems, both pre-disaster and post-disaster, is an issue and challenge. The solution is to link their information using the My Number system launched in 2016.

- Another big issue when it comes to sharing information is privacy. It is necessary to gain prior agreement before sharing private information. An agreement between agencies who share private information should cover confidentiality and utilization of the information.
- It will be difficult to know where affected people move during evacuation. The development of a registration system and database to identify affected people is necessary. To solve this issue, an official information database on victims (Hisaisha Daicho) was developed to assist in their protection. The database of beneficiaries can also be shared with support staff from government and organizations to support the assistance of stakeholders. Otherwise, support staff will find it difficult to identify and locate affected people.
- A local informal community network with local information is effective in disaster time. In particular, an informal network can share information on the situation of affected people who need social care. For instance, informal information on affected people can be shared with supporters who conduct support activities in temporary housing such as social workers, public health nurses, non-profit organizations, and volunteers, leading to useful social care services.

Information System Supporting Affected People Developed by Nishinomiya City Government

In the Great Hanshin-Awaji Earthquake (Kobe Earthquake) of 1995, most of the central area in Nishinomiya city was devastated. Computers and network systems in city hall were also heavily damaged. In the recovery process, the municipality developed an information system for the management of evacuation shelters, housing damages, gienkin donation, etc. to support affected people. This system helped administrative workers to provide public support for recovery and reconstruction for affected people. Based on the experiences and lessons learned, an information system to support affected people was developed as a web system for a widespread use by the municipality. This has been provided to local governments in Japan for free. In addition, since 2013, it has been necessary to make a list of those who need to support in time of evacuation, and to share that information with a list of supporters, based on Disaster Countermeasures Basic Act. Therefore, the municipal government developed geographic information systems highlighting those who need to support during an evacuation. The damage situation can be also found, linking the system with more information to support affected people.

6. Communication

6.1 Communication Management

- Information and communication are key during a disaster. Placing emphasis on proper communication management, the reliability of information, and information sources are crucial.
- Communication management is needed to connect social care needs to external organizations, to share information quickly between the administrative and the affected people, and between stakeholders to provide efficient social care services. Communication systems should be able to effectively reach affected people who need social care.
- Sometimes it will be hard for the elderly to understand administrative documents. It is necessary to have face-to-face communication with them to inform them of important issues. Local dialects can also be troublesome for communication. To address this issue, the establishment of face-to-face communication systems using local social workers and/or local volunteers can be effective.

6.2 Social Networks and Social Media

- Social networks and social media are an effective tool to share the internal information of the affected community with the outside non-affected world. Social media can be used to call for donations and/or aid activities.

Social Media For External Emergency Relief

Shiomi-cho, a town in Kesenuma city was inundated by the tsunami caused by the Great East Japan Earthquake that occurred on March 11, 2011. Evacuees at Kesenuma Central Community Center in the town was isolated. The evacuees included the elderly and many infants from nearby nurseries. The surroundings had become a sea of fire due to oil spills. The Director of “Mother Home”, a municipal support facility for disabled children, sent an email by her mobile phone to her family from the roof of community center. “I am at the roof top of the community center. A sea of fire. Hopeless, but make the best.” This email was forwarded immediately to her eldest son, who lived in London at that time. He then posted on Twitter to call for her emergency relief. The message was disseminated widely by the retweets of many subscribers of Twitter. Finally, Mr. Inose, who was a Vice-Governor of the Tokyo Metropolitan Prefecture, found the message and decided to send the helicopters of the Tokyo Fire Department to the rescue. At 9:30 on March 12, the next day after the earthquake happened, the rescue of evacuees at the roof of the community center was launched. At last, the evacuees were all safely rescued.

6.3 Local Communication: Emergency FM Radio

- Community radio plays an important role in providing custom information for local affected people. During disaster time, it can be used for emergency calls to evacuees. After disaster, it can be used as a communication tool to enhance community activities for the recovery.

Emergency FM

Emergency FM radio stations are established to provide information on evacuees at evacuation centers, the safety of evacuees, the damage of lifelines (electricity, gas, water supplies, and telephone lines), and the distribution of aid materials during disaster. FM radio is also utilized for providing information on support, such as communal kitchens, water supplies and baths, reopening of roads and stores, public services like temporary housing, and gienkin donation after disaster. Rapid setup and smooth management of the radio is very important, as the radio is a means of providing information to affected people to be able to take emergency responses quickly. The process to get permission for setting up the radio is simplified. The only requirement is to inform the authority, the Ministry of Internal Affairs and Communications, in an emergency. The first experience using emergency FM radio was in the Great Hanshin-Awaji Earthquake (Kobe Earthquake). The radio was used in 24 municipalities in the Great East Japan Earthquake and Tsunami.

6.4 Volunteer and Other Formal / Informal Communication Networks

- Coordination among stakeholders is needed to prevent overlap and in support. Therefore, coordination with volunteer centers, informal health care networks, and other occupations is needed.
- As time goes by, in order to respond to the various needs of affected people, collaborative work among stakeholders is necessary. Networking among stakeholders contributes to the promotion of such collaboration.

6.5 Media Relationships

- Media can be both an information provider as well as an information disseminator. Providers of social care services to affected people need to utilize the media to conduct press releases. Active utilization of resources and relationships with the media, such as relationships with magazines is also important.
- In order to widely disseminate official warnings and evacuation information, the use media of is important.
- It is necessary to note that the volume of external aids related to the amount of exposure in the media.

6.6 Social Protection Program Communication Network

- Social protection programs provide regular meetings with beneficiaries in specific places. Harnessing these government-citizen interactions for DRM messaging and certain types of training can prove to be an asset.
- Social protection programs tend to have good cascading networks that can be utilized during an emergency, including regional offices, social workers, volunteers, and beneficiaries.



»» Rapid Onset

☀️ After Disaster

⬆️ High Capacity

Case of Japan

High capacity countries have better data and information systems, existing schemes, and it is often easier to make a positive impact on the affected people.

- Each country existing system has certain level of effectiveness, which needs to be studied for any country-specific operation.
- Rapid onset disaster provides a relatively shorter timeslot for quick response, and therefore pre-disaster preparedness is important.
- Depending on the nature of the rapid onset disaster (frequent: typhoon, flood or less frequent: earthquake, volcano, tsunami etc.), people's perception of the risk is different.
- In most of the low probability, high consequence, rapid onset disasters (like the East Japan Earthquake and Tsunami in 2011), the need for social protection measures is immense, even in case of a high capacity country, like Japan. This requires good coordination between government, non-government, and civil society organizations.

1. Introduction

1.1 About The Scenario

This scenario describes the issues and experiences of a rapid onset disaster, like an earthquake or tsunami, which is a low probability and high consequence event. This scenario describes the post-disaster situation, focusing on recovery phases. This scenario draws experiences from past disasters in Japan, including the Great Hanshin Awaji Earthquake and the East Japan Earthquake and Tsunami.

1.2 Key Issues of Rapid Onset Disaster

The following are some of the key characteristics of a rapid onset disaster.

- Usually rapid onset disasters have a short response time.
- Highly visible impacts in terms of damages (both physical and environmental.)
- In case of frequent disasters, there may be prior experiences. If not so frequent, several new issues appear, and often the people and local governments are left at a loss.
- People's mindset is different based on the nature of the disaster, whether it is frequent or non-frequent. Thus, the level of preparedness may be different.
- Urban/rural settings will have different impact due to the differential level of business interruption and livelihood losses. This will also depend on the nature of the hazard (like earthquake or typhoon or flood.)
- Different types of pressure exist in a post-disaster scenario, including media/political pressure for better and faster recovery.

2. Institutional Setting

2.1 Institutions and Legislation

2.1.1 Key DRM legislation linked to social protection

- Disaster risk management (DRM) in Japan is conducted on the basis of the Disaster Countermeasures Basic Act. This act formulates a comprehensive and strategic disaster management system. It also addresses all of the disaster phases of prevention, mitigation, preparedness, and emergency response, as well as recovery and rehabilitation. Social protection in DRM also follows this act.
- The protection of affected people during and after disasters is conducted based on following laws and acts.
 - A) Disaster Relief Act: This act is to protect victims of disaster and maintain social order by causing the Central Government to provide needed relief services on an emergency basis, in cooperation with Local Public Entities, the Japan Red Cross, other entities, and the people of Japan. Relief activities including shelters and temporary housing, distribution of food, drinking water etc. are provided in-kind.
 - B) Act on Provision of Disaster Condolence Grant: This act provides a disaster condolence grant, as well as a condolence grant for disaster disabilities, and loans for affected people with low income.
 - C) Act on Support for Livelihood Recovery of Disaster Victims: This act provides a grant for livelihood recovery and housing reconstruction for affected people.
 - D) Act on Earthquake Insurance: This act designates insurance in case of earthquakes.
- In the case of huge disasters, financial support measures by the national government to respond to increasing recovery needs are conducted based on the Act on Special Financial Support to Deal with Extremely Severe Disasters. Regarding social protection, exceptions on the provision of employment insurance can be approved. If financial support by the national government will be needed more than the regulation of the act, special financial measures can be enacted.
- A recovery fund enables flexible measures for social protection to affected people can also be established, based on the Local Autonomy Act.

2.1.2 Key institutions / ministries involved

- in the Cabinet Office, which is responsible for securing cooperation and collaboration among related government organizations in wide-ranging issues, the Director-General for Disaster Management is mandated to undertake the planning of basic disaster management policies and response to large-scale disasters, as well as conducting overall coordination.
- In terms of social protection, while the Ministry of Health, Labor, and Welfare (MHLW) at the central government designs and oversees social policies, local governments are involved in almost every aspect of social policy, except public pensions. However, the Disaster Management Operation Plan for the MHLW mentions that the social welfare council (SWC) and the Japan Red Cross Society are the main responders for volunteer coordination, as well as for providing social services. Japan Pension Service is the main responder for social insurance, and SWC is the main responder for emergency loans to affected families.
- As far as specific laws and acts for the protection of affected people and their livelihood, administrative operations of the Disaster Relief Act and Act on Provision of Disaster Condolence Grant had been conducted by MHLW until 2013. However, these have currently been conducted by the Cabinet Office for comprehensive disaster management, linked to the Disaster Countermeasures Basic Act. Administrative operation for the Act on Support for Livelihood Recovery of Disaster Victims and Act on Special Financial Support to Deal with Extremely Severe Disasters is also conducted by the Cabinet Office. National operation based on the Act on Earthquake Insurance is conducted by the Ministry of Finance.

2.1.3 National and local government responsibilities

- According to the Disaster Countermeasures Basic Act, in the event of a disaster occurring, municipalities will primarily be engaged in emergency countermeasures, as they are the closest to residents. Prefectural administration occurs when comprehensive, wider-area measures are necessary. In the event of a large-scale disaster beyond the capability of local public entities, the national government will step in to support the local entity and coordinate mutual support among local entities.

- In particular, the welfare department of the municipality will be needed to set up evacuation shelters and temporary housing, as well as the provision of health and welfare services to those who need assistance. In the Disaster Management Operation Plan for MHLW, human resources for the response to post-disaster responsibilities should be considered.
- Responsibility for the operation of the acts regarding the protection of affected people during and after disasters are as follows:
 - A) Disaster Relief Act: Prefectural governments.
 - B) Act on Provision of Disaster Condolence Grant: Municipal governments.
 - C) Act on Support for Livelihood Recovery of Disaster Victims: Prefectural government.
 - D) Act on Earthquake Insurance: The Ministry of Finance, through insurance companies.

2.2. Finance

2.2.1 Financing schemes

- According to the Disaster Countermeasures Basic Act, as a principle, responsibility for the payment of costs related to disaster preparedness and emergency responses should be fielded by the implementing local governments. Necessary costs to be spent after disaster are budgeted immediately. Also, according to the act, in order to devote the immediate expenses required for disaster response, local governments are supposed to make use of the disaster recovery fund. It can be utilized as a source of revenue for emergency response.
- Financial resources for the operation of acts regarding the protection of affected people during and after disasters are listed below:
 - A) Disaster Relief Act: Financial resources from prefectural government are utilized. However, if the cost becomes more than 1 million yen, a part of the cost can be contributed by the national government. 1) For less than 2% of the part of the general tax revenue, estimated amount is 50% of that amount. 2) For 2% to 4% of the part of the general tax revenue, estimated amount is 80% of that amount. 3) More than 4% of the part of the general tax revenue, estimated amount is

90% of that amount. Special grant tax measures and/or prefectural bonds issued based on the Disaster Countermeasures Basic Act can be devoted as financial resources by prefecture.

B) Act on Provision of Disaster Condolence Grant: Funds for disaster condolence grants and emergency cure grants to victims are contributed by the national government (one-half), prefectural government (one-fourth), and municipal government (one-fourth). Funds for emergency loans to affected families are contributed by the national government (two-thirds) and prefectural government (one-third).

C) Act on Support for Livelihood Recovery of Disaster Victims: This financial resource is a fund donated by prefectural government. Half of the donation comes from the national government, while the remaining comes from prefectural bonds.

D) Act on Earthquake Insurance: Amount of damages by a huge earthquake greater than the amount covered by private insurance companies are born by the national government.

- In case of a shortage of budget from tax revenue, the issuance of government bonds or a reconstruction tax can be introduced to secure the budget for recovery and reconstruction. In the Great East Japan Earthquake and tsunamis, expense burden for the protection of affected people by local governments was enormous. Therefore, the contributed by the national government by the Act on Support for Livelihood Recovery of Disaster Victims was increased to 80% from 50% by the enactment of a Special Financial Measures Law. Also, the law allowed exceptional measures about the exemption from social insurances, such as employment insurance, health insurance, and long-term care insurance.
- For fund acquisition of the recovery fund, local governments issue bonds.
- Gienkin (donation directly distributed to affected people) is collected.

2.2.2 Financial governance

- Financial governance structures for the operation of the acts during and after disasters are listed below:
 - Disaster Relief Act: Financial governance is handled by prefectural government. The distribution of food and water to victims can be done by municipal governments and/or volunteers. In this case, the municipal governments or volunteers through the municipal governments can apply for the costs of the distribution, and the prefectural government will carry out the liquidation process. Contribution by the national government is conducted based on the application of the prefectural government.
 - Act on Provision of Disaster Condolence Grant: After the provision of the grant or loan to affected people, the amount of the grant/loan is contributed by the national government, depending on the application from municipal governments through prefectural government.
 - Act on Support for Livelihood Recovery of Disaster Victims: After the provision of the grant to affected people by the designated support corporation, the amount of the grant is contributed by the national government, depending on the application of the corporation.
 - Act on Earthquake Insurance: The amount of contribution for the earthquake insurance by the national government is determined in the parliament every fiscal year.
- A foundation is established for the operation of recovery funds by donation from local governments. Operation profits are utilized for recovery projects. The process of this operation is as follows: 1) Affected local governments are issued bonds in the undertaking of financial institutions. 2) Funds earned by bond insurance are donated or made an interest-free loan to the recovery fund, which is established as a foundation. 3) The foundation purchases bonds from financial institutions and receives its interest that can be used for recovery projects. 4) Most of the interest is covered by local allocation tax from the national government to local government.
- Gienkin, which is donation directly distributed to affected people, is collected in cooperation with the Red Cross Society, the Central Community Chest Society, and other agencies. There is a case when a donation to affected local governments called as “Furusato Nozei” is used for their recovery projects.

How “Gienkin” (Donations) Are Collected and Distributed

In Japan, if a large-scale disaster occurs, Gienkin, a kind of donation to transfer to affected people, is collected through aid organizations and governments such as the Japanese Red Cross Society, the Central Community Chest Society, local government, TV stations, and more. 100 percent of the donations collected are delivered as fair cash to affected people. As a procedure of its distribution: 1) The committee consisting of the affected prefectural governments, the Japanese Red Cross Society, and mass media is set up to determine how percentages of donations are delivered to each affected prefectural government. 2) A committee in each prefecture is established to discuss the allocation of donations to affected people. 3) The amount of the donation determined by the committee is delivered to each affected prefecture, based on the application by the prefecture. 4) The amount of donations is divided from the affected prefecture to affected municipalities, based on the decision of the committee. 5) Based on the request of affected people, donations are distributed to the affected people from the affected municipalities. The amount of donations delivered to the affected people is decided based on the degree of damages by disaster. In terms of the fair distribution of donations, each municipality can deliver only after the identification of damages. This means, it takes many days before the delivery of donations to the affected people.

Donation System for Local Governments (Furusato Nozei in Japanese)

“Furusato Nozei” is a donation system for local governments introduced in 2009. People can donate to their favorite prefectures and/or municipalities. A part of the donation amount is deducted from their income tax and resident tax. There is a case where a gift of appreciation is delivered from the municipalities to people who donated. An online donation system for Furusato Nozei has been established by each prefecture and/or the private sector. Generally, once a municipality has received a donation, a certification of donation receipt is generated. In the Kumamoto Earthquake of 2016, 37 local governments across the country supported the office works on behalf of donation acceptance. As a result, as of June 14, donations to the affected municipalities of the Kumamoto Earthquake exceeded three billion.

2.3 Capacity and Coordination

2.3.1 Human resources and capacities

- Capacity consists of different issues, including human resources, institutional mechanisms, internal community resilience, external networks, etc. It is important to make a proper assessment of damages and the capacity of stakeholders for prompt and effective response after disasters.
- The welfare department of municipalities will be needed to conduct huge business works regarding the setup of evacuation shelters and temporary housing, the provision of health and welfare services to those who need assistance, and more. Additionally, human resources for the response of such huge business endeavors should be considered.
- It is necessary to care for people affected by disaster, as well as who have been provided social care serves during normal times. To respond to their needs, the utilization of human resources such as social care service providers, social welfare councils, welfare commissioners, neighborhood associations, voluntary organizations for DRR, firefighting companies for rapid discovery, and social care facilities will be needed.
- Mental healthcare and privacy at evacuation shelters and temporary housing are required. It is needed to increase the number of experts such as public health nurses, psychiatric social workers, clinical psychologists, and human resources related to social welfare. Non-profit organizations and volunteers can be utilized for the management of evacuation shelters, as well as the provision of food, water, and care activities in temporary housing. Capacity development opportunities for organizations/volunteers will be also important.
- Collaboration with expert associations that conduct consultation services, like legal advice (Japanese Legal Support Center), mental health advice (mental health centers at prefectures), or advice on human rights (Human Rights Counseling Service by the Ministry of Justice) is an effective way to supplement social services.

3. Instruments

The first three instruments are cash, goods, and services related to social care.

3.1 Cash Transfer

- The protection of affected people during and after disasters by cash transfer is listed below:
 - A) Act on Provision of Disaster Condolence Grant: A maximum of 2 million yen can be provided as disaster condolence grant, while 2.5 million yen can be provided as emergency cure grants to victims. Households whose house is totally collapsed can use an emergency loan up to 3.5 million yen.
 - B) Act on Support for Livelihood Recovery of Disaster Victims: Households whose house is totally collapsed can gain 1 million yen, and whose house is partially collapsed can gain 0.5 million. In addition, households who reconstruct or purchase their own house can gain maximum of 2 million yen.
- Gienkin (donation) is distributed to affected people depending on the degree of the damages by disaster. The amount of distribution is decided based on the total amount collected and the number of affected households.
- Public assistance by cash transfer continues after disaster too. Beneficiaries can receive public assistance during evacuation, without a decrease in the amount if the beneficiaries received Gienkin (donation) in parallel. Affected people who have financial difficulties due to damages by disaster can apply for public assistance at the place evacuated.
- As a cash-for-work program to people affected by the Great East Japan Earthquake and Tsunami (EJET), the Emergency Job Creation Program (fund) was utilized. The program launched in 2008 with a limited period as a measure to expand employment. Beneficiaries of the original program had not been allowed to extend their contract with their employee for more than one year, but the program after the EJET allowed for renewal of the contract period past one year. The program achieved success as emergency employment, however, there was also a side effect of short-term and temporary employment. As a result, employment security became a challenge after the end of the program.

Cash Transfer System for Reconstruction of Individual Housing in Japan

In the Great Hanshin-Awaji Earthquake (Kobe Earthquake) of 1995, many people were not able to take their insurance, fix their house, nor recover their livelihood after the disaster, due to a lack of income and assets. Furthermore, the amount of Gienkin (a kind of donations distributed to affected households) would not be over several hundred of thousand yen per household. Due to this issue, the necessity of a minimum safety net to affected people was pointed out. Therefore, the Natural Disaster Victims Relief Law that enables cash transfers to affected households as support for their commodities by maximum of one million yen was enacted in 1999. On the other hand, based on the argument that there would be a problem with the expenditure of public funds on personal property, no system of cash transfer for housing reconstruction was available at that time. However, support systems for housing reconstruction which aimed to support the repair and reconstruction of houses was created in 2004. This system supports measures ensuring stable residences post-disaster. As a result, subsidies of up to two million yen for housing reconstruction could be accepted. Meanwhile, the Hyogo prefectural government affected by the Kobe Earthquake launched a new Housing Reconstruction Mutual Aid System in 2005. Housing owners who subscribed the mutual aid system with 5,000 yen per year as its charge could gain six million yen for the reconstruction of housing damaged by disasters.

2.3.2 Institutional/local government collaboration

- An on-site disaster management headquarters may be set up to promptly coordinate among the affected local entities and collect information and requests from relevant prefectures. The headquarters will conduct the emergency response activities in consideration to the needs for the affected people. Through joint meetings held in collaboration with disaster response headquarters organized by the local entities in the affected areas, the national government and the local entities will coordinate based on their shared awareness. This is the government's closest one-stop contact point for requests from the affected local entities.
- The Disaster Countermeasures Basic Act mentions that local governments should cooperate with their efforts for disaster response. For this to occur, a mutual support agreement between local governments is made, sending support officials upon the request of affected governments. An example is the Regional Support Agreement during Disasters for Prefectures and the Mutual Support Agreement for Disasters by 21 cities.
- According to the Disaster Management Operation Plan for MHLW, requests based on the mutual support agreement should be done immediately, due to the great needs of affected people after disasters. Costs for their support should be covered by the affected government.
- The Disaster Countermeasures Basic Act also mentions that national and local governments should make an effort to cooperate with volunteers. For the coordination with volunteers during disasters, social welfare councils set up a disaster volunteer center.

Kansai Region Network and Its Disaster Management Plan

The Union of Kansai Governments was established in 2010 to respond to regional administrative issues in the field of disaster risk management (DRM), tourism, culture and sports promotion, industry, medicine, environmental conservation, tests, and licenses. The union consists of seven prefectures and four city governments in Kansai region as of December, 2015. Based on lessons learned from the Kobe Earthquake of 1995 and the East Japan Earthquake and Tsunami of 2011, the Disaster Management Plan prescribes policy and procedure against large-scale disasters by the union. Also, guidelines for providing and receiving support during disasters was developed based on the disaster management plan. The guidelines show implementation systems and procedures to provide and receive support in the fields such as in-kind transfers, dispatch of support staff, evacuation, and temporary housing so that disaster responses can be conducted smoothly in cooperation among member governments of the union, as well as other agencies/organizations. When a large-scale disaster occurs, the union assigns roles for governments. As a rule, support is carried out by assigning a particular affected government using a "counterpart system." In the Kumamoto Earthquake of 2016, Hyogo Prefecture became a chief and organized a support team to give assistance in the affected prefectures and cities. Hyogo Prefecture became in charge of logistics, education, health and sanitation, and temporary housing. Shiga Prefecture became in charge of volunteers. Tottori Prefecture became in charge of shelter management. Wakayama Prefecture became in charge of rubble processing. Nara and Kyoto Prefectures became in charge of information collection.

3.2 In-kind Transfer

- The types of relief activities by in-kind transfer based on Disaster Relief Act include: 1) Provision of accommodations (including emergency temporary housing). 2) Distribution of cooked rice and other foods, as well as supplies of drinking water. 3) Distribution and/or loan of clothing, bedding, and other basic necessities. 4) Medical and natal care. 5) Rescue of disaster victims. 6) Emergency repairs of housing subject to disaster. 7) Distribution and/or loan of funding, equipment, and materials required to maintain livelihoods. 8) Distribution of school supplies. 9) Interment. 10) Other matters including those in preceding subparagraphs, as specified by government ordinance.

3.3 Social Care Services

- Social care services to protect the elderly or the disabled after disasters include:
 - To support the rapid discovery of the elderly or the disabled who remain at their home.
 - To respond to the needs of the elderly or the disabled, which increase due to damage to social care facilities, including nursing care facilities, or providing human resources for social care to evacuation shelters.
 - To open evacuation shelters with social care facilities for the evacuees. Establishment of consultation systems on the needs of the elderly or the disabled, such as wheelchairs, mobile toilets and diapers for the disabled, guide helpers, and sign language interpreters.
 - To send expert teams composed of social workers and nurses for the implementation of screening and triage of the elderly and the disabled at evacuation shelters.
 - To conduct salon activities, exchange activities, and door-to-door activities for the prevention of isolation in evacuation shelters and temporary housing.
 - To send teams composed of psychiatrists, psychologists, and nurses for mental health care at evacuation shelters and temporary housing.
 - To establish support facilities to provide comprehensive support activities to the elderly in temporary housing such as consultation, day service, and more.

- For orphans by disasters, interview of the orphans and discussion on their care with their relatives is done by the Child Consultation Center. In the case where relatives have difficulty caring for them, a foster parent system or family home system will be utilized.

Social Care Services by Non-Profit Organization (Nishi Suma Danran)

The Welfare Division of the Union of Tukimiyama Neighborhood Associations in Suma ward, Kobe city launched “Freai Lunch”, a kind of lunch meeting targeting the elderly, and “Welfare Class” to learn elderly care. “Welfare Network Nishisuma Danran” was established in 1998 by 30 people. They responded to the call for the establishment of a Non-Profit Organization which supported home welfare, aiming help the elderly live through support activities based on the effects of the Great Hanshin-Awaji Earthquake of 1995. Service in the field of home welfare by Nishisuma Danran is not free of charge. Contents of the service include of cleaning, gardening, rough work, cooking, watching, hearing, assistance to move out, trips to the hospital, and feeding. The service charge of Nishisuma Danran is 800 yen per hour. 75% of the total charge is delivered to actual workers, and 25% of the total charge will be income of the organization.

3.4 Role of Insurance Mechanisms

- There can be different types of insurance mechanisms available to apply for after disasters: 1) Employment insurance. 2) Health insurance. 3) Pensions. 4) Life insurance. 5) House/property/asset insurance. In Japan employment insurance, health insurance, and pensions are public insurances.
- Unemployment benefits by employment insurance is generally conducted in the case that the worker retires and not in case of taking a day off. However, by the Act on Special Financial Support to Deal with Extremely Severe Disasters, exceptional measures to provide benefits to the insurance to workers who take a day off or temporarily leave a job can be conducted. In the East Japan Earthquake and Tsunami (EJET), increasing the number of days of benefit payment by 60 days (from the original 60 days to 120 days) was provided by the Special Financial Measures Law. Further, workers who lost or suspended their jobs due to the EJET in the coastal areas of affected prefectures could increase the number of days of benefit payment by 90 days more than the extended days (from the original 60 days to 210 days).
- Exemption of health insurance charges was adopted in the EJET by the Special Financial Measures Law.
- Exemption or postponement of pension charges was adopted in the EJET by the Special Financial Measures Law, in case that the worker lost their job due to the disaster.
- In Japan, fire insurance does not apply to damages by earthquakes and/or tsunamis caused by earthquakes. Only earthquake insurance can provide the benefit, depending on the degree of damages. Earthquake insurance is an insurance that is applied for buildings and household belongings. The amount of the benefit is 100% of the contract amount in case of total loss, 50% of contract amount in case of a half loss, and 5% of contact amount in case of partial damage.



4. Delivery System

4.1 ID System

- In Japan, many programs for the protection of affected people are conducted based on damage certificates of household issued by municipal government. Therefore, household ID schemes implemented for social protection and DRM are needed.
- ID for social protection is useful to gain information on the targets of social protection before and after disaster, such as recipients of long-term care insurance. Therefore, standardization of ID strategy among relevant agencies to link ID to taxpayers, recipients of social insurances, and beneficiaries of disaster is effective. In Japan, the number system for social protections and taxes launched in 2016. This links information about social protection and taxes by an identification number. This number will also be linked to a beneficiary ID for smooth disbursement of public services after disasters.

4.2 Targeting

- Targeting to provide cash and in-kind transfers as listed below. Targeting of recipients at shelters and damaged houses during disaster are identified by registration in the field, and targeting of recipients after disaster are identified by the registration of official damage certificates that become a base of various public services to affected households.
 - A) Disaster Relief Act: Those who evacuate at evacuation shelters, as well as outdoors, in a car, or at a damaged house can be targeted as a recipient of food and water during disaster. Targeting the provision of temporary housing is generally designated to people whose house was totally collapsed or burned, and who have not reconstructed with their means. However, an extension of the targeting to include people whose house had partially collapsed was conducted in the Great East Japan Earthquake and Tsunami (EJET).
 - B) Act on Provision of Disaster Condolence Grant: Targets for the disaster condolence grant include people who lost their spouse, children, parent, grandchildren, grandparents, or brothers and sisters due to disaster. Targets of the emergency cure grants are people who

have become disabled due to disaster. Targets of the emergency loan to affected families include families whose house or household belongings were damaged, however, an income cap is set.

C) Act on Support for Livelihood Recovery of Disaster Victims: Cash for assistance is delivered depending on the degree of damages to the house (total collapse, half collapse, and partial collapse) or the method of reconstruction of the house.

D) Act on Earthquake Insurance: This benefit is delivered depending on the degree of damage to the house and household belongings (total loss, half loss, and a part of loss.)

4.3 Enrollment

- Preparedness and flexibility of the enrollment process are needed. The process will be required in the field during disasters, and can be done at the back-office before or after disaster.
- Regarding the registration of evacuees, a list of evacuees, including ones at evacuation shelters, as well as at damaged houses, should be developed for the clarification of the number of people who need assistance, such as the provision of food and water. Gathering information on gender, age, and what support is needed is recommended to connect to necessary social care services to the evacuees.
- Official damage certificates (Risai Shomei) are issued upon the request of affected households as the assessment finishes. Utilization of public relations in the municipality will be effective for the smooth issuance of official damage certificates. Issuance at multiple venues or evacuation centers can be considered, depending on the situation of affected people.
- An official information database on the victims (Hisaiha Daicho) can be developed to assist the protection of the disaster victims comprehensively and effectively. Information such as name, birthday, gender, residence address, the degree of housing damage, assistance conducted, and necessity of consideration for assistance is registered in the database.

Official Acknowledgment of Housing Damages and Its Certificate

The official acknowledgment of damages (Higainintei in Japanese) acknowledges the degree of damage (destroyed, partially destroyed, etc.) of a house by disasters such as earthquakes or storms, and is carried out by municipalities. The official damage certificate (Risaihomei in Japanese) is issued to affected households based on acknowledgment of the result. The degree of damage of the house is standardized by the national government and conducted based on the rate of losses, using a percentage of the total economic loss of housing materials such as roofs, walls, etc.

In general four categories include, “completely destroyed,” “large-scale partial destruction,” “partially destroyed,” and “does not lead to the partially destroyed.” The acknowledgment is carried out by four categories, “total collapse,” “large collapse,” “half collapse,” and “less than half collapse.” The methodology of the assessment is standardized by the national government. Concretely, damages of housing materials such as an incline of the house, losses of roofs, walls, etc. are investigated by a group with more than two municipal officials who are trained as an investigator. The official damage certificate is widely utilized as the standard for the application to assistance to affected people such as cash transfers, loans, reduction and exemption, postponement, and in-kind transfers.

4.4 Payment Mechanisms

- Payment of cash transfer programs (disaster condolence grants, emergency cure grants, grants for livelihood recovery and housing reconstruction, and gienkin donation) are delivered by bank transfer upon the request of a beneficiary to the affected municipality after the issuance of an official damage certificate.
- Regarding in-kind transfer programs provided after disasters, the provision of food and water is delivered at evacuation centers based on the number of evacuees. Providing services to evacuees who are not at evacuation shelters can be solved by registering the list of evacuees, or calling for volunteers and non-profit organizations to support the delivery to evacuees.
- Temporary housing is delivered to affected households who meet the conditions. Selection of residents is usually conducted by lottery. As a result, social relationships built before disaster cannot be kept in temporary housing complexes, therefore, social care services to prevent isolation or death of vulnerable residents are needed.

- One of the challenges of the provision of social care services is to identify the elderly and the disabled who need care at evacuation shelters/ temporary housing without adequate facilities for social welfare services. It is important to conduct a survey and share information on the elderly and the disabled with volunteers, non-profit organizations, local welfare commissioners, and more.
- Affected people have various social protection needs where comprehensive support by multiple experts and agencies can be effective. Establishing one stop services by local governments, social welfare councils, and expert associations allows affected people to receive social protection benefits effectively.

To supplement social care services, consultation by telephone or email, as well as opening a consultation counter at back and/or field offices can be considered. In addition, delivery services for consultation can be effective for vulnerable affected people who have limitations on their moving.

5. Information

4.5 Grievance Redress Mechanism

- Protection programs after disaster are affected by the result of an official damage certificate. Acceptance of re-assessment for the official damage certificate can be done in the case that an affected household is not satisfied with the result of the first assessment. The affected household should be informed with the result of the re-assessment. Immediate response on the re-assessment can leave the affected household with a good impression. A flexible response on re-assessment, including involving the affected household and/or engineers, can be effective to convince the affected household of the outcome.

5.1 Information on Vulnerable People

- Based on the Disaster Countermeasures Basic Act, a list of people who need special care for their evacuation during disaster, such as the elderly, the disabled, and infants has been developed since 2013. The list will be utilized for evacuation support and confirmation of the people's safety. The agreement for utilization, including privacy protection, should be made before disaster if the list is to be shared with other agencies.

5.2 Local Information Flow: System, Agent, Process, and Challenges

- Disaster risk information and social protection information are gathered and managed from different departments. Therefore, information sharing between different departments with different systems, both pre-disaster and post-disaster, is an issue and challenge. The solution is to link their information using the My Number system launched in 2016.
- Another big issue when it comes to sharing information is privacy. It is necessary to gain prior agreement before sharing private information. An agreement between agencies who share private information should cover confidentiality and utilization of the information.
- It will be difficult to know where affected people move during evacuation. The development of a registration system and database to identify affected people is necessary. To solve this issue, an official information database on victims (Hisaisha Daicho) was developed to assist in their protection. The database of beneficiaries can also be shared with support staff from government and organizations to support the assistance of stakeholders. Otherwise, support staff will find it difficult to identify and locate affected people.
- A local informal community network with local information is effective in disaster time. In particular, an informal network can share information on the situation of affected people who need social care. For instance, informal information on affected people can be shared with supporters who conduct support activities in temporary housing such as social workers, public health nurses, non-profit organizations, and volunteers, leading to useful social care services.

- It can be effective to have community activities linking together to share information, including indigenous knowledge on disaster risks and the individuals who need support during disasters in the community.

Semi-formal Information Flow (Exchanges in Kesenuma)

In Kesenuma city, one of the cities severely damaged by the Great East Japan Earthquake and Tsunami (EJET), 90 temporary housing complexes were constructed for the affected people who had lived and had lost their house in the city. Selection of the residents at each complex was conducted by the lottery, so the residents did not know each other. Thus, an activity for community building in the temporary housing complexes was needed. The municipal government of Kesenuma city contracted with the Kesenuma Reconstruction Association (KRA), a local non-profit organization aiming to have an activity for the recovery of Kesenuma, for this community building in temporary housing complexes, utilizing the Emergency Job Creation Program. KRA created four groups with 20 staff members to conduct communal exchange activities at least twice a month in each temporary housing complex. Also, KRA attended the coordination meeting that was held with the municipal government, social welfare council, and non-profit organizations every Friday. In the meeting, KRA shared informal information on the needs of residents in temporary housing that had been clarified by the exchange activities, allowing matching between the needs and seeds of social care services conducted by the government or aid organizations.



6. Communication

6.1 Communication Management

- Communication management is needed to connect social care needs to external organizations, to share information quickly between the administrative and the affected people, and between stakeholders to provide efficient social care services. Communication systems should be able to effectively reach affected people who need social care.
- Sometimes it will be hard for the elderly to understand administrative documents. It is necessary to have face-to-face communication with them to inform them of important issues. Local dialects can also be troublesome for communication. To address this issue, the establishment of face-to-face communication systems using local social workers and/or local volunteers can be effective.

6.2 Social Networks and Social Media

- Social networks and social media are an effective tool to share the internal information of the affected community with the outside non-affected world. Social media can be used to call for donations and/or aid activities.

Social Media For External Emergency Relief

Shiomi-cho, a town in Kesennuma city was inundated by the tsunami caused by the Great East Japan Earthquake that occurred on March 11, 2011. Evacuees at Kesennuma Central Community Center in the town was isolated. The evacuees included the elderly and many infants from nearby nurseries. The surroundings had become a sea of fire due to oil spills. The Director of “Mother Home”, a municipal support facility for disabled children, sent an email by her mobile phone to her family from the roof of community center. “I am at the roof top of the community center. A sea of fire. Hopeless, but make the best.” This email was forwarded immediately to her eldest son, who lived in London at that time. He then posted on Twitter to call for her emergency relief. The message was disseminated widely by the retweets of many subscribers of Twitter. Finally, Mr. Inose, who was a Vice-Governor of the Tokyo Metropolitan Prefecture, found the message and decided to send the helicopters of the Tokyo Fire Department to the rescue. At 9:30 on March 12, the next day after the earthquake happened, the rescue of evacuees at the roof of the community center was launched. At last, the evacuees were all safely rescued.

6.3 Local Communication: Emergency FM Radio

- Community radio plays an important role in providing custom information for local affected people. During disaster time, it can be used for emergency calls to evacuees. After disaster, it can be used as a communication tool to enhance community activities for the recovery.

Emergency FM

Emergency FM radio stations are established to provide information on evacuees at evacuation centers, the safety of evacuees, the damage of lifelines (electricity, gas, water supplies, and telephone lines), and the distribution of aid materials during disaster. FM radio is also utilized for providing information on support, such as communal kitchens, water supplies and baths, reopening of roads and stores, public services like temporary housing, and gienkin donation after disaster. Rapid setup and smooth management of the radio is very important, as the radio is a means of providing information to affected people to be able to take emergency responses quickly. The process to get permission for setting up the radio is simplified. The only requirement is to inform the authority, the Ministry of Internal Affairs and Communications, in an emergency. The first experience using emergency FM radio was in the Great Hanshin-Awaji Earthquake (Kobe Earthquake). The radio was used in 24 municipalities in the Great East Japan Earthquake and Tsunami.

6.4 Volunteer and Other Formal/Informal Communication Networks

- Coordination among stakeholders is needed to prevent overlap and in support. Therefore, coordination with volunteer centers, informal health care networks, and other occupations is needed.
- As time goes by, in order to respond to the various needs of affected people, collaborative work among stakeholders is necessary. Networking among stakeholders contributes to the promotion of such collaboration.

Kesennuma NPO/NGO Network

Kesennuma city is one of the cities affected by the Great East Japan Earthquake and Tsunami (EJET.) Their municipal government coordinated relief services with social welfare councils, fire departments, police departments, the Defense Force, and non-profit organizations. Kesennuma’s NPO/NGO network, created from the coordination of the municipal government, held a coordination meeting every Friday. The network functioned for the coordination of relief activities such as the provision of relief materials and a communal kitchen soon after the EJET. The network also worked creating collaboration among stakeholders and sharing information on challenges found by their activities. The network is an optional conference body which does not have regulation or a budget. Distribution materials for the meeting are prepared by participant organizations. Every meeting is held face-to-face, allowing common understanding between stakeholders. The network became a window to receive new external aid organizations, which could then gain local information on support activities for the affected people and communities.

6.5 Media Relationship

- Media can be both an information provider as well as an information disseminator. Providers of social care services to affected people need to utilize the media to conduct press releases. Active utilization of resources and relationships with the media, such as relationships with magazines is also important.




Rapid Onset

Before Disaster

High Capacity

Case of Mexico

- Depending on the nature of the rapid onset disaster (frequent: typhoon, flood or less frequent: earthquake, volcano, tsunami etc.), people's perception of the risk is different.
- The existence of disaster risk management and proper governance systems assist preparedness for both social protection and disaster risk reduction.
- It is important to identify and recognize the change agents in the community (civil society or volunteer organizations) to promote pre-disaster preparedness activities.
- The country's disaster management system and social protection system may have different levels of development.

1. Introduction

1.1 About The Scenario

The scenario is a description of the formal and functional relationship of the Disaster Relief Management (DRM) and the Social Protection System (SPS) in Mexico in pre-disaster situation, especially focusing on risk mitigation.

Relevant Country Facts

- Mexico is exposed to a wide variety of geological and hydro-meteorological hazards due to its diverse geography, including earthquakes, hurricanes, floods, droughts, volcanoes, tsunamis, wildfires, and landslides. It is ranked as one of the world's 30 most exposed countries to three or more types of natural hazards (World Bank, 2012).
- The country has a federal system comprised of 32 states and 2,457 municipalities, which is characterized by a significant level of de facto centralization. The Federal Government collects approximately 90% of the revenue and is directly responsible for 65% of the total public sector spending.
- Mexico DRM-related activities are highly dependent on the government, as Mexico has a weak civil society & volunteer sector (0.4% share of the economically active population, compared to Japan with 4.2%, or the US with 9.8%).
- Mexico's DRM framework and its social protection system have separately gone through significant improvement in the last 20 years, having, in some cases, presented innovations that have been emulated in other countries (See Figure 1).
- During the past two decades, over 80% of total economic losses from weather-related disasters occurred in the agricultural sector.

1.2 Key Issues of Rapid Onset Disaster

- Usually rapid onset disasters have a short response time.
- Highly visible impacts in terms of damages (both physical and environmental.)
- In case of frequent disasters, there may be prior experiences. If not so frequent, several new issues appear, and often the people and local governments are left at a loss.
- People's mindset is different based on the nature of the disaster, whether it is frequent or non-frequent. Thus, the level of preparedness may be different.
- Urban/rural settings will have different impact due to the differential level of business interruption and livelihood losses. This will also depend on the nature of the hazard (like earthquake or typhoon or flood.)
- Different types of pressure exist in a post-disaster scenario, including media/political pressure for better and faster recovery.

2. Institutional Setting

2.1 Institutions and Legislation

2.1.1 Key DRM legislation linked to social protection

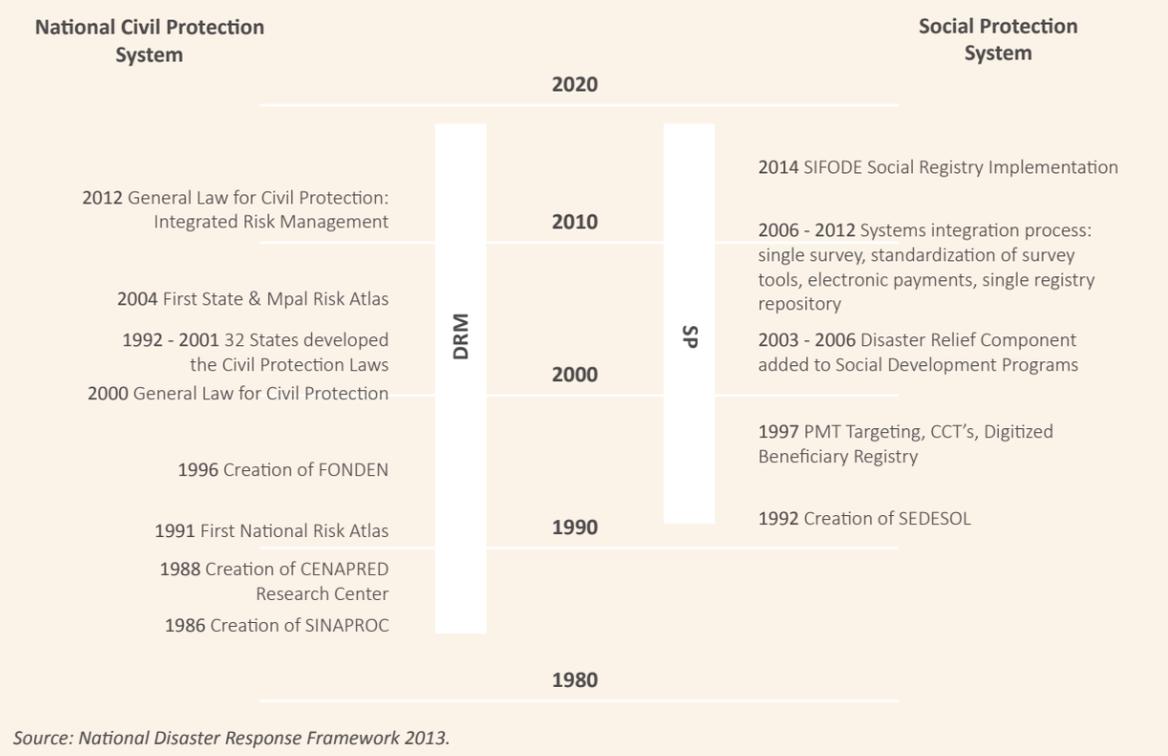
- The official name of Mexico’s DRM framework is the National Civil Protection System (*Sistema Nacional de Protección Civil*, SINAPROC). The current National Civil Protection System has its legal basis in the General Law for Civil Protection. The law has a comprehensive approach, addressing all disaster phases including risk identification, prevention, mitigation, preparedness, emergency response, recovery, and reconstruction.
- Fund for Natural Disasters (FONDEN) Operating Rules:¹ FONDEN was established in 1996 as a budgetary tool through which federal funds were annually allocated for expenditure on post-disaster response. Since then, FONDEN has evolved significantly. Changes to its operating rules and procedures have improved and the focus has shifted from post-disaster funding to a comprehensive disaster management fund.
- Natural Disaster Prevention Fund Program Operational Rules (*Fondo para la Prevención de Desastres Naturales*, FOPREDEN): One of FONDEN’s two major budget instruments used to support local governments to implement disaster preventive projects. Its creation in 2003 reflects a change in the country’s DRM strategy away from a reactive disaster management system focused on ex-post financing to an increasingly proactive system that promotes ex-ante prevention.²
- Line Ministries Operating Rules:
 - A) Component for the Attention of Natural Disasters (Componente para la Atención a Desastres Naturales para el Sector Agropecuario, CADENA) Operating Rules: CADENA catastrophe insurance is a social safety net for small-scale farmers in Mexico. It was launched in 2003 under the Ministry of Agriculture, Livestock, and Fisheries (SAGARPA) and it uses macro-level catastrophe climatic agricultural index products as a social safety net product for small subsistence farmers for whom commercial crop insurance is not necessarily an appropriate or cost-effective mechanism.³
 - B) Temporary Employment Program (*Programa de Empleo Temporal*, PET) Operating Rules: PET is a cash for work program providing temporary transfers in exchange for labor in community projects to unemployed or vulnerable individuals. PET has a specific catalogue of sub-projects and thematic purposes from which executing agencies can choose. In 2009, PET introduced a disaster-prevention sub-project category called *actions to mitigate and prevent the impact of climate change*. These include small flood protection infrastructure and landslide prevention infrastructure, as well as disaster risk management education (under a social participation theme).⁴

National Civil Protection System

The SINAPROC is defined as the organic sum of structures, functional relationships, methods, norms, policies, instruments, procedures, services, and actions established among the agencies of the three levels of government, civic society, as well as private enterprises with the objective of coordinating disaster relief activities.

The objective of the SINAPROC is protect the individual, society, and the environment in relation to the risk and dangers posed by disruptive events and the vulnerability caused by natural and anthropogenic phenomenon in short and long run, through an integrative risk management framework, as well as developing citizen’s capacity to adapt and recover from disaster (DOF 2012).

Comparative Evolution of Mexico’s Civil Protection and Social Protection Systems



1. “Operating Rules” in Mexico are updated once a year and published in the Federal Official Gazette. These rules normally describe the origin of funds, the types of subsidies, the eligible expenditure categories, eligible executing agencies, and transparency principles, among other things.
 2. (OECD, 2013.)
 3. (World Bank, 2013.)
 4. (World Bank, 2013.)

2.1.2 Key institutions/ministries involved

- Mexico is a federal country with three levels of government: federal, state, and municipal. Organizing the complex national civil protection system and assuring communication and collaboration under this federal structure is the responsibility of the Ministry of the Interior (*Secretaría de Gobernación, SEGOB*).
- National Water Commission (*Comisión Nacional del Agua, CONAGUA*): CONAGUA is an administrative, normative, technical, consultative, and decentralized agency of the Ministry of the Environment and Natural Resources (SEMARNAT). CONAGUA is responsible for administrating national water, management, and control of the hydrologic system. This agency, through several national projects, leads the efforts to mitigate hydro-meteorological risks, such as flooding and tropical cyclones.
- National Center for Disaster Prevention (*Centro Nacional de Prevención de Desastres, CENAPRED*): This center was created in 1988 with the economic and technical support of the Mexican government. The Center's objective is to improve the country's resilience by conducting research, monitoring natural phenomenon, educating people, and disseminating civil protection culture.⁵
- Ministry of Agrarian, Territorial and Urban Development (*Secretaría de Desarrollo Agrario, Territorial y Urbano, SEDATU*): This Ministry is of recent creation. It was established in 2013 and is directly responsible for the Risk Prevention for Human Settlements Program.
- Ministry of Agriculture, Livestock, and Fisheries (*Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación, SAGARPA*): This ministry is responsible for the CADENA program.
- Ministry of Social Development (*Secretaría de Desarrollo Social, SEDESOL*): SEDESOL is responsible for the Temporary Employment Program.

2.2 Finance

2.2.1 Financing schemes

- According to the General Law for Civil Protection, local governments are responsible for financing and implementing disaster preparedness and mitigation projects. To achieve this, the law promotes the creation of a local civil protection fund and the adaptation of risk transferring mechanisms.

- Local Civil Protection Fund: Article 66 of the General Law for Civil Protection states that each state will create and manage a State Civil Protection Fund, with the objective of training, equipping, and preparing local governments' civil protection systems.⁶
- Risk transfer mechanisms at the local level: Article 88 of the General Law for Civil Protection establishes that states must propose and utilize risk transferring mechanisms by hiring insurance schemes or through other financial tools.
- Mexico's main mechanism for disaster risk financing is FONDEN, which finances the cost of reconstruction and repairs to public infrastructure and low-income households. According to Mexico's Federal Law on Budget and Treasury Responsibility (Article 37), the annual budget must allocate at least 0.4% of the total programmable spending to disaster financing.⁷ FONDEN is composed of two complementary budget instruments: FONDEN Program for Reconstruction and Natural Disaster Prevention Fund Program (*Fondo para la Prevención de Desastres Naturales, FOPREDEN*).
- Natural Disaster Prevention Fund Program (*Fondo para la Prevención de Desastres Naturales, FOPREDEN*): This fund provides financial support to state and municipal projects related to three main areas related to disaster prevention: risk assessment (e.g. risk atlas), risk reduction (e.g. early warning systems and small flood protection infrastructure), and capacity building on disaster prevention (e.g. educational materials).
- The CADENA program is funded through the annual federal and state budgets. The executing agencies for this program are the state-governments, through their respective rural development ministry. States interested in providing the CADENA catastrophe insurance scheme will co-finance 10% of the insurance premium for municipalities categorized as marginalized and 20% for all the rest of the municipalities. The federal government funds the rest of the insurance premium cost.
- The PET program is funded through the federal annual budget. In the beginning of each fiscal year, SEDESOL allocates each state an amount based on a specific formula (which uses population, marginalization, unemployment, etc.). The state government can choose to add to the PET budget (normally 20 to 30%) creating a larger pool of resources from which local executing agencies can draw resources from, in a competitive grant process.

2.2.2 Financial governance

- The use of disaster funds is carefully regulated through FONDEN's operating rules and guidelines, which are also published in the Official Federal Gazette.
- Transparency and accountability have been further improved through regular updating of FONDEN's operating rules, reflecting its capacity to take into account the previous fiscal year's feedback. States do not have direct access to federal resources for preventive projects. These resources are available through the FOPREDEN trust, which pays out directly to specific service providers. The FOPREDEN trust is co-managed by SEGOB and the Ministry of Finance (*Secretaría de Hacienda y Crédito Público, SHCP*). The fiduciary of the FONDEN trust is the state-owned development bank BANOBRAS. It disperses approved expenditures to businesses hired by state entities in accordance with a predefined work plan and only after the presentation of the specific invoice.⁸
- The expenditure for disaster prevention projects does not fall under the category of force majeure spending, thus it is subject to the procurement procedures established under the Law for Acquisitions, Leasing, and Services for the Public Sector, as well as state level procurement laws.

2.3 Capacities and Coordination

2.3.1 Human resources and capacities

- Disaster prevention capacity is highly concentrated at the federal government level. This is the result of the centralized/top-down institutional building process that characterized Mexican government during most of the twentieth century.
- In terms of risk mitigation, civil construction codes are an exclusive function of municipalities. A recent OECD study found that a significant amount of municipalities do not have sufficient resources to produce the civil construction codes, leading to unregulated construction in seismic areas.
- Another example of limited local government capabilities is in terms of emergency response planning. While the Army and Navy have long established civil contingency plans, some first responders at the state, and especially at the municipal level, continue to lag behind their federal counterparts.

2.3.2 Institutional/local government collaboration

- SINAPROC's main objective is to coordinate groups of institutions, functional relationships, and programs that ensure links between the civil protection capacities of the public, private, and social sectors. At its core is the aim to achieve a system of integrated risk management, bringing together professionals responsible for emergency co-ordination and response units, scientific research, early warning systems, and the financing of reconstruction.
- The actual implementation of SINAPROC is the responsibility of the General Coordination of Civil Protection (*Coordinación General de Protección Civil, CGPC*) under the Ministry of the Interior. The CGPC has three general directions beneath it: i) General Directorate of Civil Protection, ii) FONDEN General Directorate, and iii) National Center for Disaster Prevention.
- The Ministry of the Interior, through the General Directorate of Civil Protection, is responsible for horizontal coordination with other federal ministries and agencies (including the coordination with the Ministry of Social Development), as well as vertical coordination and communication with state and municipal governments.
- Article 17 of the General Law for Civil Protection establishes that states and municipal governments have the responsibility to develop and implement local civil protection systems, in alignment with this law.
- In the last ten years, there has been significant coordination between the federal and local governments in terms of risk identification. Article 86 of the General Law of Civil Protection states that state and municipal governments have the responsibility to develop their respective risk atlas databases. The federal government offers support for this development through the FOPREDEN, and also through the Risk Prevention for Human Settlements Program (PRAH), while CENAPRED provides technical support.

5. (CENAPRED, 2016.)

6. (Diario Oficial de la Federación, 2012.)

7. (Diario Oficial de la Federación, 2008.)

8. (OECD, 2013.)

3. Instruments

The functional relationship between social protection programs and disaster prevention strategies in Mexico is still weak. This section will describe two social protection instruments that contribute to Mexico's risk prevention strategy, particularly in the risk mitigation phase.

3.1 Cash Transfers

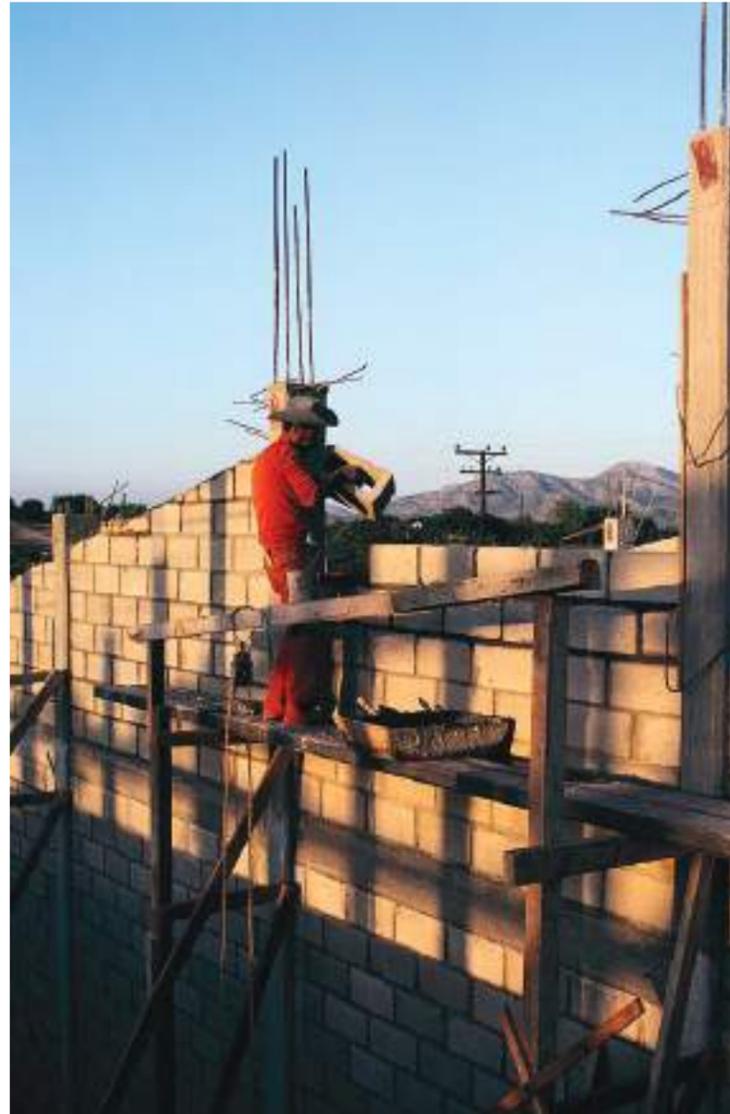
3.1.1 Cash for work program

- The standard PET is the regular program that supports community-focused public works in several thematic areas, with the goal of providing temporary transfers in exchange for participation in public works projects to unemployed and vulnerable populations. As part of the standard PETs operations, some of the public works focus on disaster risk reduction, including environmental conservation, rehabilitation and construction of rural roads, climate change adaptation, and disaster risk management education, which contributes to risk reduction and preparedness to disasters.⁹

3.2 Role of Insurance Mechanisms

3.2.1 Catastrophe insurance for low-scale farmers CADENA:

- The CADENA program has an insurance component called Catastrophe Insurance. This component supports low income-agricultural producers with no access to private or public insurance schemes who are affected by natural phenomenon.
- State governments, as the executing agency, purchase insurance to protect their budgetary allocations to natural disaster compensation for the most vulnerable farmers. The state is the insured, and as mentioned above, the insurance premiums are co-financed between the federal and state governments.



9. (World Bank, 2013.)

4. Delivery System

4.1 ID System

- Mexico has a foundational ID system called the Unique Population Registry Number (CURP). The CURP was originally introduced in October 1996 and implemented in 1997. The CURP is an 18 digit alphanumeric code, which is bi-univocal (that is, it identifies just one person and one person is identified by just one code), verifiable, and universal. It is generated using four basic individual data components: complete name, gender, date of birth, and place of birth.
- The CURP has several issues, as it has not achieved complete national coverage and it has 180 million active unique IDs in a country of 112 million people.¹⁰
- A common alternative to the use of the CURP is to use demographic data (such as complete name, gender, date of birth, and place of birth) and conduct what is called “demographic de-duplication” in each program’s MIS.

4.2 Targeting

- CADENA Catastrophe Component: There are strict criteria defining which small-scale farmers are eligible to benefit from CADENA policies, which were significantly expanded in 2013. Previously, in 2011, the program was limited to farmers without any other scheme of public or private agricultural insurance and who owned or cultivated less than 10 hectares of annual crops, 5 hectares in the case of perennial fruit crops, or who owned less than 45 livestock units. In 2013, the criteria was expanded to 20 hectares of annual crops and 60 livestock units, representing a significant expansion of eligible farmers under the program.¹¹
- Even though CADENA does not use geographic targeting as a part of their eligibility criteria, it uses poverty maps to prioritize poor municipalities by providing a higher percentage of the insurance premium funding to highly marginalized municipalities.
- PET geographic targeting: The standard PET will support individuals living in priority investment zones from both rural and urban localities.

10. (Palacios & Nishikawa, 2015.)

11. (World Bank, 2013.)

12. (Diario Oficial de la Federación, 2015.)

- PET individual targeting: PET operational guidelines define the target population as “men and women, 16 years old or older who suffer from a temporary decrease in their income due to low employment availability or through the effects of an emergency.” Even though the PMT survey is applied to each family as a mandatory requirement, the poverty score is not applied and individuals self-select themselves into the program depending on whether or not they can participate in the project and accept the daily transfer amount.¹²

4.3 Enrollment

- Catastrophe Insurance enrolls beneficiaries only after the occurrence of the natural disaster. As mentioned above, the state government is the insured.
- In regards to PET, once a project is approved, the executing agency is responsible for notifying the SEDESOL regional office, which will send field staff to enroll beneficiaries in the program.

4.4 Payment Mechanisms

- Both the standard PET program and the CADENA Catastrophe Insurance are not executed directly by the federal government (in contrast to other programs like PROSPERA or the non-contributory pensions program, PAAM). The payment mechanisms are chosen by the executing agency.

4.5 Grievance Redress Mechanism

- Both SEDESOL and SAGARPA have toll-free numbers to receive complaints and file grievances.

5. Information

5.1 Information on Vulnerable People

- According to Article 21 of the General Law for Civil Protection, risk management interventions will give priority to vulnerable groups and households living beneath the welfare line.¹³
- The National Civil Protection System's Organization and Operations Manual establishes that the local Civil Protection Units, in coordination with the federal and state health ministries and the Integral Family Development Departments (*Desarrollo Integral Familiar*, DIF), must identify and contact local vulnerable group shelters and other facilities in order to provide preventive technical assistance, certify emergency measures, and train employees on emergency procedures.¹⁴
- In terms of concentration of poverty, Mexico employs a regional marginalization indicator to classify levels of poverty at the state, municipal, and local level. This is based on the national census and is updated every 5 years. Geographical targeting used by government programs are based on this indicator.
- Additionally, SEDESOL has recently begun implementation of the Development Targeting System (*Sistema de Focalización para el Desarrollo*, SIFODE), which consolidates and organizes information from all socioeconomic questionnaires conducted by any federal social program. This social registry provides household level data and multidimensional poverty scores for families that have accessed a social program.

13. (Diario Oficial de la Federación, 2012.)

14. (Diario Oficial de la Federación, 2006.)

6. Communication

6.1 Communication Management

- At the national level, the General Directorate of Civil Protection is also in charge of operating the National Communications Center (*Centro Nacional de Comunicaciones*, CENACOM). This national center centralizes and distributes information related to SINAPROC emergency preparedness and response operations, issuing bulletins to civil protection authorities across the country on potential risks.



Bibliography

CENAPRED. (2016). *Portal de CENAPRED*. Retrieved 07 05, 2016, from <http://www.cenapred.unam.mx/es/dirQuienesSomos/Objetivo/>.

Diario Oficial de la Federación. (2008, 12 31). Ley Federal de Presupuesto y Responsabilidad Hacendaria. *Diario Oficial de la Federación*.

Diario Oficial de la Federación. (2012, March 6). Ley General de Protección Civil. Mexico City: Congreso de la Unión.

Diario Oficial de la Federación. (2006, 10 23). Manual de Organización y Operación del Sistema Nacional de Protección Civil. *Diario Oficial de la Federación*.

Diario Oficial de la Federación. (2015, 12 32). REGLAS de Operación del Programa de Prevención de Riesgos. *Diario Oficial de la Federación*.

Diario Oficial de la Federación. (2015, December 31). Reglas de Operación del Program de Empleo Temporal. *Diario Oficial de la Federación*.

Diario Oficial de la Federación. (2010, 12 3). Reglas Generales del Fondo de Desastres Naturales. *Diario Oficial de la Federación*.

Diario Oficial de la Federación. (2011, 1 31). Lineamientos de Operación Específicos del Fondo de Desastres Naturales. *Diario Oficial de la Federación*.

Lester M. Salamon, S. W. (2004). *Global Civil Society: Dimensions of the Nonprofit Sector, Volume 2*. Bloomfield: Kumarian Press.

OECD. (2013). *Estudio de la OCDE sobre el Sistema de Protección Civil en México*. OECD.

Palacios, R., & Nishikawa, K. (2015). *Identity Systems Analysis Mexico*. World Bank, Social Protection and Labor Global Practice, Washington DC.

World Bank. (2013). *CADENA Catastrophe Insurance: A Social Safety Net for Small-scale Farmers in Mexico*. Agricultural and Rural Development Team. Mexico City: World Bank.

World Bank. (2013). *Mexico's Temporary Employment Program (PET) CASE Study*. World Bank, GFDRR & Rapid Social Response. World Bank.

 **Rapid Onset**

 **During Disaster**

 **High Capacity**

Case of Mexico

- High capacity countries have better data and information systems, existing schemes, and it is often easier to make a positive impact on the affected people.
- The country's disaster management system and social protection system may have different levels of development.
- Rapid onset disasters provide relatively shorter time slots for quick response, and therefore pre-disaster preparedness is important.
- Depending on the nature of the rapid onset disaster (frequent: typhoon, flood or less frequent: earthquake, volcano, tsunami etc.), people's perception of the risk is different.

1. Introduction

1.1 About The Scenario

The scenario is a description of the formal and functional relationship of the Disaster Relief Management (DRM) and the Social Protection System (SPS) in Mexico during a disaster situation, especially focusing on immediate relief and response issues. It draws experiences from flood events in Mexico from 2006 to 20014, which may be considered a high-probability, high-consequence event.

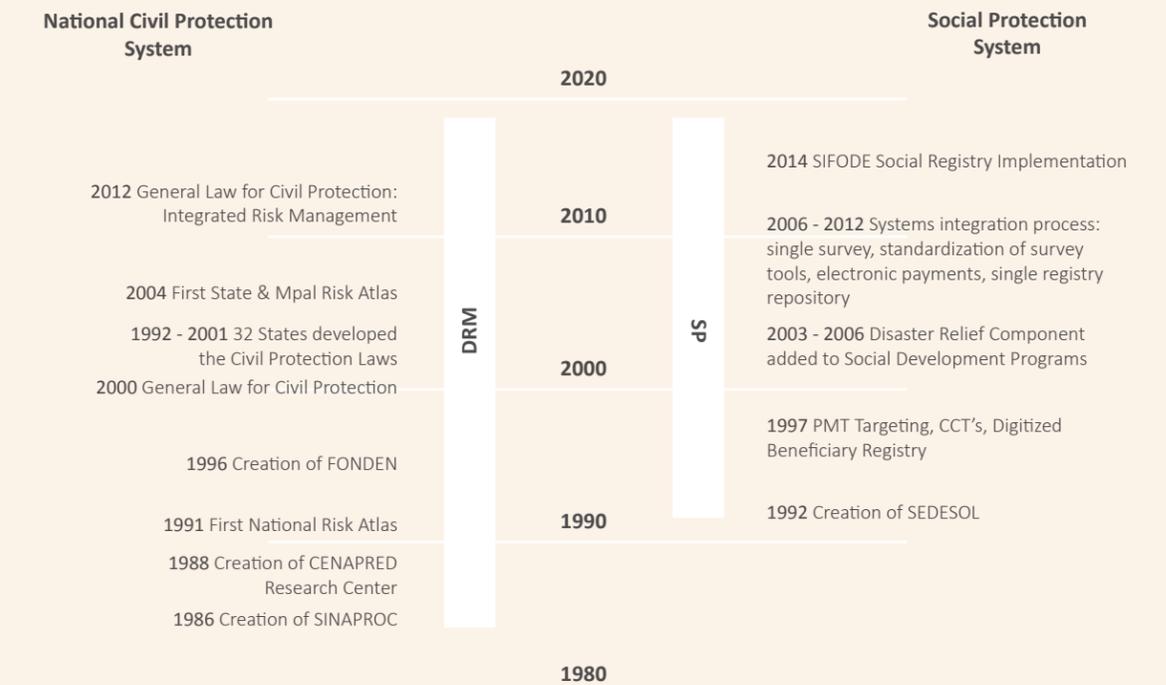
Relevant Country Facts

- Mexico is exposed to a wide variety of geological and hydro-meteorological hazards due to its diverse geography, including earthquakes, hurricanes, floods, droughts, volcanoes, tsunamis, wildfires, and landslides. It is ranked as one of the world’s 30 most exposed countries to three or more types of natural hazards (World Bank, 2012).
- The country has a federal system comprised of 32 states and 2,457 municipalities, which is characterized by a significant level of de facto centralization. The Federal Government collects approximately 90% of the revenue and is directly responsible for 65% of the total public sector spending.
- Mexico DRM-related activities are highly dependent on the government, as Mexico has a weak civil society & volunteer sector (0.4% share of the economically active population, compared to Japan with 4.2%, or the US with 9.8%).
- Mexico’s DRM framework and its social protection system have separately gone through significant improvement in the last 20 years, having, in some cases, presented innovations that have been emulated in other countries (See Figure 1).

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- Usually rapid onset disasters have a short response time.
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- Urban/rural settings will have different impact due to the differential level of business interruption and livelihood losses. This will also depend on the nature of the hazard (like earthquake or typhoon or flood.)
- Different types of pressure exist in a post-disaster scenario, including media/political pressure for better and faster recovery.

Comparative Evolution of Mexico’s Civil Protection and Social Protection Systems



Source: National Disaster Response Framework 2013.

2. Institutional Setting

2.1 Institutions and Legislation

2.1.1 Key DRM legislation linked to social protection

- The official name of Mexico's DRM framework is the National Civil Protection System (Sistema Nacional de Protección Civil, SINAPROC). The current National Civil Protection System has its legal basis in the General Law for Civil Protection. The law has a comprehensive approach, addressing all disaster phases including risk identification, prevention, mitigation, preparedness, emergency response, recovery, and reconstruction.
- Fund for Natural Disasters (FONDEN) Operating Rules:¹ FONDEN was established in 1996 as a budgetary tool through which federal funds were annually allocated for expenditure on post-disaster response. Since then, FONDEN has evolved significantly. Changes to its operating rules and procedures have improved and the focus has shifted from post-disaster funding to a comprehensive disaster management fund.
- FONDEN's Emergency Support Fund (Fondo para la Atención a Emergencias FONDEN, FAE) Guidelines: Created in 2000, this is a fast-track financial mechanism supplies states and municipalities with basic goods.
- Organization and Operations Manual of the National Civil Protection System (Manual de Organización y Operación del Sistema Nacional de Protección Civil): Published in the Official Federal Gazette on October 2006, this manual describes ten key functions in emergency response and establishes the responsibilities and tasks for all thirty four emergency response stakeholders at the federal level.²

2.1.2 Key institutions / ministries involved in DRR

- Mexico is a federal country with three levels of government: federal, state, and municipal. Organizing the complex national civil protection system and assuring communication and collaboration under this federal structure is the responsibility of the Ministry of the Interior (Secretaría de Gobernación, SEGOB).

National Civil Protection System

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- Mexican Armed Forces: The Army and Navy, through the DNIII and Navy Plan respectively, provide emergency support through search and rescue operations, emergency repair of civil works, transportation and logistics, emergency healthcare and relief, temporary shelter provision and management, as well as security in affected areas.
- DICONSA: A state-owned enterprise under the coordination of the Ministry of Social Development that has the mandate to provide direct and affordable access of basic products in marginalized localities of the country. It currently manages a network of more than 22,000 community-owned stores.³

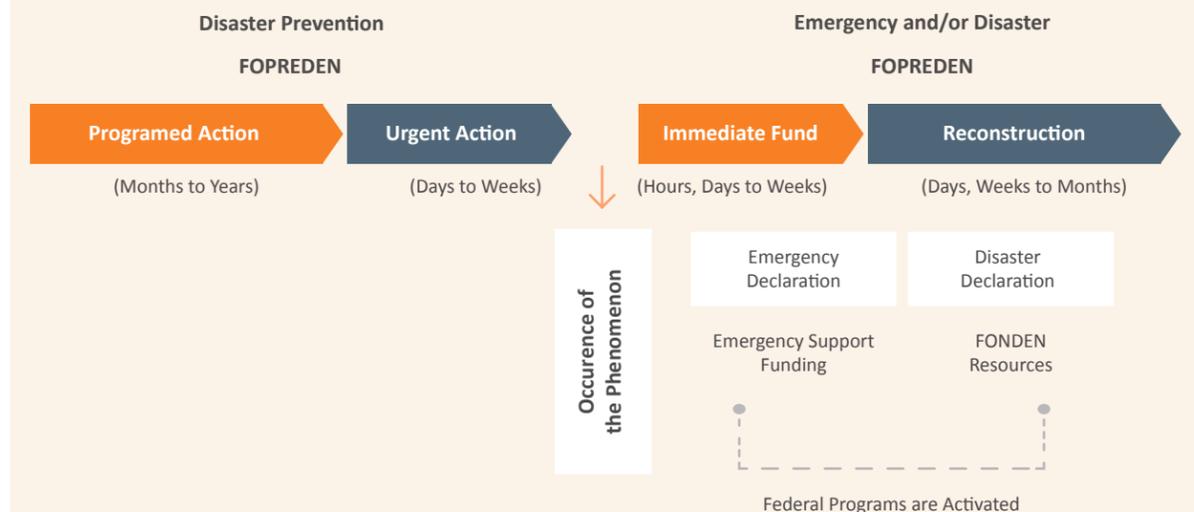
2.2. Finance

2.2.1 Financing schemes

- According to Article 21 of the 2012 General Law for Civil Protection, municipal governments, through their respective civil protection unit, are responsible for implementing and/or coordinating disaster preparedness, emergency response, and recovery activities. When the emergency or disaster surpasses the municipal government's capacity to respond, the municipality must request support from the state government. In cases where state support is not sufficient, the state will request the intervention of the federal government, which will proceed to activate its respective funds and programs.⁴
- Local Civil Protection Fund: Article 66 of the General Law for Civil Protection states that each state will create and manage a State Civil Protection Fund, with the objective of training, equipping, and preparing local governments' civil protection systems for emergencies and disaster situations.⁵

- Mexico's main mechanism for disaster risk financing is FONDEN, which finances the cost of reconstruction and repairs to public infrastructure and low-income households. According to Mexico's Federal Law on Budget and Treasury Responsibility (Article 37), the annual budget must allocate at least 0.4% of the total programmable spending to disaster financing.⁶
- Another fast-track budget instrument is the Immediate Partial Support Program (Apoyos Parciales Inmediatos, APIN). State and municipal governments can request this fund for any activity related to the immediate restoration of public services like debris removal, water supply distribution, provisional shelters, schools, and bridges. This support program is managed by FONDEN, although the financial resources come from the Finance Ministry budget line.

Financial Instruments to Prevent and Respond to Disasters



Source: OECD, 2013.

1. "Operating Rules" in Mexico are updated once a year and published in the Federal Official Gazette. These rules normally describe the origin of funds, the types of subsidies, the eligible expenditure categories, eligible executing agencies, and transparency principles, among other things.
 2. (OECD, 2013.)
 3. (Diario Oficial de la Federación, 2015.)

4. (Diario Oficial de la Federación, 2012.)
 5. (Diario Oficial de la Federación, 2012.)
 6. (Diario Oficial de la Federación, 2008.)

3. Instruments

3.1 In-kind Transfers

- During the emergency phase, the most common instrument used is the in-kind transfer of food supplies, temporary shelter, mattresses and blankets, cleaning materials, and equipment.



2.2.2 Financial governance

- The use of disaster funds is carefully regulated through FONDEN's operating rules and guidelines, which are also published in the Official Federal Gazette.
- According to FONDEN's operating rules, access to Emergency Support Fund can only be triggered by official emergency declaration by the Ministry of the Interior (SEGOB), which must be published in the Official Federal Gazette.⁷
- The acquisition of goods requested by the state or municipal governments through the FAE are made directly by the Ministry of the Interior and are delivered in situ to the requesting government.
- According to Article 21 of the Emergency Support Fund guidelines, the requesting local government must publish in its institutional web portal, the types of goods and the quantities it has delivered to the population.

2.3 Capacity and Coordination

2.3.1 Human resources and capacities

- There is a great disparity among local level government capacity in terms of emergency response.
- Emergency response capacity and capability is concentrated in the federal level.
- Federal bodies normally do not wait for local government's request to intervene.
- As soon as an emergency is detected, the federal government begins mobilizing resources and personnel to the emergency site.

2.3.2 Institutional/local government collaboration

- SINAPROC's main objective is to coordinate groups of institutions, functional relationships, and programs that ensure links between the civil protection capacities of the public, private, and social sectors. At its core is the aim to achieve a system of integrated risk management, bringing together professionals responsible for emergency co-ordination and response units, scientific research, early warning systems, and the financing of reconstruction.

- The actual implementation of SINAPROC is the responsibility of the General Coordination of Civil Protection (*Coordinación General de Protección Civil*, CGPC) under the Ministry of the Interior. The CGPC has three general directions beneath it: i) General Directorate of Civil Protection, ii) FONDEN General Directorate, and iii) National Center for Disaster Prevention.
- The Ministry of the Interior, through the General Directorate of Civil Protection, is responsible for horizontal coordination with other federal ministries and agencies (including the coordination with the Ministry of Social Development), as well as vertical coordination and communication with state and municipal governments.
- According to the Organization and Operations Manual of the National Civil Protection System, in the case of an emergency, SEGOB will lead the executive coordination for civil protection as Chair of the National Emergencies Committee.⁸
- During emergencies, states and municipalities are responsible for technical coordination and may be supported in this function by the regional delegation of federal agencies such as SEGOB, DICONSA, and the armed forces.

7. (Diario Oficial de la Federación, 2010.)

8. (Diario Oficial de la Federación, 2006.)

4. Delivery System

4.1 ID System

- In-kind transfers such as food provisions must clearly define who the beneficiary is. Whether these are individuals or a household determines what controls can be implemented to avoid abusive behavior.
- Distribution of goods or services in emergency situations requires control over public messaging to potential beneficiaries, specifically regarding eligibility criteria.
- Community representatives during the delivery process have been used to authenticate beneficiaries, as well as to assure households do not receive more than one transfer.

4.2 Targeting System

- Food, medical, and shelter supplies are mobilized to previously defined distribution centers and shelters.
- Priority is given to the zones where the displacement of households is higher.

4.3 Enrollment

- In the case of emergencies that extend over a longer period of time (as in the case of floods), voucher systems have been implemented. They are normally stickers with certain security features that are exchanged for food supplies or cleaning materials.

4.4 Transfer Mechanisms

- Supplies are either distributed through defined distribution points or delivered in established temporary shelters to the population.
- Accurate communication on supplies, delivery hours, and locations is essential.
- Government personnel should be assigned to maintain a certain level of organization during the delivery process, as well as to engage beneficiaries and answer questions.
- In Mexico, during emergency situations, manual lists are used to control the delivery of supplies.

4.5 Grievance Redress Mechanism

- Temporary desks are placed in several key points in each of the distribution points and shelters to receive complaints and handle additional requests.
- Municipal government installs telephone service with the objective of identifying search and rescue necessities, as well as to inform the population of the distribution of food supplies, the location of shelters, and other safety measures.

5. Information

5.1 Information on Vulnerable People

- According to Article 21 of the General Law for Civil Protection, risk management interventions will give priority to vulnerable groups and households living beneath the welfare line.⁹
- The National Civil Protection System's Organization and Operations Manual establishes that the local Civil Protection Units, in coordination with the federal and state health ministries and the Integral Family Development Departments (Desarrollo Integral Familiar, DIF), must identify and contact local vulnerable group shelters and other facilities in order to provide preventive technical assistance, certify emergency measures, and train employees on emergency procedures.¹⁰
- In terms of concentration of poverty, Mexico employs a regional marginalization indicator to classify levels of poverty at the state, municipal, and local level. This is based on the national census and is updated every 5 years. Geographical targeting used by government programs are based on this indicator.
- Additionally, SEDESOL has recently begun implementation of the Development Targeting System (Sistema de Focalización para el Desarrollo, SIFODE), which consolidates and organizes information from all socioeconomic questionnaires conducted by any federal social program. This social registry provides household level data and multidimensional poverty scores for families that have accessed a social program.



9. (Diario Oficial de la Federación, 2012.)

10. (Diario Oficial de la Federación, 2006.)

6. Communication

6.1 Communication Management

- Crisis communication is a key function of SINAPROC. The DGPC of the Ministry of the Interior operates the National Communication Center (CENACOM) and has the capacity to immediately disseminate any warning from the early warning systems to state and municipal levels.
- CENACOM is in constant communication with states' civil protection units via telecommunications systems such as line telephones, cell phones, the federal government's radio network, as well as email.
- The local government directly manages public messaging in emergency situations. Radio, television and, more recently, social media are the major means of communication with the public during emergency situations.

6.2 Social Networks and Social Media

- The magnitude of the emergency defines the governments spokesperson for the media.
- In situations where the local government has control over the emergency, the local general director of the civil protection unit will be the communication channel with the media.
- In situations where local government has been surpassed by the emergency event, the highest-ranking official from the federal government will take charge of the relationship with the media.



Bibliography

- CENAPRED. (2016). *Portal de CENAPRED*. Retrieved 07 05, 2016, from <http://www.cenapred.unam.mx/es/dirQuienesSomos/Objetivo/>.
- Diario Oficial de la Federación. (2012, March 6). Ley General de Protección Civil. Mexico City: Congreso de la Unión.
- Diario Oficial de la Federación. (2012, 7 3). Lineamientos del Fondo de Atención a Emergencias FONDEN. *Diario Oficial de la Federación*.
- Diario Oficial de la Federación. (2006, 10 23). Manual de Organización y Operación del Sistema Nacional de Protección Civil. *Diario Oficial de la Federación*.
- Diario Oficial de la Federación. (2015, 12 28). Reglas de Operación del Programa de Abasto Rural a cargo de Diconsa, S.A. de C.V. (DICONSA), para el ejercicio fiscal 2016. *Diario Oficial de la Federación*.
- Diario Oficial de la Federación. (2010, 12 3). Reglas Generales del Fondo de Desastres Naturales. *Diario Oficial de la Federación*.
- Diario Oficial de la Federación. (2011, 1 31). Lineamientos de Operación Específicos del Fondo de Desastres Naturales. *Diario Oficial de la Federación*.
- Lester M. Salamon, S. W. (2004). *Global Civil Society: Dimensions of the Nonprofit Sector, Volume 2*. Bloomfield: Kumarian Press.
- OECD. (2013). *Estudio de la OCDE sobre el Sistema de Protección Civil en México*. OECD.
- Palacios, R., & Nishikawa, K. (2015). *Identity Systems Analysis Mexico*. World Bank, Social Protection and Labor Global Practice, Washington DC.
- World Bank. (2013). *CADENA Catastrophe Insurance: A Social Safety Net for Small-scale Farmers in Mexico*. Agricultural and Rural Development Team. Mexico City: World Bank.
- World Bank. (2013). *Mexico's Temporary Employment Program (PET) CASE Study*. World Bank, GFDRR & Rapid Social Response. World Bank.


Rapid Onset

After Disaster

High Capacity

Case of Mexico

- High capacity countries have better data and information systems, existing schemes, and it is often easier to make a positive impact on the affected people.
- Post-disaster coordination between the disaster management system and social protection programs are more common than for pre-disaster experiences.
- The country's disaster management system and social protection system may have different levels of development.
- Rapid onset disasters provide relatively shorter time slots for quick response, and therefore pre-disaster preparedness is important.
- Depending on the nature of the rapid onset disaster (frequent: typhoon, flood or less frequent: earthquake, volcano, tsunami etc.), people's perception of the risk is different.
- In countries with large percentage of households living in poverty (46.2%, in the case of Mexico), the need for social protection measures is immense.

1. Introduction

1.1 About The Scenario

This scenario describes the formal and functional relationship between the Disaster Relief Management (DRM) and the Social Protection System (SPS) in Mexico in a post-disaster situation, focusing especially on recovery phases. It draws experience from both flood events in Mexico from 2006 to 20014, which may be considered as high probability, high consequence event, as well as from low probability-high consequence events such as earthquakes, which occurred during the same period.

Relevant Country Facts

- Mexico is exposed to a wide variety of geological and hydro-meteorological hazards due to its diverse geography, including earthquakes, hurricanes, floods, droughts, volcanoes, tsunamis, wildfires, and landslides. It is ranked as one of the world's 30 most exposed countries to three or more types of natural hazards (World Bank, 2012).
- The country has a federal system comprised of 32 states and 2,457 municipalities, which is characterized by a significant level of de facto centralization. The Federal Government collects approximately 90% of the revenue and is directly responsible for 65% of the total public sector spending.
- Mexico DRM-related activities are highly dependent on the government, as Mexico has a weak civil society & volunteer sector (0.4% share of the economically active population, compared to Japan with 4.2%, or the US with 9.8%).
- Mexico's DRM framework and its social protection system have separately gone through significant improvement in the last 20 years, having, in some cases, presented innovations that have been emulated in other countries (See Figure 1).

In Mexico, the main interaction between the DRM system and SP system happens during the recovery phases, specifically in relation to the housing¹ early recovery and reconstruction. Housing is only one of the eleven reconstruction categories in the Mexican DRM framework. Other reconstruction categories include communication and transportation infrastructure, health infrastructure, urban infrastructure, hydraulic infrastructure, and education infrastructure, among others.

1. "Housing" includes household livelihood.

2. Institutional Setting

1.2 Key Issues of Rapid Onset Disaster

- Usually rapid onset disasters have a short response time.
- Highly visible impacts in terms of damages (both physical and environmental.)
- In case of frequent disasters, there may be prior experiences. If not so frequent, several new issues appear, and often the people and local governments are left at a loss.
- People’s mindset is different based on the nature of the disaster, whether it is frequent or non-frequent. Thus, the level of preparedness may be different.
- Urban/rural settings will have different impact due to the differential level of business interruption and livelihood losses. This will also depend on the nature of the hazard (like earthquake or typhoon or flood.)
- Different types of pressure exist in a post-disaster scenario, including media/political pressure for better and faster recovery.

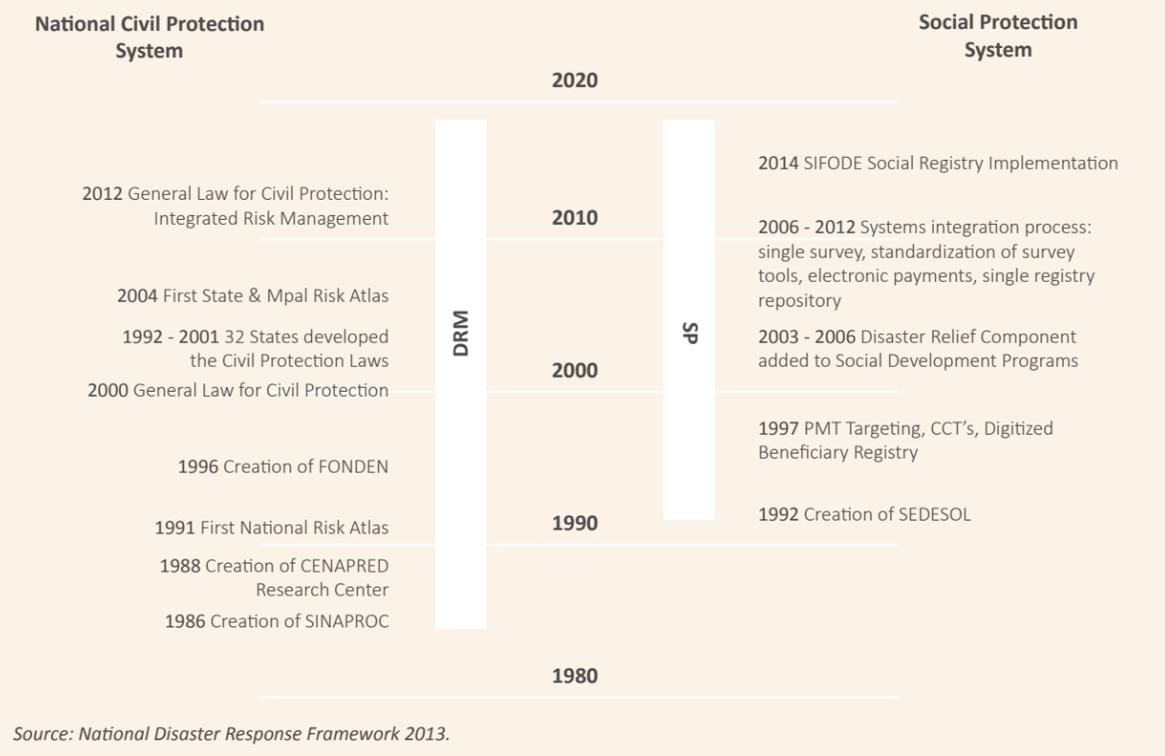
2.1 Institutions and Legislation

2.1.1 Key DRM legislation linked to social protection

- The official name of Mexico’s DRM framework is the National Civil Protection System (Sistema Nacional de Protección Civil, SINAPROC). The current National Civil Protection System has its legal basis in the General Law for Civil Protection. The law has a comprehensive approach, addressing all disaster phases including risk identification, prevention, mitigation, preparedness, emergency response, recovery, and reconstruction.
- Fund for Natural Disasters (FONDEN) Operating Rules:² FONDEN was established in 1996 as a budgetary tool through which federal funds were annually allocated for expenditure on post-disaster response. Since then, FONDEN has evolved significantly. Changes to its operating rules and procedures have improved and the focus has shifted from post-disaster funding to a comprehensive disaster management fund.

- General Law for Social Development: This law was introduced in 2004 and it ensures access to social development for all, guaranteeing incremental annual budgets, as well as transparency in the expenditure of financial resources.
- Line Ministries Operating Rules:
 - A) Temporary Employment Program (*Programa de Empleo Temporal*, PET) Operating Rules: PET is a cash for work program providing temporary transfers in exchange for labor in community projects to eligible households in marginalized municipalities. In 2003, PET incorporated an *early recovery* support for households whose livelihoods have been affected by natural disasters or other crises (this component is called Immediate Temporary Employment Program). Although the program has geographical targeting criteria, a maximum daily rate per person, and a maximum percentage for non-labor concepts per project, these criteria do not apply for disaster relief projects.
 - B) Housing Support Program Operating Rules (*Programa Apoyo a la Vivienda*): This program is designed to provide quality housing to families living beneath the welfare line. In 2006, in coordination with FONDEN, this program incorporated a post-disaster component to support the reconstruction process. There are three main types of post-disaster reconstruction support: rehabilitation, reconstruction, and total housing relocation.
 - C) Habitat Program Operating Rules: Habitat is a multi-component urban development program, which includes civil works, such as community centers and street paving projects, as well as other non-construction components, such as training and workshops. The program geographically targets marginalized urban polygons. In 2003, Habitat incorporated an *early recovery* component to support affected households living beneath the welfare line to purchase new household goods. As in PET, geographical targeting and budget ceilings do not apply in these post-disaster projects.

Comparative Evolution of Mexico’s Civil Protection and Social Protection Systems



National Civil Protection System

The SINAPROC is defined as the organic sum of structures, functional relationships, methods, norms, policies, instruments, procedures, services, and actions established among the agencies of the three levels of government, civic society, as well as private enterprises with the objective of coordinating disaster relief activities.

The objective of the SINAPROC is protect the individual, society, and the environment in relation to the risk and dangers posed by disruptive events and the vulnerability caused by natural and anthropogenic phenomenon in short and long run, through an integrative risk management framework, as well as developing citizen’s capacity to adapt and recover from disaster (DOF 2012).

2. “Operating Rules” in Mexico are updated once a year and published in the Federal Official Gazette. These rules normally describe the origin of funds, the types of subsidies, the eligible expenditure categories, eligible executing agencies, and transparency principles, among other things.

2.1.2 Key institutions / ministries involved

- Mexico is a federal country with three levels of government: federal, state, and municipal. Organizing the complex national civil protection system and assuring communication and collaboration under this federal structure is the responsibility of the Ministry of the Interior (*Secretaría de Gobernación, SEGOB*).
- Ministry of Social Development (*Secretaría de Desarrollo Social, SEDESOL*): SEDESOL is responsible for the Temporary Employment Program. SEDESOL is also responsible for implementing most of the household related post-disaster activities (from door to door diagnosis to service delivery).
- Ministry of Agrarian, Territorial, and Urban Development (*Secretaría de Desarrollo Agrario, Territorial y Urbano, SEDATU*): This Ministry was recently created. It was established in 2013 and is directly responsible for the Habitat Program.
- General Directorate of Land-Use Planning and Risk Areas Detection and Support (*Dirección General de Ordenamiento Territorial y Atención a Zonas de Riesgo, DGOTyAZR*): This directorate is within the SEDATU and has mainly preventive responsibilities. During post-disaster recovery phases, the Director General leads social protection program coordination (a practice that began before 2013 when this general directorate was under SEDESOL).
- FONHAPO: The Housing Support Program: This program is under the National Trust-fund for Popular Housing (*Fideicomiso Fondo Nacional de Habitaciones Populares, FONHAPO*), a decentralized federal agency under SEDATU.
- Before 2013, both the Habitat and the Housing Support Programs were part of SEDESOL.

2.2. Finance

2.2.1 Financing schemes

- According to Article 21 of the 2012 General Law for Civil Protection, municipal governments, through their respective civil protection unit, are responsible for implementing and/or coordinating disaster preparedness, emergency response, and recovery activities. When the emergency or disaster surpasses the municipal government's capacity to respond, the municipality must request

support from the state government. In cases where state support is not sufficient, the state will request the intervention of the federal government, which will proceed to activate its respective funds and programs.³

- Mexico's main mechanism for disaster risk financing is FONDEN, which finances the cost of reconstruction and repairs to public infrastructure and low-income households. According to Mexico's Federal Law on Budget and Treasury Responsibility (Article 37), the annual budget must allocate at least 0.4% of the total programmable spending to disaster financing.⁴

FONDEN is composed of two complementary budget instruments: FONDEN Program for Reconstruction and Natural Disaster Prevention Fund Program (Fondo para la Prevención de Desastres Naturales, FOPREDEN).

FONDEN resources are covered by two insurance mechanisms that cover a certain level of public funding: i) an excess of loss scheme and ii) a parametric catastrophe bond.

First Government Catastrophe Bonds in the World

FONDEN issued the world's first government catastrophe bond in 2006, called CAT-Mex, which provided coverage against earthquakes in three zones of Mexico. Under the terms of the CAT bond, a payout is triggered if two conditions are met: a) an official state of emergency or disaster declaration is issued by SEGOB and ii) an earthquake with a specified magnitude, depth, and epicenter within the three pre-defined zones is registered. The CAT-bond was renewed in 2010 and converted to a multi-risk instrument covering both earthquakes and tropical cyclones (OECD, 2013).

- Line Ministries Financial Schemes:

A)The Immediate Temporary Employment Program (PETI) has three financing sources. According to its operating rules, SEDESOL is required to allocate at least 30% of the program's annual budget to the PETI's post-disaster response and rehabilitation activities under a separate budget line to the PET.⁵ In case this reserve is exhausted, SEDESOL may request additional funding from FONDEN or from the Ministry of Finance which, according to Article 19 of the Federal Law on Budget and Treasury Responsibility, can re-distribute savings from efficiencies or underinvestment in other Ministries, or from surplus in the government income.

B)Housing Support Program: According to this program's operating rules, FONHAPO may utilize uncommitted resources from the annual budget for housing reconstruction purposes. If these are not sufficient, FONHAPO will request additional funding from FONDEN.⁶

C)Habitat Program: According to the program's operating rules, SEDATU may allocate funding from its annual budget. The percentage is not specified in the rules. As in FONHAPO, Habitat normally utilizes uncommitted resources from the annual budget, and in some cases, receives redistributed additional funds from the Ministry of Finance that result from income surplus or savings from other line ministries, similar to the PET program.⁷

2.2.2 Financial governance

- The use of disaster funds is carefully regulated through FONDEN's operating rules and guidelines, which are also published in the Official Federal Gazette.
- According to FONDEN's operating rules, access to disaster funds can only be triggered by official emergency and/or disaster declaration by the Ministry of the Interior (SEGOB), which must be published in the Official Federal Gazette.⁸

- The detailed request of disaster funds, containing damage diagnoses, is produced by the Damage Assessment Committee, which is comprised of representatives from the three levels of government, as well as all relevant agencies.
- Transparency and accountability have been further improved through regular updating of FONDEN's operating rules, reflecting its capacity to take into account previous fiscal year leanings and strive for continuous improvement. States do not have direct access to federal resources for their infrastructure reconstruction. These resources are available through the FONDEN trust, which pays out directly to specific contractors. The FONDEN trust is co-managed by SEGOB and the Ministry of Finance (*Secretaría de Hacienda y Crédito Público, SHCP*). The trust fund holds the allocated reconstruction funds before they are approved for the reconstruction process. The fiduciary of the FONDEN trust is the state-owned development bank BANOBRAS. It disperses approved expenditures to businesses contracted by the federal and state entities with responsibility for scheduling reconstruction operations.⁹
- When the Habitat, Housing Support Program, or PETI use FONDEN funds, financial governance norms from the FONDEN operating rules apply.
- The Habitat and Housing Support Program's disaster components can only be triggered through disaster or emergency declarations, according to their respective operating rules.
- The Immediate Temporary Employment Program (PETI) does not currently require an emergency or disaster declaration. When PETI was originally introduced, the emergency or disaster declaration was a requisite to trigger the PETI component. Through the learning of several fiscal year cycles, SEDESOL identified this trigger as an obstacle for preparing and implementing early recovery projects in constant disaster events. This led to the elimination of the declaration requisite from the program's operating rules. In its place was introduced an official request from the Temporary Employment Program State Committee, which meets regularly and is comprised of representatives from four federal ministries and two state agencies. This current arrangement allows for a certain level of discretionary use of PETI, which was severely questioned in 2015.

5. (Diario Oficial de la Federación, 2015.)

6. (Diario Oficial de la Federación, 2015.)

7. (SEDATU, 2013.)

8. (Diario Oficial de la Federación, 2010.)

9. (OECD, 2013.)

3. (Diario Oficial de la Federación, 2012.)

4. (Diario Oficial de la Federación, 2008.)

- The Habitat projects, and to a lesser degree PETI, requires the purchase of goods. The total procurement amount in both cases normally exceeds the maximum allowed to directly adjudicate vendors. Article 41 of the Law for Acquisitions, Leasing, and Services for the Public Sector allows direct adjudication of vendors in force majeure situations. This arrangement is naturally a tradeoff between the effective timely response to disasters and the transparent and accountable use of these funds.

The Controversial Use of PETI in 2015

2015 was the first fiscal year in the Temporary Employment Program's history that the amount spent for its disaster component (PETI) surpassed normal PET components. 60% of the program's budget went to PETI and the remaining 40% to non-disaster related components. Approximately 90% of PETI was spent in the two months leading up to the Federal Intermediate Elections held June 7th 2015, that is before hurricane season had started (which runs from June to October.) During this time PETI normally begins the implementation of projects (this was four months before Category 5 Hurricane Patricia hit the Pacific Coast of Mexico). Additionally, there was no emergencies or disasters that supported this spending in the first five months of that fiscal year. This was heavily criticized by opposition parties and led to the SEDESOL Minister Rosario Robles announcing the temporary suspension of PETI two weeks before the election.

2.3 Capacities and Coordination

2.3.1 Human resources and capacities

As mentioned above, the main source of interaction between the Mexican social protection system and the National Civil Protection System has been the housing and livelihood recovery phases. For this specific task, the capacity and capabilities in the post-disaster recovery phase in Mexico are distributed as follows:

- **Civil Protection Expertise:** Civil protection personnel at the state and municipal level are trained and certified by the National Center for Disaster Prevention (Centro Nacional de Prevención de Desastres, CENAPRED) through technical cooperation agreements with the federal government. Their responsibilities and training include inter-institutional coordination and communication, which are crucial for this stage.
- **Rapid Housing Assessment and Service Delivery:** The Ministry of Social Development has the largest number of social workers in the country specifically from the PROSPERA CCT program and PAAM non-contributive pension programs. These social workers are trained to conduct enumeration, outreach, payment, social marketing, and other types of citizen engagement activities. In the event of a disaster, SEDESOL has the capacity to mobilize social workers and vehicles from the region to conduct a rapid housing assessment. Additionally, SEDESOL has the in-house capacity to process the information, apply specific criteria, calculate individual household subsidies, and transfer the funds through its established payment infrastructure.
- **Structural Damage Assessment:** The personnel with the capacity to conduct structural damage assessments are normally limited and come from FONHAPO and local civil protection units.

2.3.2 Institutional/local government collaboration

- SINAPROC's main objective is to coordinate groups of institutions, functional relationships, and programs that ensure links between the civil protection capacities of the public, private, and social sectors. At its core is the aim to achieve a system of integrated risk management, bringing together professionals responsible for emergency co-ordination and response units, scientific research, early warning systems, and the financing of reconstruction.
- The actual implementation of SINAPROC is the responsibility of the General Coordination of Civil Protection (Coordinación General de Protección Civil, CGPC) under the Ministry of the Interior. The CGPC has three general directions beneath it: i) General Directorate of Civil Protection, ii) FONDEN General Directorate, and iii) National Center for Disaster Prevention.
- The Ministry of the Interior, through the General Directorate of Civil Protection, is responsible for horizontal coordination with other federal ministries and agencies (including the coordination with the Ministry of Social Development), as well as vertical coordination and communication with state and municipal governments.
- Article 17 of the General Law for Civil Protection establishes that states and municipal governments have the responsibility to develop and implement local civil protection systems, in alignment with this law.
- Post-disaster coordination is established through the Damage Assessment Committee, which, as mentioned above, incorporates representatives of the three levels of government and all relevant agencies at each level.
- During the rapid housing assessment, each enumeration team is normally comprised of one SEDESOL social worker and at least one state or municipal government representative, providing each level of government assurance of the objectivity and accuracy of the results.
- Once the information is uploaded into the MIS and processed by SEDESOL, the eligible beneficiary list is shared with the local governments for them to provide additional post-disaster components, if any.



3. Instruments

When a disaster event occurs, it is up to the Federal Government, in coordination with the Damage Assessment Committee, to decide what components will be brought into the recovery phases. This decision is based on the type and magnitude of the disaster, as well as the extent of the initial estimation of damages.

3.1 Cash Transfers

3.1.1 Cash for work program (early recovery component)

- The main cash transfer used in disaster recovery is the Immediate Temporary Employment Program. The PETI is designed to create temporary employment in affected areas, which helps increase local production and stimulate local demand, while indirectly supporting recovery operations.
- There are two main types of PETI modalities, although not described in the operation rules or guidelines. First, and more commonly used, is the non-conditional cash transfer modality, which is in essence a family support transfer provided to improve the household livelihood and justified through household cleaning and rehabilitation activities. Second is the community project or cash for work modality, which is used to support recovery operations, such as cleaning of public spaces, as well as sheltering support workers.

3.2 In-kind Transfers

3.2.1 Household goods (early recovery component)

- The Habitat Program Household-Goods component is designed to support households living under the welfare line, substituting their damaged appliances and furniture. Eligible families are provided a voucher that can be exchanged in local supermarkets for specific goods.
- In some cases, this support is provided in cash.

3.2.2 Construction materials (reconstruction component)

- The Housing Support Program is an owner-driven reconstruction component designed to provide households living under the poverty line whose houses were damaged by a disaster the means to rehabilitate their housing.
- This program has four modalities that apply depending on the magnitude of the damage: i) rehabilitation of minor damage, ii) reconstruction of partial damages, iii) complete construction, or iv) relocation and construction.
- The housing program provides materials and equipment packages/vouchers of different value depending on the modality. Up to 20% of the total package can be used to pay for labor costs and this portion may be transferred in cash.
- In the case of relocation and construction, the household is provided with land in a non-hazardous zone, as well as the same materials and equipment as the complete construction modality.

4. Delivery System

- While funding and coordination activities are clearly defined in the legal framework of the National Civil Protection System, the actual service delivery process has not received the same level of formalization and systematization. On one hand, this enables a certain level of flexibility and adaptability of the SP-DRM relationship, and on the other, this can be time consuming, as procedures need to be explained in detail to local authorities during each event.
- This section explains how the service delivery operated in post-flood and earthquake events from 2006 to 2014 in Mexico.

4.1 ID System

- Identification issues have to be addressed before any significant field operation. There are two levels of identification that should be considered. First, clearly define the beneficiary unit to align the survey or surveys, as well as the beneficiary registry as much as possible. Second, there has to be a selection of unique identifiers for the beneficiary unit.
- These issues are normally solved in the Damage Assessment Committee before beginning the door-to-door diagnosis.
- The three social program components used for post-disaster recovery have variations in their definition of the actual beneficiary unit:
 - A) The Habitat program talks about households, defined as an “individual or group of individuals who live in the same house and share a common life.”¹⁰
 - B) The Housing Support Program also defines household with the following definition: “group of people that may or may not have family ties, share the same house, and share living expenses.”¹¹
 - C) PET’s beneficiaries may be individuals of households. A household is defined as “a group of individuals who share a common life and house that may or may not have family ties, share living expenses, and prepare food in the same kitchen.”¹²
 - D) FONDEN’s guidelines use the family as the beneficiary unit and offers no definition in their guidelines.¹³
- Although it may seem that all definitions align with the definition of a group of people sharing one house, this issue has created several field discussions, as there are single housing units with two kitchens, each used by a separate group of people. This conflicts PET’s definition of household with the other two.
- Subsequently, the Damage Assessment Committee usually defines how to uniquely identify each household. Normally the unique identifier of the head of the household is used.
- Mexico has a foundational ID system called the Unique Population Registry Number (CURP). The CURP was originally introduced in October 1996 and implemented in 1997. The CURP is an 18 digit alphanumeric code, which is bi-univocal (that is, it identifies just one person and one person is identified by just one code), verifiable, and universal. It is generated using four basic individual data components: complete name, gender, date of birth, and place of birth.
- The CURP has several issues, as it has not achieved complete national coverage and it has 180 million active unique IDs in a country of 112 million people.¹⁴
- The other option for the Damage Assessment Committee is to use the electoral committee ID (called INE). This identification is a functional ID system that acts as the de facto foundational ID in Mexico, as it has more comprehensive coverage and has a robust de-duplication system.
- Another common option is to use demographic data (such as complete name, gender, date of birth, and place of birth) and conduct what is called “demographic de-duplication” in the MIS. This system is not as robust as the others, due to potential homonyms in adjacent households from extended families, among other issues.

10. (Diario Oficial de la Federación, 2015)

11. (Diario Oficial de la Federación, 2015)

12. (Diario Oficial de la Federación, 2015)

13. (Diario Oficial de la Federación, 2011)

14. (Palacios & Nishikawa, 2015.)

4.2 Targeting System

- SEDATU's DGOTyAZR and the SEDESOL, in coordination with the Damage Assessment Committee, decide the ad hoc mix of social protection components to implement for the particular disaster event, as well as the transfer amounts per household in the case of PETI and Habitat.

4.2.1 Geographic targeting

- Local civil protection and DGOTyAZR personnel identify the affected areas using area or local land-registry maps, clearly establishing the affected polygons.
- The affected polygons are cross-referenced with poverty maps in order to select the polygons which will be eligible for social protection components. The Damage Assessment Committee determines the final polygon selection.

4.2.2 Eligibility criteria

- The eligibility criteria for PETI and Habitat components are decided in an ad hoc manner for each disaster event. This is normally proposed by the DGOTyAZR and SEDESOL and approved by the Damage Assessment Committee.
- In case of floods, for example, the flood level within the house is used as a proxy for affected or not affected household.
- In case of earthquakes, the level of damage to the house is a proxy for PETI and Habitat support.
- In some cases, especially for earthquakes in rural areas, living within the affected polygon is the eligibility criteria, as livelihoods are completely disrupted.
- The eligibility criteria are communicated to all relevant agencies, as well as to the SEDESOL MIS team, for them to process the information once uploaded.

4.2.3 Housing damage assessment planning

- The door-to-door damage assessment survey is planned and implemented by SEDESOL.
- Total number of households are estimated using information from the National Geo-Statistic Institute (INEGI) and in some cases, municipal land-registry data.

- Survey days are calculated based on the deadline set by the Damage Assessment Committee to deliver the first early recovery component.
- Using the number of households estimate and total survey days, the number of enumeration teams are calculated.
- SEDESOL mobilizes its local social workers, if needed, from adjacent states.
- Political issues are factored in the process. For example, in cases where the local governments are from different political parties than the federal government, multi-government enumeration teams are organized to assure trustworthy and objective results.
- SEDESOL has a ready made and flexible survey tool called PETI-03 that is used in paper or electronic/tablet format. The normal socioeconomic survey tool (known as CUIS and mandatory for all social programs) is not used for post-disaster recovery, mainly because the PMT targeting mechanism is not used (as eligibility is a function of geographical eligibility plus damage level) and the length of the questionnaire (average of 90 questions) renders it impractical.
- Enumeration teams are trained on the eligibility criteria, use of the survey tools, citizen engagement protocols, and identification of housing damage.
- Enumeration is conducted and the information is uploaded to the MIS.
- The SEDESOL MIS team checks completeness of information, de-duplicates the surveys, and applies eligibility criteria, producing three beneficiary lists: the list for PETI transfers, the list for Habitat beneficiaries, and the list of households with identified housing damage. Each list is then sent electronically to its corresponding ministry.
- The FONHAPO team uses the identified houses' list to conduct targeted visits with civil engineers to properly assess the level of damage, thus making more efficient use of limited expertise. The Housing Support Program uses a specific survey tool for this assessment.

4.3 Enrollment

- Beneficiaries are considered enrolled once they are qualified as eligible by the MIS.

4.4 Payment Mechanisms

4.4.1 PETI

- Once the beneficiary list is finalized by SEDESOL, the MIS team proceeds to calculate the subsidy amount for PETI and electronically transfers the payroll file to the payment service provider.
- The list is subdivided in smaller, neighborhood-sized lists and sent to the field to be posted in safe public areas where potential beneficiaries can check if they will be recipients of the PETI transfer.
- SEDESOL's social workers are mobilized to conduct outreach and inform payment points and dates to beneficiaries.

- The transfers are made to the head of the household or a proxy, who must present his or her ID to receive the payment.
- Mexico has been able to cut down the PETI service delivery cycle (from assessment to payment) to 4 days.

PETI's Payment Service Provider

The Temporary Employment Program is under the General Directorate of Vulnerable Groups Support (Dirección General de Atención a Grupos Prioritarios, DGAGP), which is responsible for the PETI, Migrant Farm Worker Aid Program (PAJA), and the Non Contributory Pension Program for the Elderly (PAAM). To make efficient use of resources, in 2006 DGAGP integrated the management system for three programs. This means that they share personnel and equipment resources, MIS, and payment service providers, among other things.

PAAM is by far the largest program of the three (both in terms of beneficiaries and budget). DGAGP divides the PAAM payment service provision between two state-owned enterprises across the country (TELECOMM and BANSEFI). TELECOMM has a larger physical presence across the country, and in their contract the payment service for PET and PAJA is included. The costing structure and expected process times for each type of service is detailed in the contract, including PETI payment provisions. PET and PAJA benefit from the integrated payment service strategy by leveraging PAAM's transaction volume.

5. Information

4.4.2 Habitat household goods component

- For the household goods component, once SEDATU receives the beneficiary list from SEDESOL, it calculates the subsidy amount and hires a private print company to produce the vouchers with several security features.
- SEDATU carries out agreement with two or more local supermarkets in order for beneficiaries to exchange the vouchers for eligible household goods.
- A separate list of eligible beneficiaries is posted in a safe public space and the social workers conduct outreach to inform beneficiaries of the voucher distribution points and dates.
- Vouchers may be distributed in payment camps with the PETI transfers.
- The household can exchange the vouchers for electrical appliances and/or furniture of their choosing in any of the eligible stores.

4.4.3 Housing support program

- The response time from the housing support program varies depending on the modalities that will be implemented.
- Different from early recovery SP components, the housing support program is delivered through an executing agency, which normally is the state or municipal government.
- Once the beneficiary houses are determined through a structural survey, FONHAPO prints out certificates which the beneficiary signs and agrees with the executing agency on the transfer dates and quantities of materials and equipment. Additionally, the beneficiary household commits to finishing the construction or reconstruction of the housing unit by a certain date.
- Once materials and equipment have been delivered, it is the responsibility of the executing agency to supervise the construction process until the housing units are completed.

4.5 Grievance Redress Mechanisms

- Temporary desks are placed in several key points in each of the affected polygons from the survey to the payment process. These desks serve as gathering as well as command or supervision points for the social workers and as grievance reception windows, in terms of citizen engagement.
- There are normally three types of grievances reported during these operations: i) non-surveyed households requesting an enumeration team to be dispatched to their house; ii) households requesting a second assessment, as they were excluded from the beneficiary list, and iii) beneficiaries whose personal information with the payment service provider is wrong, and they are requesting an immediate correction to cash out.
- Additionally, SEDESOL provides a toll free number to receive complaints and file grievances during or after the service delivery process.

5.1 Information on Vulnerable People

- According to Article 21 of the General Law for Civil Protection, risk management interventions will give priority to vulnerable groups and households living beneath the welfare line.¹⁵
- The National Civil Protection System's Organization and Operations Manual establishes that the local Civil Protection Units, in coordination with the federal and state health ministries and the Integral Family Development Departments (Desarrollo Integral Familiar, DIF), must identify and contact local vulnerable group shelters and other facilities in order to provide preventive technical assistance, certify emergency measures, and train employees on emergency procedures.¹⁶
- In terms of concentration of poverty, Mexico employs a regional marginalization indicator to classify levels of poverty at the state, municipal, and local level. This is based on the national census and is updated every 5 years. Geographical targeting used by government programs are based on this indicator.
- Additionally, SEDESOL has recently begun implementation of the Development Targeting System (Sistema de Focalización para el Desarrollo, SIFODE), which consolidates and organizes information from all socioeconomic questionnaires conducted by any federal social program. This social registry provides household level data and multidimensional poverty scores for families that have accessed a social program.



15. (Diario Oficial de la Federación, 2012.)

16. (Diario Oficial de la Federación, 2006.)

6. Communication

6.1 Communication Management

- At the national level, the General Directorate of Civil Protection is also in charge of operating the National Communications Center (Centro Nacional de Comunicaciones, CENACOM). This national center centralizes and distributes information related to SINAPROC emergency preparedness and response operations, issuing bulletins to civil protection authorities across the country on potential risks.
- During the recovery phases, municipal governments are responsible for informing the population on early recovery and reconstruction activities through television, radio, or social media.

6.2 Media Relationship

During the post-disaster phases, the Damage Assessment Committee generally manages the relationship with media outlets. During emergency and early recovery, all implementing agencies are required to report progress on a daily basis. This information is consolidated by the Committee and presented to the press periodically.



Bibliography

Lester M. Salamon, S. W. (2004). *Global Civil Society: Dimensions of the Nonprofit Sector, Volume 2*. Bloomfield: Kumarian Press.

Diario Oficial de la Federación. (2008, 12 31). Ley Federal de Presupuesto y Responsabilidad Hacendaria. *Diario Oficial de la Federación* .

Diario Oficial de la Federación. (2012, March 6). Ley General de Protección Civil. Mexico City: Congreso de la Unión.

Diario Oficial de la Federación. (2006, 10 23). Manual de Organización y Operación del Sistema Nacional de Protección Civil. *Diario Oficial de la Federación* .

Diario Oficial de la Federación. (2015, December 31). Reglas de Operación del Program de Empleo Temporal. *Diario Oficial de la Federación* .

Diario Oficial de la Federación. (2015, 12 30). Reglas de Operación del Programa Apoyo a la Vivienda Ejercicio Fiscal 2016.

Diario Oficial de la Federación. (2015, 12 31). Reglas de Operación del Programa de Infraestructura 2016. *Diario Oficial de la Federación* .

Diario Oficial de la Federación. (2010, 12 3). Reglas Generales del Fondo de Desastres Naturales. *Diario Oficial de la Federación* .

Diario Oficial de la Federación. (2011, 1 31). Lineamientos de Operación Específicos del Fondo de Desastres Naturales. *Diario Oficial de la Federación* .

OECD. (2013). *Estudio de la OCDE sobre el Sistema de Protección Civil en México*. OECD.

Palacios, R., & Nishikawa, K. (2015). *Identity Systems Analysis Mexico*. World Bank, Social Protection and Labor Global Practice, Washington DC.

SEDATU. (2013). Lineamientos de Operación del Programa Habitat 2013.



AA88

»» **Rapid Onset**

☀️ **Before Disaster**

⚡ **Low Capacity**

Case of Nepal

- Low capacity countries, such as Nepal, are characterized by weak policy linkages and low organizational capacity to coordinate between disaster risk management and social protection systems.
- Rapid onset disasters provide relatively shorter time slots for quick response, and therefore pre-disaster preparedness is important.
- Depending on the nature of the rapid onset disaster (frequent: typhoon, flood or less frequent: earthquake, volcano, tsunami etc.), people's perception of the risk is different.
- Identification of the agencies involved in disaster preparedness and risk mitigation activities from central to local level and coordination between the various agencies for information sharing and capacity support are key to ensure adequate coordination for effective response during disasters.

Introduction

1.1 About The Scenario

The scenario is a description of the formal and functional relationship of the Disaster Relief Management (DRM) and the Social Protection System (SPS) in Nepal in pre-disaster situation, especially focusing on disaster preparedness and risk mitigation.

Relevant Country Facts

- Nepal is exposed to a number of natural hazards such as flood, landslide, earthquake, fire, cyclonic winds, and hailstorms, cloudburst, drought, famine, and epidemics (NSDRM 2008, p.13). The 2016 World Risk Index ranks Nepal 108 out of 171 in terms of overall risk, scoring 'high' in terms of lack of coping capacities (81.05%), vulnerability (55.91%), lack of adaptive capacities (48.64%), and susceptibility (38.05%).
- A new constitution that defined Nepal as a federal democratic republic was promulgated in September 2015. Under the new constitution, Nepal is expected to transition to a federal state structure with 7 states and local level government bodies, the number of which is still being decided upon. Until the transition completes, the country will continue to be governed under the existing structure of center-local relations, which presently divide the entire country into 75 districts, roughly 217 municipalities, and 3,157 Village Development Committees (VDCs), each overseen by a centrally-appointed civil servant.
- Nepal's DRM system is dependent both on government planning, budgeting, implementing, and coordinating risk management and relief efforts at the central and local level, as well as on non-governmental and community organizations for effective coordination and implementation at local level.
- Nepal's DRM and SP systems have not been developed to include effective linkages between the two.

2. Institutional Setting

2.1 Institutions and Legislation

2.1.1 Key DRM legislation linked to social protection

- Natural Calamity Relief Act 1982 (NCRA) and the Local Self Governance Act 1999 (LSGA) are the existing legal foundations for disaster response in Nepal. Both of these policies are focused on responding to disasters and outlining the responsibilities of local and central level bodies while coordinating the provision of relief for disaster affected areas.
- The National Strategy for Disaster Risk Management 2009 (NSDRM) was formulated to outline a long-term vision to create disaster resilient communities and mainstream disaster risk reduction in development planning. One of the directive principles of the strategy includes ‘assurance of safe life and social security’¹ for disaster affected populations. However, the implementation of the institutional and operational principles of the NSDRM remains incomplete without the enactment of the National Disaster Management Act, prepared in 2009.
- The NSDRM 2009, however, has led to the formal adoption and implementation of Disaster Preparedness and Response Planning Guidance Notes 2010 (DPRPG), Local Disaster Risk Management Planning Guidelines (2012), and District Disaster Management Planning Directives 2013 (DDMPD) to guide planning at the district level in risk assessment, preparation, and capacity building for disaster risk and mitigation activities. Almost all districts have prepared a District Disaster Preparedness and Response Plan (DDPRP) to identify the potential sources of disaster risk in the district and develop capacity at different line agency offices to effectively respond in case of disasters. Although these plans are supposed to be reviewed and updated annually with regular monitoring from district and central level bodies, whether they are done so in practice remains questionable.²

- The Disaster Victims Rescue and Relief Standards 2007 (DVRRS) also requires district level bodies to store relief materials, create disaster relief funds, and identify rescue teams in preparation for any disaster in the district.
- Nepal’s DRR policy framework and implementation arrangements do not have any linkage with the country’s social protection (SP) system. While the country’s SP programs have grown, both in terms of the range of schemes and their budget, the SP system does not adequately cover the range of risks and vulnerabilities caused by the onset of a rapid disaster.³
- The major SP programs in the country include social security allowances, public works programs, maternal and child health incentives, and scholarships and food for education programs run by different line ministries and respective district offices.⁴
- Other related legislation:
 - Water Induced Disaster Management Act 2015: The Department of Water Induced Disaster Management, under the Ministry of Irrigation, are responsible for implementing certain programs to reduce the risk of floods, landslide, erosion, etc. through river training, institutional capacity building, and community awareness raising activities.
 - Health Sector Emergency Preparedness & Disaster Response Plan Nepal 2003: This plan developed by the Department of Health Services, Epidemiology & Disease Control Division, Ministry of Health outlines the broad framework for working with the main disaster response institutions (Ministry of Home Affairs) and local bodies, as well as the key principles for disaster preparedness and response in health sector.
 - Livestock Insurance Policy and Agriculture and Livestock Insurance Regulation (2013): This policy and regulation aims to increase the investment of financial institutions in the agricultural sector by providing subsidies

on insurance for agriculture and livestock for disasters and other harmful events. However, enrollment in the insurance programs is poor, resulting in low coverage.

- Social Security Allowances Program Operational Guidelines 2016: These guidelines are a recently amended version of the 2012 document that outlines the administration of the largest cash transfer conducted by the government to certain categories of the population considered vulnerable.

2.1.2 Key institutions / ministries involved

- The Ministry of Home Affairs has the mandate to lead all disaster management related activities, coordinating with line ministries and other national and international organizations. As noted earlier, the act is mostly focused on during and after disasters, and not on the pre-disaster preparedness and risk mitigation. The ministry has created a Disaster Management Division with three sections, Disaster Preparedness and Recovery Section, Disaster Study and Research Section, and National Emergency Operation Center (NEOC). The latter is active all year and in non-disaster situations is also responsible for information dissemination on disaster preparedness. Regional, district, and local level EOCs are supposed to have been formed at various levels, however they are not present or functional in many cases.
- The NCRA 1982 provides guidelines for the formulation of the following committees at the

central, regional, district, and local level for effective coordination of relief and recovery activities post-disaster.

- Central Natural Disaster Relief Committee (CNDRC). The Ministry of Home Affairs (MoHA) heads the CNDRC to formulate national policy regarding the declaration of affected areas, co-ordinating and implementing relief distribution, including creating working associations with social organizations, rehabilitation and reconstruction of affected areas, and providing support and direction to the district and local committee.⁵ There are two sub-committees under the CNDRC headed by relevant line ministries, including Rescue & Treatment, and Supply, Shelter, and Rehabilitation. The CNDRC has the authority to activate the cluster system of Nepal that delineates cluster leads from government agencies and its counterpart, humanitarian agencies:
- Regional Disaster Relief Committee (RDRC). Chaired by the Regional Administrator, the RDRC is present in all five regions of Nepal and includes a combination of government and security agencies, and voluntary organizations. The RDRC supports and monitors activities implemented at the district level.⁶
- District Disaster Relief Committee (DDRC). Chaired by the Chief District Officer (CDO) at the District Administration Office, DDRC is responsible for formulating district disaster

1. NSDRM 2009, 3.2.2, p. 25.

2. A preliminary review of the DDPRPs on the Disaster Risk Reduction Portal, run by the Ministry of Home Affairs, suggests that the first plans drafted 4-5 years ago were only updated once.

3. The 2015 earthquakes caused heavy loss of life and assets (dwellings, livestock), leading to an estimated additional 2.5–3.5 percent of the population falling back into poverty.

4. Further details of the programs provided in later sections.

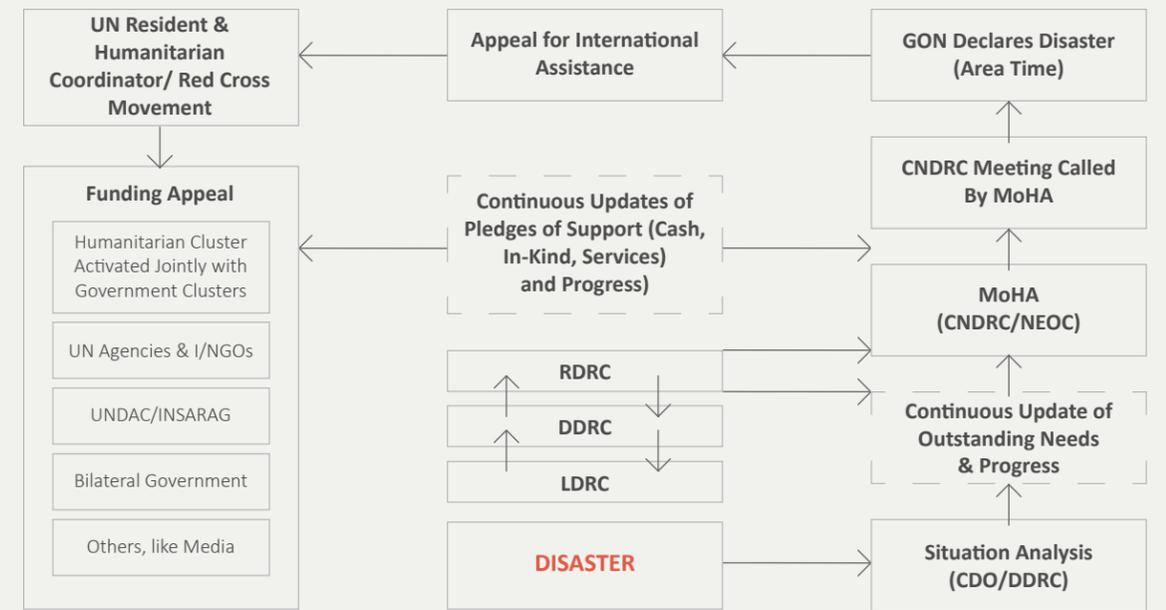
Name of Cluster	Health	WASH	Shelter	Food Security	Logistics	CCCM	Education	Protection	Telecom.	Nutrition	Early Recovery Network
Cluster Leads	MoPH	MoUD	MoUD	MoAD	MoHA	MoUD	MoE	MoWCSW/NHRC	MoIC	MoHP	MoFALD
Cluster Co-Leads	WHO	UNICEF	IFRC/UN Habitat	WFP/FAO	WFP	IOM	UNICEF/SC	UNHCR/UNICEF/UNFPA	WFP	UNICEF	UNDP

Source: National Disaster Response Framework 2013.

5. 1982 Natural Calamity Relief Act.

6. Disaster Management Institution and System in Nepal, p.15. With the implementation of the federal structure, the regional administrative offices may be dissolved and appropriated in the state level administrative structure.

National and International Assistance & Coordination Structure



Source: National Disaster Response Framework 2013.

management plans, coordinating local committees on relief and preparedness, and providing information to RDRC and CNDRC.⁷ The Local Development Officer at the District Development Committee acts as the member secretary of DDRC and coordinates with VDCs, municipalities, and other non-governmental organizations in disaster planning, preparation, and mitigation activities. The cluster approach is replicated at the district level as well.

- Local Disaster Relief Committee (LDRC). Following the Local Self Governance Act 1999 that decentralized and devolved power to the local level, the LDRC is responsible for disaster management at the municipal and the Village Development Committee (VDC) level.
- The Fire Control & Disaster Management Section under the Municipalities and Environmental Management Division at the Ministry of Federal Affairs & Local Development (MoFALD) works

directly with and supports local level government bodies (District Development Committees, Municipalities, and Village Development Committees) to coordinate with the DDRC at the district level in preparation, coordination, awareness raising, and capacity building for disaster preparedness and management.

- Department of Urban Development and Building Construction, under the Ministry of Urban Development is responsible for developing building codes to ensure disaster resilient buildings in urban areas. It is also responsible for monitoring the implementation of building codes by municipalities.
- The Department of Water Induced Disaster Management, under the Ministry of Irrigation administers programs related to river training, community awareness, and disaster risk mitigation from irrigation activities, etc.

- The Department of Hydrology & Meteorology and Meteorological Forecasting Division, under the Ministry of Environment collects hydro-meteorological data from stations through the country and provides early warning for disasters.
- The Department of Civil Registration, under MoFALD manages the nationwide administration of Social Security Allowances Program through local bodies (DDCs, VDCs, and Municipalities).
- MoFALD also manages the administration of two public works programs (Karnali Employment Program and Rural Community Infrastructure Works Program) in collaboration with donor agencies.
- The Government of Nepal launched the National Risk Reduction Consortium in 2011 to bring together international financial institutions, humanitarian agencies, and other non-profit organizations in order to generate funding for and improve coordination of disaster preparedness and risk reduction.⁸ Based on consultation among various stakeholders, the NRRC identified five flagship programs of immediate action for DRM in Nepal: i) school and hospital safety (through retrofitting), ii) emergency preparedness and response, iii) flood management in the Koshi river basin, iv) community based DRR/DRM (up to 1000 VDCs), and v) policy/institutional support for DRM.
- National and international humanitarian organizations including the UN, Red Cross, and Red Crescent Society, among others, support the government at both the central and local level to increase capacity for disaster preparedness and risk mitigation. The Disaster Prevention Network (DP-NET), formed in 1996, serves to coordinate all institutions, government and non-governmental, working in the field of disaster prevention and preparedness in the country.
- Research organizations like the Asian Disaster Reduction Center, International Center for Integrated Mountain Development, Center for Disaster Risk Management, etc. conduct research, awareness, and capacity building activities related to disaster preparedness and risk mitigation.

2.2 Finance

2.2.1 Financing schemes

- The provision for the Natural Disaster Relief Fund at the central, regional, and district level was created under the NCRA 1982. The Disaster Victim Rescue and Relief Standards 2007 also mandates the RDRC and DDRC maintain a minimum balance of 700,000 and 300,000 NPR at the regional and district level for disaster relief funds as preparation for disaster incidence.
- The GoN has set up the Prime Minister's Disaster Relief Fund to include money received from GoN or from any other national/international sources to be used primarily for rescue, relief, and rehabilitation of the affected people.
- Funding for disaster preparedness and mitigation related activities has to be provided for by local governments (DDCs, VDCs, Municipalities) themselves through their regular annual budgeting process. The District Disaster Preparedness and Response Plan guides the prioritization of disaster preparedness and risk mitigation activities annually and selection for inclusion in the next year's budget for the district.
- The line agencies (including irrigation and health) conducting disaster risk mitigation programs at the district level rely on their own budget received from the line ministries to implement their program activities.
- Additionally, a few other funding sources have also been established.
 - The NRRC has estimated a total budget of USD 150 million for its three-year flagship programs, of which 45% has been funded by the end of 2011. Through the Consortium, donors can provide support in two main ways: i) fund government departments for activities covered by the Consortium, or ii) form bilateral agreements with agencies that are implementing activities under the Consortium, which relies on agencies own fundraising efforts.⁹

8. Disaster Risk Reduction in Nepal: Flagship Programmes, The Nepal Risk Reduction Consortium, p. vii (April 2011).

9. Synthesis Report: Analysis of financing mechanism and funding streams to enhance emergency preparedness, Development Initiatives, Jan Kellett and Hannah Sweeney, <https://www.scribd.com/document/185584369/Analysis-of-financing-mechanisms-and-funding-streams-to-enhance-emergency-preparedness-Synthesis-Report>.

7. Disaster Management Institution and System in Nepal, p.15. With the implementation of the federal structure, the regional administrative offices may be dissolved and appropriated in the state level administrative structure.

- A report from UNOCHA FTS shows that there has been an increase in funding to Nepal for preparedness, from US\$1.9 million in 2007 to US\$4.0 million in 2011.
- Despite efforts from national and international actors, it is important to note that two of the three available financing schemes are for when disaster strikes, rather than for mitigation or management purposes. The full functioning of the NRRC is also dependent on the National Disaster Management Authority which has yet to be passed, despite Cabinet approval in 2009.¹⁰
- The funding for the Social Security Allowances Program and public works programs are provided centrally by MoFALD to municipalities and DDCs, who administer the funds through the VDCs.

2.3.2 Financial governance

- As disaster preparedness and risk mitigation activities are implemented through the local bodies themselves, the Local Government Financial Administration Rules 2007 and Local Body (Financial) Resources Mobilization and Management Rules 2012 applies to them like any other regular development activities.
- The Prime Minister's Disaster Relief Fund Operational Rules 2006 apply to the flow of funds from the central to local level and the coordination of various organizations providing funding for rescue, relief, recovery, and reconstruction post-disaster.

2.3 Capacities and Coordination

2.3.1 Human resources and capacities

- Technical capacity for disaster preparedness and risk mitigation is highly concentrated in central government agencies (like the DHM and DWIDM), and the local level government bodies that are responsible for assessing and planning for preparedness and mitigation are too understaffed and overburdened with their regular workload to effectively prepare for disasters.
- The building codes whose effective implementation is ensured by municipalities are often very understaffed, resulting in poor disaster-resilient design of buildings. Newly created municipalities face more severe capacity constraints.
- The District Disaster Preparedness and Response Plans prepared by the districts identify both available resources in government and non-governmental sectors, as well as key capacity constraints to effectively prepare for and respond to disasters. However, implementation of these plans by district bodies to strengthen their capacity is weak and uneven, given the uneven performance of districts in implementing their budgeted annual programs.

2.3.2 Institutional/local government collaboration

- While the DDRC remains the main institution for inter-agency collaboration for disaster relief and recovery, the planning for pre-disaster preparedness is led by the DDC (NSDRM 2009) and other non-governmental organizations that are identified as District Lead Support Agencies. Coordination with other line agencies, such as the district and project offices of DWIDM, where necessary, is achieved through the DDC during the implementation of preparedness and risk mitigation activities.

3. Instruments

The policy and institutional linkages between disaster prevention strategies and social protection programs in Nepal are very weak. This section looks at the SSA and public works programs administered by MoFALD and the food for education program run by the Ministry of Education.

These programs were chosen as they are the major SP programs run by the government that also have potential in serving as models or entry points for identification and targeting of vulnerable populations as part of disaster preparedness.

3.1 Cash Transfer

- Cash transfer or the Social Security Allowance (SSA) program fall under social assistance programs under SPS in Nepal and are overseen by MoFALD.
- There are currently five schemes under the SSA: old-age pension, single woman's pension, the child grant, disability, and endangered ethnicity. These allowances are not explicitly targeted to the poor, but they are intended for those who are considered socially and/or economically vulnerable.
- While Nepal does not have a social registry, MoFALD recently developed a management information system (MIS) that is capable of recording civil registration and SSA beneficiary data. MoFALD has rolled out the MIS in approximately 25 districts.¹¹ Prior investment, development, and maintenance of the online database of beneficiaries could provide government and humanitarian agencies information on vulnerable sections of the population for effective distribution of relief and recovery efforts in affected areas.

3.2 Public Works Program

- The Rural Community Infrastructure Works (RCIW) and the Karnali Employment Program (KEP) are the two public works programs currently in Nepal. The stated objectives of these programs are to offer a certain number of days of employment as safety nets against poverty and other forms of deprivation (KEP) or food insecurity (RCIW).
- The RCIW has been operating since the mid-1990s, often in partnership with the World Food Programme (WFP), and operates in selected VDCs in 21 food insecure districts. The KEP started in 2006 and runs only in five far-western districts

in a particularly remote, mountainous area of Nepal called Karnali. The U.K. Department for International Development is providing technical and financial support to the KEP.

- The two programs are geographically targeted to the most remote and food insecure districts in Nepal and provide a disaster risk reduction strategy for the most vulnerable populations. However, an integrated list that includes information on the beneficiaries could be maintained and used as a humanitarian assistance tool (post-emergency) and/or as part of the reconstruction strategy, if and when, a disaster were to strike.

3.3 Food for Education

- The Government of Nepal and the United Nations World Food Programme (WFP) have been implementing primary school feeding programs since 1996 and the Food for Education Project was initiated in 2002.
- Under the mid-day meal program, students are provided with fortified blended food and de-worming tablets. Under the girl incentive program, the mothers of female students with at least 80% class attendance receive two liters of cooking oil per month. Similarly, under the mother and child health care program, a monthly ration of 7kg of fortified blended food is provided to mothers with children aged 6-36 months, as well as expecting mothers. In 2009, around 100,000 students received mid-day meals, 30,000 benefited from the girl incentive program, and a further 23,000 benefited from the mother and child health program.¹²
- The Food for Education program targets girls and women who are identified as part of the vulnerable population in Nepal. The incentives provided to families creates buffer against potential shocks, reducing their vulnerabilities.

10. Synthesis Report: Analysis of financing mechanism and funding streams to enhance emergency preparedness, Development Initiatives, Jan Kellett and Hannah Sweeney, <https://www.scribd.com/document/185584369/Analysis-of-financing-mechanisms-and-funding-streams-to-enhance-emergency-preparedness-Synthesis-Report>. p. 61.

11. Roll-out in some districts was supported by the Asian Development Bank (ADB).

12. ILO Website. http://www.ilo.org/dyn/ilossi/ssimain.viewScheme?p_lang=en&p_scheme_id=3200&p_geoaid=524.

4. Delivery System

4.1 ID System

- Precise identification of individuals in vulnerable and disaster-prone contexts could serve as a major asset in disaster preparedness and risk mitigation. The non-robust and highly fragmented identity ecosystem in Nepal compounds the problem of identification and delivery of SP in case of disasters.
- Several government entities are mandated to deal with certain aspects of identity and have some identity assets in Nepal. For example, while the Department of Civil Registration (DOCR) manages civil registration and has the mandate to establish family folders, MoHA issues citizenship cards to all citizens over the age of 16. This citizenship number is unique only within the district where these are issued. The absence of a centralized electronic database and the non-uniqueness of the citizenship ID numbers provided by each district further constrains the possibility of uniquely identifying individuals.
- In the 2015 earthquakes, the lack of a population register prevented the government from developing an accurate count of the affected population and hindered immediate relief and recovery efforts. Key figures such as the number of households, number of individuals by age group, and location could have enhanced emergency planning and speedy provision of relief. Many government and nongovernment agencies were forced to conduct their own beneficiary identification surveys, adding cost and time delays to the implementation of relief and recovery efforts.
- To establish a more robust identity instrument, the Nepal's government established the National Identity Management Center under MoHA in 2011, with the mandate of issuing national IDs in the form of smart cards with biometric data. However, due to implementation delays, the National Identity Management Center has only begun distributing the first batch of IDs in a small-scale pilot in 2016.

4.2 Targeting

- The district disaster preparedness plans also identify locations and communities with exposure to certain disasters, which allows for geographical targeting for disaster preparedness, mitigation, and awareness raising.
- The SP programs in Nepal are more categorical than targeted, although there are some programs, such as the food security (child grant) nutritional supplemental programs, that tend to target geographically.

4.3 Payment Mechanism

- The funding process includes the disbursement of funds from the central level to the districts and/or municipalities for both SSA and public work programs.
- The districts then disburse the fund to the VDCs, who in turn manually deliver the cash to beneficiaries in rural areas. The municipalities usually make cash transfers through banks. In some cases, the allowances are deposited into beneficiaries' bank accounts, although in most cases, banks simply distribute the cash without opening individual accounts for the beneficiaries. Some districts and VDCs are starting to use agent-based banking models to reach beneficiaries in remote and rural areas.

5. Information

5.1 Information on Disaster Risk

- The District Disaster Preparedness and Response Plans specify the scope and nature of disaster risk for all local bodies within the district. Since the updating of information is not consistent, major changes in the infrastructure or topography (due to floods, landslides) may not be reflected in these plans.
- The DHM and MFD routinely forecast and provide early warnings for any predictable disasters. Community and technology-based early warning systems are also in place for certain areas to disseminate information on any unfolding disaster events.

5.2 Information on Social Protection Beneficiaries

- Nepal currently does not have a social registry. MoFALD recently developed a management information system (MIS) that is capable of recording civil registration and SSA beneficiary data. MoFALD has rolled out the MIS in approximately 25 districts and is in the process of extending this to the remaining districts in the country. The public works program and other SP programs operate separately, and often with paper-based registry of program beneficiaries.
- Lack of a social registry that combines information on all SP program beneficiaries is a major bottleneck for incorporating SP programming in disaster preparedness and response.



6. Communication

6.1 Communication Management

- Centrally, the NEOC and the NRRC play coordinating and supporting roles to the government and other bodies, developing and disseminating communication materials during emergencies. The DDCs, with support from DDRCs, local bodies, and non-governmental organizations, help disseminate information on active disaster risks and mitigation activities being conducted by the district body.

»» Rapid Onset

☀️ During Disaster

⚡ Low Capacity

Case of Nepal

- Low capacity countries, such as Nepal, are characterized by weak policy linkages and low organizational capacity to coordinate between disaster risk management and social protection systems.
- Rapid onset disasters provide relatively shorter time slots for quick response, and therefore pre-disaster preparedness is important.
- Low capacity, both technical and financial, and the lack of preparedness of local bodies and other agencies involved often result in delayed response during disasters, especially
- in communities located in geographically remote areas.
- Disasters often break the weak existing infrastructure for communication and transportation, making immediate response more difficult.

Introduction

1.1 About The Scenario

The scenario is a description of the relationship between the Disaster Relief Management (DRM) and the Social Protection System (SPS) in Nepal during a rapid onset disaster situation, especially focusing on rescue and immediate relief.

Relevant Country Facts

- Nepal is exposed to a number of natural hazards such as flood, landslide, earthquake, fire, cyclonic winds, and hailstorms, cloudburst, drought, famine, and epidemics (NSDRM 2008, p.13). The 2016 World Risk Index ranks Nepal 108 out of 171 in terms of overall risk, scoring 'high' in terms of lack of coping capacities (81.05%), vulnerability (55.91%), lack of adaptive capacities (48.64%), and susceptibility (38.05%).
- A new constitution that defined Nepal as a federal democratic republic was promulgated in September 2015. Under the new constitution, Nepal is expected to transition to a federal state structure with 7 states and local level government bodies, the number of which is still being decided upon. Until the transition completes, the country will continue to be governed under the existing structure of center-local relations, which presently divide the entire country into 75 districts, roughly 217 municipalities, and 3,157 Village Development Committees (VDCs), each overseen by a centrally-appointed civil servant.
- Nepal's DRM system is dependent both on government planning, budgeting, implementing, and coordinating risk management and relief efforts at the central and local level, as well as on non-governmental and community organizations for effective coordination and implementation at local level.
- Nepal's DRM and SP systems have not been developed to include effective linkages between the two.

2. Institutional Setting

2.1 Institutions and Legislation

2.1.1 Key DRM legislation linked to social protection

- Natural Calamity Relief Act 1982 (NCRA) and the Local Self Governance Act 1999 (LSGA) are the existing legal foundations for disaster response in Nepal. Both of these policies are focused on responding to disasters and outlining the responsibilities of local and central level bodies while coordinating the provision of relief for disaster affected areas.
- The National Strategy for Disaster Risk Management 2009 (NSDRM) was formulated to outline a long-term vision to create disaster resilient communities and mainstream disaster risk reduction in development planning. One of the directive principles of the strategy includes ‘assurance of safe life and social security’¹ for disaster affected populations. However, the implementation of the institutional and operational principles of the NSDRM remains incomplete without the enactment of the National Disaster Management Act, prepared in 2009.
- The National Disaster Response Framework 2013 outlines the coordination mechanisms for national and international bodies during and after disaster and provides a timeframe for response activities by different agencies. However, because the government has not approved the NDMA, the framework remains a guiding document and does not provide the concrete legal basis needed to build coordination and institutional capacity to effectively respond to disasters.
- The Disaster Victims Rescue and Relief Standards 2007 (DVRRS) also requires district level bodies to store relief materials, create disaster relief funds, and identify rescue teams in preparation for any disaster in the district.
- National Strategic Action Plan for Search & Rescue 2014 outlines the institutional and operational arrangements for effective coordination between various agencies at central, district and local level for search and rescue operations during emergencies. The Plan highlights the necessary amendments in various policies governing the

operations of the Nepal army, the Armed Police Force, and Nepal police, which are usually the first responders during emergencies, and also the capacity building needs of search and rescue teams at central and local level.

- Disaster Assessment Guideline 2016 provides the format and timeframe for collecting disaster impact data within 24 hours of the incidence of disaster to initiate early rescue and relief operations.
- National Emergency Operation Center Standard Operating Procedures 2016: This document was formalized after the 2015 earthquake to guide the operations of the National Emergency Operation Center (NEOC), which is the main implementing body of the Central Disaster Relief Committee (CDRC) described below. The NEOC is expected to be operational and on standby throughout the year, specifically focusing on disaster preparedness and information dissemination. The NEOC becomes active during disasters, coordinating disaster response and relief at the national level.

2.1.2 Key institutions / ministries involved

- The Ministry of Home Affairs has the mandate to lead all disaster management related activities, coordinating with line ministries and other national and international organizations. As noted earlier, the act is mostly focused on during and after disasters, and not on the pre-disaster preparedness and risk mitigation. The ministry has created a Disaster Management Division with three sections, Disaster Preparedness and Recovery Section, Disaster Study and Research Section, and National Emergency Operation Center (NEOC). The latter is active all year and in non-disaster situations is also responsible for information dissemination on disaster preparedness. Regional, district, and local level EOCs are supposed to have been formed at various levels, however they are not present or functional in many cases.
- The NCRA 1982 provides guidelines for the formulation of the following committees at the central, regional, district, and local level for effective coordination of relief and recovery activities post-disaster.

- Central Natural Disaster Relief Committee (CNDRC). The Ministry of Home Affairs (MoHA) heads the CNDRC to formulate national policy regarding the declaration of affected areas, co-ordinating and implementing relief distribution, including creating working associations with social organizations, rehabilitation and reconstruction of affected areas, and providing support and direction to the district and local committee.² There are two sub-committees under the CNDRC headed by relevant line ministries, including Rescue & Treatment, and Supply, Shelter, and Rehabilitation. The CNDRC has the authority to activate the cluster system of Nepal that delineates cluster leads from government agencies and its counterpart, humanitarian agencies:
- Regional Disaster Relief Committee (RDRC). Chaired by the Regional Administrator, the RDRC is present in all five regions of Nepal and includes a combination of government and security agencies, and voluntary organizations. The RDRC supports and monitors activities implemented at the district level.³
- District Disaster Relief Committee (DDRC). Chaired by the Chief District Officer (CDO) at the District Administration Office, DDRC is responsible for formulating district disaster

management plans, coordinating local committees on relief and preparedness, and providing information to RDRC and CNDRC.⁴ The Local Development Officer at the District Development Committee acts as the member secretary of DDRC and coordinates with VDCs, municipalities, and other non-governmental organizations in disaster planning, preparation, and mitigation activities. The cluster approach is replicated at the district level as well.

- Local Disaster Relief Committee (LDRC). Local level committees are not present uniformly across the country. During disaster, they serve as a coordinating body for search and rescue operations, as well as immediate relief distributing agencies. Most of these committees are formed informally and consist of political party representatives.
- Nepal Army, Armed Police Force, and Nepal Police all are immediately activated for disaster relief and search and rescue. The Nepal Army has established a central Disaster Management Directorate to mobilize resources during and after disasters, and the Armed Police Force (APF) has also established a Disaster Response Training Center to enhance skills of APF personnel to effectively engage in disaster response.

Cluster System in Nepal

Name of Cluster	Health	WASH	Shelter	Food Security	Logistics	CCCM	Education	Protection	Telecom.	Nutrition	Early Recovery Network
Cluster Leads	MoPH	MoUD	MoUD	MoAD	MoHA	MoUD	MoE	MoWCSW/NHRC	MoIC	MoHP	MoFALD
Cluster Co-Leads	WHO	UNICEF	IFRC/UN Habitat	WFP/FAO	WFP	IOM	UNICEF/SC	UNHCR/UNICEF/UNFPA	WFP	UNICEF	UNDP

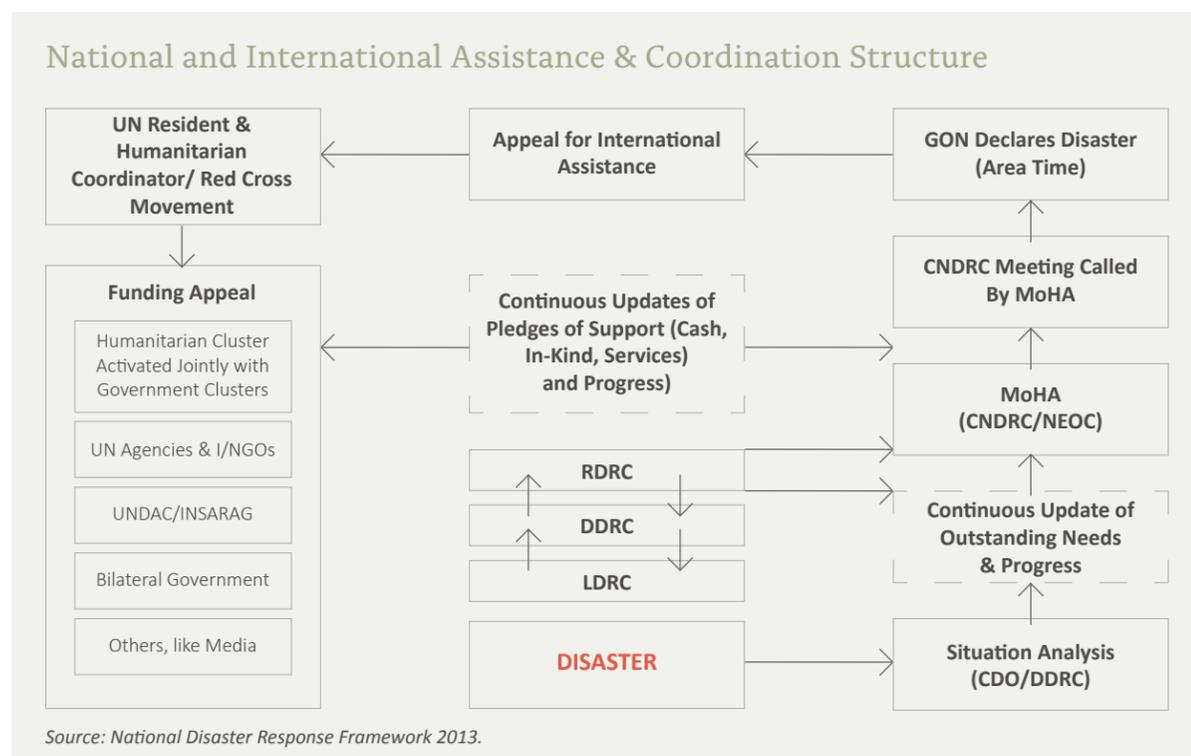
Source: National Disaster Response Framework 2013.

2. 1982 Natural Calamity Relief Act.

3. Disaster Management Institution and System in Nepal, p.15. With the implementation of the federal structure, the regional administrative offices may be dissolved and appropriated in the state level administrative structure.

4. Ibid.

1. NSDRM 2009, 3.2.2, p. 25.



- National and international humanitarian organizations including the UN, Red Cross, and Red Crescent Society, among others, support the government at both the central and local level to increase capacity for efficient disaster response. All of these organizations work in coordination with the CDRC and DDRC at the central and local level. The chart on the following page outlines the coordination structure of different bodies after disasters.

2.2 Finance

2.2.1 Financing schemes

- The provision for the Natural Disaster Relief Fund at the central, regional, and district level was created under the NCRA 1982. The Disaster Victim Rescue and Relief Standards 2007 also mandates the RDRC and DDRC maintain a minimum balance of 700,000 and 300,000 NPR at the regional and district level for disaster relief funds as preparation for disaster incidence.

- The GoN has set up the Prime Minister's Disaster Relief Fund to include money received from GoN or from any other national/international sources to be used primarily for rescue, relief, and rehabilitation of the affected people.
- The line agencies (including irrigation and health) conducting disaster risk mitigation programs at the district level rely on their own budget received from the line ministries to implement their program activities.

2.3.2 Financial governance

- The Prime Minister's Disaster Relief Fund Operational Rules 2006 apply to the flow of funds from the central to local level and the coordination of various organizations providing funding for rescue, relief, recovery, and reconstruction post-disaster.
- The funds from the Prime Minister's Disaster Relief Fund and Central Disaster Relief fund are channeled through the DDRC to be used as necessary during and after emergencies.

2.3 Capacities and Coordination

2.3.1 Human resources and capacities

- The capacity of local bodies to respond to disasters depends on the preparedness and storage of relief and rescue materials. In most cases in Nepal, the capacity is uneven and low.
- The primary responders in the event of disasters are the security forces, who also receive special training on disaster response.
- In most cases, the central government mobilizes support for disaster response.

2.3.2 Institutional/local government collaboration

- The DDRC remains the main institution for inter-agency collaboration for disaster relief during emergencies.



3. Instruments

- In-kind transfers as food, tarpaulins, and sanitation supplies are primary instruments of relief delivery during emergencies. The DDRCs may use the DDRF or request more funds from the central government to supply relief materials.
- The Disaster Victim Rescue and Relief Standards 2007 provides for cash transfers of NPR 5000 immediately after disaster for households who have lost their homes or their food supplies. However, this immediate cash grant was not observed during the 2015 earthquake.

4. Delivery System

4.1 ID System

- Nepal's weak identification system has meant that the ad hoc identification of beneficiaries is based on recommendations from political party leaders and VDC officials at the local level. DDRCs must accept this list of beneficiaries for relief materials.

4.2 Targeting

- Local Disaster Relief Distribution Committees were formed in an ad hoc manner, in place of LDRCs, which are not functional in most places, to coordinate distribution of food, shelter, and medicinal goods at certain locations during the 2015 earthquake. The VDC secretaries who reported to the DDRC after each round of distribution coordinated the LDRDCs.

4.3 Grievance Redress Mechanism

- During prolonged emergencies such as floods or earthquakes with continued aftershocks, complaints regarding the non-receipt of relief materials are usually channeled through the VDC secretary or local political party leaders, directly to the DDRC. Unfortunately, the low capacity of overburdened District Administration Offices leading the DDRC usually result in a lack of investigation of complaints.



5. Information

5.1 Information on Disaster Impact

- The Disaster Assessment Guidelines 2016 provide a format to be used to collect data on disaster impact and affected populations immediately after disaster, aiding in early relief and recovery. The DDRC coordinates with security forces and local bodies to collect this information, and reports it to the CRDC.

5.2 Information on Vulnerable Populations

- The directive principles identified in the NSDRM related to the 'assurance of safe lives and social security' and 'gender and social inclusion' provide for the identification and prioritization of vulnerable populations (including women, children, single women/men, the sick, and the disabled) and marginalized communities in developing targeted rescue, relief, and rehabilitation programs during and after emergencies. However, given the lack of a population register, local informants, including political party and community leaders, are usually responsible for identifying these populations, which may lead to delays and inaccurate targeting of vulnerable populations.

6. Communication

6.1 Communication Management

- Centrally, the NEOC and the NRRC play coordinating and supporting roles to the government and other bodies, developing and disseminating communication materials during emergencies.
- The District and Municipal Emergency Operation Centers, where present, and in other cases DDCs with support from DDRCs, local bodies, non-governmental organizations help disseminate information on ongoing disasters and preventive measures to ensure safety.
- The national and local media are used extensively by the government, as well as other organizations involved in rescue and relief during emergencies.



» Rapid Onset

☀️ After Disaster

⏏️ Low Capacity

Case of Nepal

- Low capacity countries, such as Nepal, are characterized by weak policy linkages and low organizational capacity to coordinate between disaster risk management and social protection systems.
- SP programming can play a significant role in post-disaster settings to help disaster victims in recovery, rehabilitation, and reconstruction.
- Most existing DRM policies in Nepal focus on relief and early recovery, with no institutional arrangement to oversee the transition to long-term recovery and rehabilitation post-disaster.
- Although some potential for social protection programming exists in DRM policies, especially for early recovery and response, a lack of robust social registries, manual payment methods, and weak financial management capacities add further obstacles to integrating existing SP program models into DRM post-disaster.
- Disasters often affect the most vulnerable populations of society and therefore effective and well-funded social protection programming are essential to help communities recover and rebuild their lives post-disaster.

Introduction

1.1 About The Scenario

This scenario is a description of the formal and functional relationship of the Disaster Relief Management (DRM) and the Social Protection System (SPS) in Nepal in post-disaster situation, especially focusing on relief, recovery, and rehabilitation.

Relevant Country Facts

- Nepal is exposed to a number of natural hazards such as flood, landslide, earthquake, fire, cyclonic winds, and hailstorms, cloudburst, drought, famine, and epidemics (NSDRM 2008, p.13). The 2016 World Risk Index ranks Nepal 108 out of 171 in terms of overall risk, scoring 'high' in terms of lack of coping capacities (81.05%), vulnerability (55.91%), lack of adaptive capacities (48.64%), and susceptibility (38.05%).
- A new constitution that defined Nepal as a federal democratic republic was promulgated in September 2015. Under the new constitution, Nepal is expected to transition to a federal state structure with 7 states and local level government bodies, the number of which is still being decided upon. Until the transition completes, the country will continue to be governed under the existing structure of center-local relations, which presently divide the entire country into 75 districts, roughly 217 municipalities, and 3,157 Village Development Committees (VDCs), each overseen by a centrally-appointed civil servant.
- Nepal's DRM system is dependent both on government planning, budgeting, implementing, and coordinating risk management and relief efforts at the central and local level, as well as on non-governmental and community organizations for effective coordination and implementation at local level.
- Nepal's DRM and SP systems have not been developed to include effective linkages between the two.

2. Institutional Setting

2.1 Institutions and Legislation

2.1.1 Key DRM legislation linked to social protection

- The Natural Calamity Relief Act 1982 (NCRA) and the Local Self Governance Act 1999 (LSGA) provide the legal foundations for post-disaster response in Nepal. Both of these policies are focused on responding to disasters and outlining the responsibilities of local and central level bodies while coordinating the provision of relief, recovery, and rehabilitation.
- The National Strategy for Disaster Risk Management 2009 and National Disaster Response Framework 2013 further provide broad guidance on the coordination of disaster preparedness, relief, and recovery efforts.
- Disaster Victims Rescue and Relief Standards 2007 (DVRRS) specifies the amount of cash grants to be distributed among disaster affected families after receiving the requested amount from the central level disaster relief committee.
- Disaster Assessment Guidelines (DAG) 2015 provides operational details and formats for collection of data in different stages after disasters, to be used by all relevant government bodies at the local and national level for relief, recovery, and reconstruction planning.
- Post-disaster Dead Body Management Guidelines (DMBG) 2012 provides details on identification, management, handover, and last rites of dead bodies post-disaster.
- Disaster Victim Relocation Operational Guidelines 2014 (DVROG) provides institutional and operational details on application, verification, and recommendation of relocation of individuals or communities in post-disaster situations where the previous area of residence is no longer habitable.
- No specific policy or program exists to provide the overall legal basis for an integrated approach to recovery, rehabilitation, and reconstruction post-disaster. The legislation described above only provides guidance up to the early recovery phase post-disaster. With the National Disaster Management Act not passed by the government,

the institutional arrangement envisioned by the NSDRM 2009, an independent National Disaster Management Authority and other central committees for recovery and reconstruction cannot be realized. In the absence of the Act, some ad-hoc (for example, the action plan for rehabilitation and reconstruction of disaster precipitated by 2014 flood and landslide in Banke, Bardiya, Dang, Surkhet, and Sindhupalchowk districts, 2015) and other more well-developed laws (like the National Reconstruction & Rehabilitation Policy 2016 formed after the earthquake) were passed in response to specific disaster events.

- Nepal's DRR policy framework and implementation arrangements do not have any linkage with the country's social protection (SP) system. While the country's SP programs have grown, both in terms of the range of schemes and their budget, the SP system does not adequately cover the range of risks and vulnerabilities caused by the onset of a rapid disaster.¹
- Few of the main SP programs in the country include social security allowances, public works programs, maternal and child health incentives, scholarships and food for education programs, and a People's Housing Program run by different line ministries and respective district offices.²
- Other related legislation:
 - People's Housing Program Implementation Guidelines 2014 (3rd Amendment): The guidelines outline the implementation program for constructing houses for marginalized ethnicities and communities in 55 out of 75 districts in Nepal. However, the program does not yet have any post-disaster reconstruction component for the same marginalized communities.
 - Social Security Allowances Program Operational Guidelines 2016: These guidelines are a recently amended version of the 2012 document that outlines the administration of the largest cash transfer conducted by the government to certain categories of the population considered vulnerable.

2.1.2 Key institutions / ministries involved

- The Ministry of Home Affairs has the mandate to act as the National Focal Agency on Disaster Management and leads all disaster management related activities, coordinating with line ministries and other national and international organizations. The ministry has created a Disaster Management Division with three sections, Disaster Preparedness and Recovery Section, Disaster Study and Research Section, and National Emergency Operation Center (NEOC).
 - The NCRA 1982 provides guidelines for the formulation of the following committees at the central, regional, district, and local level for effective coordination of relief and recovery activities post-disaster.
 - Central Natural Disaster Relief Committee (CNDRC). The Ministry of Home Affairs (MoHA) heads the CNDRC to formulate national policy regarding the declaration of affected areas, co-ordinating and implementing relief distribution, including creating working associations with social organizations, rehabilitation and reconstruction of affected areas, and providing support and direction to the district and local committee.³ There are two sub-committees under the CNDRC headed by relevant line ministries, including Rescue & Treatment, and Supply, Shelter, and Rehabilitation. The CNDRC has the authority to activate the cluster system that delineates

cluster leads from the government agencies and its counterpart in humanitarian agencies.

- Regional Disaster Relief Committee (RDRC). Chaired by the Regional Administrator, the RDRC is present in all five regions of Nepal and includes a combination of government and security agencies, and voluntary organizations. The RDRC supports and monitors activities implemented at the district level.⁴
- District Disaster Relief Committee (DDRC). Chaired by the Chief District Officer (CDO) at the District Administration Office, DDRC is responsible for formulating district disaster management plans, coordinating local committees on relief and preparedness, and providing information to RDRC and CNDRC.⁵ The cluster approach is replicated at the district level as well.
- Local Disaster Relief Committee (LDRC). Following the Local Self Governance Act 1999 that decentralized and devolved power to the local level, the LDRC is responsible for disaster management at the municipal and the Village Development Committee (VDC) level. The chart on the next page outlines the coordination structure of different bodies after disasters.
- The National Reconstruction Authority, formed after the enactment of the National Reconstruction & Rehabilitation Policy 2016, coordinates all central and district level activities related to reconstruction of housing, infrastructure, etc. after the 2015 earthquake.

Cluster System in Nepal

Name of Cluster	Health	WASH	Shelter	Food Security	Logistics	CCCM	Education	Protection	Telecom.	Nutrition	Early Recovery Network
Cluster Leads	MoPH	MoUD	MoUD	MoAD	MoHA	MoUD	MoE	MoWCSW/NHRC	MoIC	MoHP	MoFALD
Cluster Co-Leads	WHO	UNICEF	IFRC/UN Habitat	WFP/FAO	WFP	IOM	UNICEF/SC	UNHCR/UNICEF/UNFPA	WFP	UNICEF	UNDP

Source: National Disaster Response Framework 2013.

1. The 2015 earthquakes caused heavy loss of life and assets (dwellings, livestock), leading to an estimated additional 2.5–3.5 percent of the population falling back into poverty.

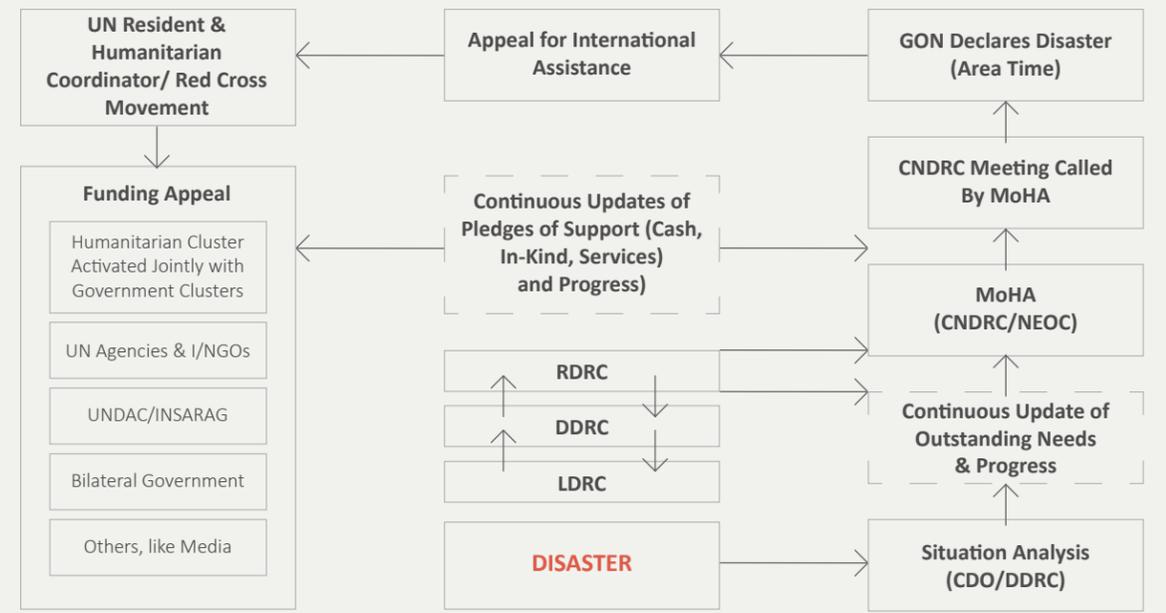
2. Further details of the programs are provided in later sections.

3. 1982 Natural Calamity Relief Act.

4. Disaster Management Institution and System in Nepal, p.15. With the implementation of the federal structure, the regional administrative offices may be dissolved and appropriated in the state level administrative structure.

5. Ibid.

National and International Assistance & Coordination Structure



Source: National Disaster Response Framework 2013.

- Department of Urban Development and Building Construction under the Ministry of Urban Development, through its division offices, is responsible for implementing the People’s Housing Program, which builds houses for marginalized and vulnerable ethnicities and communities. The program, however, has only been able to deliver about 7,000 of its target 21,000 houses by 2018. However, recent increases in budgetary support shows some promise of its expansion. The program has also been marked by allegations of malfeasance and corruption at the local level.
- The Department of Civil Registration under MoFALD manages the nationwide administration of the Social Security Allowances Program through local bodies (DDCs, VDCs, and municipalities). MoFALD also manages the administration of two public works programs (Karnali Employment Program and Rural Community Infrastructure Works Program) in collaboration with donor agencies.

2.2 Finance

2.2.1 Financing schemes

- The provision for the Natural Disaster Relief Fund at the central, regional, and district level was created under the NCRA 1982. The Disaster Victim Rescue and Relief Standards 2007 also mandates the DDRC provide cash grants of 20,000 NPR to disaster-affected families who have lost their homes, food supplies, or land. However, the latter was not observed during the 2015 earthquake, which may have been due to low financial or institutional capacity. The DDRCs waited for identification of households with damaged homes before requesting funds from CDRCs for distribution of 15,000 NPR. This led to massive delays with affected households not receiving any government aid for months.

- The GoN set up the Prime Minister’s Disaster Relief Fund to include money received from GoN or from any other national/international sources to be used primarily for the rescue, relief, and rehabilitation of affected people.
- The Earthquake Housing Reconstruction Program, administered by the National Reconstruction Authority, provides cash grants to eligible beneficiaries directly to their bank accounts.
- The funds for the Social Security Allowances Program, and the public works program are provided centrally by MoFALD to municipalities and DDCs, who administer the funds through the VDCs.
- The funds of the People’s Housing Program are managed by division offices and program implementation units of DUDBC at the district level. The department gets an annual budget for the program, which it then channels to its district level offices.

2.3.2 Financial governance

- The Prime Minister’s Disaster Relief Fund Operational Rules 2006 apply to the flow of funds from the central to local level and the coordination of various organizations providing funding for rescue, relief, recovery, and reconstruction post-disaster.
- The funds from the Prime Minister’s Disaster Relief Fund and Central Disaster Relief fund are channeled through the DDRC to be used as necessary after emergencies.
- The Reconstruction Fund Operation and Management Guidelines 2016 regulate the financial flow of housing grants from the central to the district government treasury and finally to the bank account of the beneficiary.

2.3 Capacities and Coordination

2.3.1 Human resources and capacities

- Technical capacity for disaster recovery and reconstruction is mostly centralized with the relevant line agencies at the district level responsible for implementing the reconstruction of structures (buildings, roads, electricity gridlines, etc.) in coordination with other relevant central and local bodies facing severe capacity (technical and financial) constraints.

- The capacity for damage assessment during the 2015 earthquakes was so limited that CBS had to send staff engineers from the Ministry of Urban Development (MoUD) and Department of Local Infrastructure Development and Agricultural Roads (DoLIDAR) who were mobilized to do preliminary and incomplete assessment of damage. The CBS later implemented a door-to-door survey mobilizing thousands of enumerators with the capacity to properly assess the damage level of houses, with support from UNOPS, who recruited a third party firm for data collection management.

2.3.2 Institutional/local government collaboration

- The DDRC’s activity decreases after the early recovery phase, but it continues to coordinate recovery activities in various clusters throughout districts with other non-governmental organizations.
- The DDRC is also responsible for forming and reviewing the findings of technical committees in response to requests for relocation on government land by disaster-affected households, and also for recommending the report of the technical committee to the CDRC for approval. The Supply, Shelter, and Rehabilitation Sub-committee under the CDRC forms another group to review the reports from DDRCs and make final decisions on recommendation for relocation.



3. Instruments

The policy and institutional linkages between disaster prevention strategies and social protection programs in Nepal are very weak. Although certain provisions in some of the DRM policies allow for targeting vulnerable populations for relief, recovery, and reconstruction, no funded program exists to implement these provisions generally. Similarly, the institutional fragmentation in recovery and reconstruction activities, and absence of overarching law and independent authority has led to a lack of coherent focus on designing SP programming in DRM. The SP programs described in the pre-disaster scenario case study⁶ and the People's Housing Program described above, also do not have disaster relief or recovery components within them, although the potential for use of SP systems to deliver support for DRR and DRM exists. Some features of the SP system, including lack of comprehensive information of beneficiaries, lack of integration of various program beneficiaries through a population register, and continued use of manual cash transfer are problematic. These issues point to the various bottlenecks that cash or in-kind transfers in post-disaster situations will face if the current SP systems were to be used to make these transfers.

- Cash transfers have been used by the Housing Reconstruction Program post-earthquake.
- Livelihood skills training, including mason training for disaster resilient building, are also supported by various government and non-governmental organizations in the earthquake affected districts.



6. Please refer to Scenario for rapid onset, pre-disaster, and low capacity country: Case of Nepal for description of SSA program, public works program, and food for education programs.

4. Delivery System

4.1 ID System

- Proper identification of beneficiaries is key before enrollment into disaster recovery or reconstruction related programs. However, given the fragmented and non-robust identity ecosystem in the country, identification is done on the basis of paper documents or community verification, in their absence.
- Existing SP programs, including the People's Housing Program, depend on citizenship documents and community verification processes to identify eligible beneficiaries.

4.2 Targeting

- The district disaster preparedness plans also identify locations and communities with exposure to certain disasters, which allows for geographical targeting for disaster preparedness, mitigation, and awareness raising.
- The SP programs in Nepal are more categorical than targeted, although there are some programs, such as the food security (child grant) nutritional supplemental programs, that tend to target geographically. The People's Housing Program is currently targeted to certain poor, vulnerable, and marginalized communities and ethnicities, although the potential for using poverty metrics to target beneficiaries exists.

4.3 Payment Mechanism

- The funding process includes the disbursement of funds from the central level to the districts and/or municipalities for both SSA and public work programs.
- The districts then disburse the fund to the VDCs, who in turn manually deliver the cash to beneficiaries in rural areas. The municipalities usually make cash transfers through banks. In some cases, the allowances are deposited into beneficiaries' bank accounts, although in most cases, banks simply distribute the cash without opening individual accounts for the beneficiaries. Some districts and VDCs are starting to use agent-based banking models to reach beneficiaries in remote and rural areas.

5. Information

5.1 Information on Disaster Impact by Sector

- The Disaster Assessment Guidelines 2016 provides formats to be used for collecting data after disaster in various sectors. The guidelines were formalized after the 2015 earthquake, perhaps due to the multiple damage assessment formats being used by different agencies, especially during early phases of the earthquake. The format provided detailed impact assessments including identifying children living in households in the affected areas. The newly formulated guidelines, if implemented properly, could provide detailed data on vulnerable populations, such as children etc., for the design of targeted response and early recovery.

5.2 Information on Social Protection Beneficiaries

- Nepal currently does not have a social registry. MoFALD recently developed a management information system (MIS) that is capable of recording civil registration and SSA beneficiary data. MoFALD has rolled out the MIS in approximately 25 districts and is in the process of extending this to the remaining districts in the country. The public works program and other SP programs operate separately, and often with paper-based registry of program beneficiaries.
- Lack of a social registry that combines information on all SP program beneficiaries is a major bottleneck for incorporating SP programming in disaster preparedness and response.

5.3 Information on Housing Reconstruction Program Beneficiaries

- The availability of a digitized population register in the 11 earthquake affected districts and a program beneficiary list on the MIS helps tracking enrollment, progress in construction, funding flow, and grievances through the same system.

6. Communication

6.1 Communication Management

- Centrally, the NEOC and the NRRC play coordinating and supporting roles to the government and other bodies, developing and disseminating communication materials during emergencies.
- The District and Municipal Emergency Operation Centers, where present, and in other cases DDCs with support from DDRCs, local bodies, non-governmental organizations help disseminate information on ongoing disasters and preventive measures to ensure safety.
- The national and local media are used extensively by the government, as well as other organizations involved in rescue and relief during emergencies.
- Specially formed bodies like the National Reconstruction Authority also coordinate communication campaigns on various reconstruction related issues through district-level offices and local bodies.





Case of Mali

-  **Slow Onset**
-  **Before Disaster**
-  **Low Capacity**

- The nature of slow onset disasters, in this case drought, require years of coordination, constant political will, as well as dedicated financing.
- Both the institutional setup, planning, and response (time and instruments), will be different from that of a fast-onset disaster.
- Mali is a low-capacity country with high exposure to droughts. The relationship between social protection and the international donor community is low for the prevention/management of a food crisis following a drought.
- In the management of drought and food security, the donor community plays a much more significant role (before, during, and after disaster) than in fast onset scenarios.
- The costs of responding to disasters are borne jointly by the Government of Mali and international actors.
- Fragility and conflict in the northern part of the country add an extra layer of complexity, as government functions are not available in all areas and basic services and drought response are provided through NGOs.

1. Introduction

1.1 About The Scenario

This scenario looks into the formal institutional setup with regard to preparedness to drought and the resulting food insecurity in Mali. As in many other low-income countries that are prone to droughts, the international community plays a major role and will be included throughout the analysis.

Relevant Country Facts

- Mali is regularly exposed to different types of disasters, particularly drought, locust invasions, and flooding. 8 of the 10 largest disasters in Mali took place during the last decade, affecting 5 million people, including the 1998 and 2005 droughts.¹
- Two-thirds of the territory are arid and semi-arid areas, with very low levels of rainfall. Rainfall also varies across communities, with more than 1,000mm per year in the South, and less than 200mm per year in the Northern Saharan area. The persistence of drought has led to a strong North-to-South migration.
- Food insecurity, caused primarily by the impact of drought, remains a major difficulty for the Malian population. The most recent drought of 2011/12, together with the security, political, and nutrition crises, led to 28% of the population being food insecure and a 10% prevalence of malnutrition. Vulnerability was further exacerbated by fluctuations in commodity prices, land degradation, and recent political and security events.
- Fragility and conflict in the northern regions of Mali is a great challenge, particularly with respect to the provision of basic services and the presence of government institutions.

1. UNFCCC 2012: Slow onset events were identified to include "sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification."

2. Institutional Setting

2.1 Institutions and Legislation

2.1.1 Key DRM legislation linked to social protection Social protection

- The National Strategy for Food Security (adopted in 2002) set the initial legal foundation for social protection in the country. Soon after, in 2003, the government established a committee in charge of coordinating food security across many ministries, known as the Communautaire d'orientation et de coordination du Systeme Alimentaire (hereinafter COCCSA). This committee is housed under the Ministry of Solidarity, Humanitarian Assistance, and Reconstruction of the North.
- The Commissariat for Food Security (hereinafter CSA) was established in 2004, and is housed under the Office of the President of the Republic. It is mandated to coordinate the national system for food safety, all instruments for the management and prevention of food crises, as well as the functioning of the grain markets and the recovery of security stock.
- The Institutional Framework for Food Security (Dispositif National de Sécurité Alimentaire, hereinafter DNSA) is the main mechanism in place for assessing and responding to food insecurity. In effect since the 1980s, the DNSA was funded by a mix of technical and financial partners (PTs). However, as of 2014, the DNSA has been fully funded by the Government of Mali. This mechanism includes decision-making bodies, as well as international agencies, that are part of the Carde Harmonize. It provides reserves of food security (stocks), distributed from the national level to local communities.
- The Strategic Plan for the Prevention and Management of Disasters (2007-2011), was established with the mandate of managing of disasters and post-crises reconstruction. The National Policy for Humanitarian Action is expected to be adopted soon. The main objective behind this policy is to coordinate and strengthen existing bodies that are responsible for managing emergency situations, to assist the handling of humanitarian crises, and to strengthen the resilience of affected communities.
- The National Directorate of Social Development (hereinafter DNDS) was established in 2000. The DNDS's mission is to develop the national policy on improving the living conditions of the population,

and implement the principles of national solidarity, the fight against poverty and exclusion, and the protection and promotion of disabled, elderly, and underprivileged groups. In 2009, the Decree No. 09-558 P–RM established the organization and the functional modalities of the DNDS. This included a section on humanitarian and emergency relief functions and gave way to the existence of the Regional Directorate of Social Development and Solidarity (DRDSES), a sub-regional committee on Social Development Services and Solidarity (SDSES), and local committees of Social Development and Solidarity (CCDSES) at the regional, local, and community levels.

- Recently, the Malian Government adopted the National Social Protection Policy, together with the National Action Plan for the Extension of Social Protection to 2016-2018.

Civil protection

- The law No. 06-004, in 2006, officially established the General Directorate of Civil Protection, The General Directorate of Civil Protection has a mandate to coordinate the disaster response at the national level. It is also responsible for the coordination and control of relief actions and the implementation of rehabilitation operations post-disaster. This is more commonly used in times of fast-onset disasters.
- In 2016, the Decree No. 0346/P-RM approved the National Disaster Risk Reduction Strategy, which aims to help build more resilient communities and better prepare the country in disaster response.
- Recently, in 2015, the government adopted the ORSEC Plan (Plan for Relief Organizations), which serves as the principal tool for managing disaster response. This plan is activated during major crises or disasters endangering human lives and causing considerable material losses to the social and economic infrastructure.

Other related legislation

- Agricultural legislation does exist in Mali, however, the laws apply to (and favor) big farmers and do not include building resilience for small agriculture producers.
- Overall, there is a major lack of coordination among governing bodies, particularly with respect to disaster response post-drought.

2.1.2 Key institutions / ministries involved Government institutions and departments

- The Commissariat for Food Security (Commissariat à la Sécurité Alimentaire, hereinafter CSA), established in 2004, and housed under the Office of the President of the Republic, is in charge of preparing all the necessary steps involved in free food distribution (also known as DAG). It oversees the coordination of food interventions by various actors, monitors those interventions, and completes the final reporting of activities in each community before and during food insecurity crises. The CSA is a part of the DNSA (see 2.1.1) and has supplemental roles (explained further in 2.3.2 Institutional/local governance collaboration).
- The Early Warning Systems (EWS) are housed under the CSA. They identify the areas and populations at risk of food insecurity and nutrition across the country, draw up reports, and make recommendations for vulnerable people.
- The National Council on Food Security (CNSA) is the main framework for dialogue between the government, technical and financial partners, and stakeholders for the governance of food security, food, and nutrition in Mali. The decision making bodies that fall under the CNSA include:
 1. Regional Committee of Food Security (CRSA)
 2. Local Committee of Food Security (CLSA)
 3. Communal Committee of Food Security (CRSA)
- The Ministry of Finance and Economy is the main body in charge of providing the budget and financing in response to drought.
- The Ministry of Solidarity and Humanitarian Action, on the other hand, is the main institution in charge of planning and implementing social protection in the country. The ministry has a dedicated budget line for disasters and calamities in each region, in order to respond to crises. The values of this budget varies depending on the magnitude of the crises.
- The General Directorate of Civil Protection, housed under the Ministry of Interior, is the main body in charge of disaster planning and disaster response at the national level. This, however, is more useful in times of fast-onset disasters.

- The Ministry of Agriculture's food security wing aims to: diversify the activities of rural producers, reduce the current massive surge of rural populations to cities within Mali, and create jobs for rural and urban youth by inserting them into the processing and marketing channels of agrosylvo-pastoral productions.
- The Ministry of Employment and Vocational Training implements labor-intensive public works in response to drought and floods.

International community

- The World Food Program (WFP) is one of the main international agencies involved in food insecurity response in Mali. In times of food security crises, the WFP employs several programs including general food distribution, food assistance, and nutrition/school feeding programs.
- The Food and Agriculture Organization (FAO) is also present and active in Mali, particularly in response to food insecurity. Active as of 2012, FAO's main activities, during and after crises, include the provision of agriculture inputs, seed and fuel coupon distribution to rice producers, technical supervision, and nutritional education.
- ECHO provides seasonal cash transfers to food insecure households through 5 NGOs, known as Cadre Commune de Filets Sociaux (including OXFAM and Danish Relief Council).
- The World Bank, through the Jigisemejiri project, aims to increase access to targeted cash transfers for poor and vulnerable households and build an adaptive national safety net system.
- In the northern part of Mali, given the fragile situation, government functions and provision of basic services, as well as donor aid, are carried out by NGOs.

3. Instruments

2.2 Finance

2.2.1 Financing schemes

- The Government of Mali has various tools for financing drought-response activities and the resulting food insecurity. Nevertheless, such devices are fragmented and face major constraints with regard to timely scale-up.
- The Ministry of Economy, Finance, and Budget has a dedicated budget line for responding to disasters. However, this budget line is not specifically allocated to line ministries (nor central ones) or in response to specific shocks such as drought.
- Under the national budget, there are two specific funds used for drought-response specifically: the Fund for Food Security (FSA) and the Common Counterpart Fund (FCC). However, regulatory barriers make it very difficult for the funds to be disbursed on time.
- In the management and financing of drought and food security, the donor community plays a significant role.

2.3 Capacities and Coordination

2.3.1 Human resources and capacities

- Technical capacity for disaster preparedness and risk mitigation is concentrated in central government agencies. The capacity to undertake planning, coordination, and response to slow-onset disasters Mali currently is low.
- Nevertheless, the Cadre Harmonize (harmonized management framework) analyzes and identifies food-insecure populations by classifying the severity of current and projected food insecurity. .

2.3.2 Institutional/local government collaboration

- Before crises, the Early Warning System (EWS) identifies the areas and populations at risk of food insecurity, drafts a report, and provides recommendations for support to people in need.
- The Observatory of Agricultural Markets (OMA) follows the level of market supply and agricultural prices. OMA analyzes the evolution of prices and other indicators to assess the situation of the agricultural market and its short, medium, and long term evolution.

- The social protection sphere in Mali includes a mix of the following:
 - Food subsidies: Used by the government to limit the impact of increased food prices on consumers. However, they remain untargeted.
 - In-kind support and cash transfers: They are carried out by 15 agencies that are part of the Cash Working Group Jigisemejiri: The World Bank, WFP, OXFAM, ACF, RED-CROSS, Merci Corps, Care Mali, Plan Mali, ECHO, and Save the Children.
 - School feeding programs: They are provided by the WB, UNICEF, WFP, Plan MALI, CATHOLIC RELIEF SERVICES, or the diaspora.
- Labor-intensive public works: These programs are mainly in response to floods and droughts, are developed by the Ministry of Employment and Vocational training, and are implemented by the Agency for the Promotion of Employment of the Young (known as APEJ). The new SP program under Jigisemejiri will include public works components, as well as income generating activities with a climate-responsive angle.
- When crises become acute, aid agencies' interventions focus on emergency response, especially food and healthcare. Food-for-work and cash-for-work schemes are also common responses.



4. Delivery System

- Given the low capacity in Mali and the country's reliance on humanitarian aid and donor contributions, especially when situations become acute, disaster response is generally not preceded by risk prevention or mitigation activities.

4.1 ID System

- The EWS mechanism, housed under the CSA, collects the necessary information for drought response. Based on the information collected, it is then possible to identify the areas and populations at risk of food insecurity.

4.2 Targeting

- The Early Warning System (EWS) collects the necessary data for drought response and is able to generate annual lists of communes that are vulnerable to food insecurity. This list is provided to the CSA, who is then able to determine the number of people in need of help and the amount of food aid needed to be distributed.

4.3 Partner Agencies

- The WFP uses a mix of targeting methods for food distribution, including community based targeting for labor intensive public works to select the beneficiaries.
- The upcoming World Bank supported public works program will be carried out using a combination of community based targeting (as in the parent Jigisemejiri project) and self-targeting. Half of the communities that benefit the LIPW activity are within the project parent interventions areas, the other half are not receiving cash transfers from the project. The income generating activities will utilize community-based targeting, since communities are better positioned to identify the households/individuals that would benefit from such activities. All poor and vulnerable households currently enrolled in the social registry who are receiving quarterly cash transfers will be eligible to participate.



5. Information

5.1 Information on Disaster Risk

- The Government of Mali, as well as its partners, collect a wide range of data across departments and agencies, which are used in decision-making for drought response. Information is collected from a variety of actors, including the main body, the EWS, and is then used to inform the Cadre Harmonize, and in turn, develop the National Response Plan (NRP).
- The Early Warning System (EWS) is mandated to collect, analyze, and disseminate data related to the vulnerability of food security through various surveys (including ENSAN, HEA, and SMART). Additionally, several other players, including ACMAD / AGRHYMET / CILSS, FEWS NET,² and the Joint Research Centre EU, also collect and analyze satellite data, which could inform, in a quick and reliable manner, the EWS trigger mechanisms. This data is also used for fast-onset scenarios.
- The Observatory of Sustainable Human Development (ODHD), together with the Civil Protection DG, also collect information related to disaster risk and vulnerability. This information, however, is more geared towards fast-onset disasters.
- In northern parts of the country, given the fragile situation, non-state actors, including humanitarian ones (UN system, the Red Cross, and NGOs), also play a key role in collecting data on their respective areas of operation.

5.2 Information on Social Protection Beneficiaries

- Currently, the lack of a social registry that is able to link SP programs with information on household vulnerability, makes SP and drought response actions much less effective.

6. Communication

6.1 Communication Management

- There is a need for better communication by policymakers on slow onset events and risk management options, so that more can be done before such shocks arise.

2. ENSAN : Enquête Nationale sur la Sécurité Alimentaire et Nutritionnelle, HEA : Analyse Economique des Ménages, SMART : Standardized Monitoring and Assessment of Relief and Transitions, FEWS : Famine Early Warning System, ACMAD: African Regional Climate Centre, AGRHYMET: Agro-Hydro-Meteorologie, CILSS: Comite Inter-Etat de Lutte contre la Secheresse au Sahel

Case of Mali

-  **Slow Onset**
-  **During Disaster**
-  **Low Capacity**

- The nature of slow onset disasters, in this case drought, require years of coordination, constant political will, as well as dedicated financing.
- Both the institutional setup, planning, and response (time and instruments), will be different from that of a fast-onset disaster.
- Mali is a low-capacity country with high exposure to droughts. The relationship between social protection and the international donor community is low for the prevention/management of a food crisis following a drought.
- In the management of drought and food security, the donor community plays a much more significant role (before, during, and after disaster) than in fast onset scenarios.
- The costs of responding to disasters are borne jointly by the Government of Mali and international actors.
- Fragility and conflict in the northern part of the country add an extra layer of complexity, as government functions are not available in all areas and basic services and drought response are provided through NGOs.

1. Introduction

1.1 About The Scenario

This scenario looks into the formal institutional setup with regard to the country's response to drought and resulting food insecurity. As in many other low-income countries that are prone to droughts, the international community plays a major role and will be included throughout the analysis.

Relevant Country Facts

- Mali is regularly exposed to different types of disasters, particularly drought, locust invasions, and flooding. 8 of the 10 largest disasters in Mali took place during the last decade, affecting 5 million people, including the 1998 and 2005 droughts.¹
- Two-thirds of the territory are arid and semi-arid areas, with very low levels of rainfall. Rainfall also varies across communities, with more than 1,000mm per year in the South, and less than 200mm per year in the Northern Saharan area. The persistence of drought has led to a strong North-to-South migration.
- Food insecurity, caused primarily by the impact of drought, remains a major difficulty for the Malian population. The most recent drought of 2011/12, together with the security, political, and nutrition crises, led to 28% of the population being food insecure and a 10% prevalence of malnutrition. Vulnerability was further exacerbated by fluctuations in commodity prices, land degradation, and recent political and security events.
- Fragility and conflict in the northern regions of Mali is a great challenge, particularly with respect to the provision of basic services and the presence of government institutions.

1. UNFCCC 2012: Slow onset events were identified to include "sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification."

2. Institutional Setting

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- The National Strategy for Food Security (adopted in 2002) set the initial legal foundation for social protection in the country. Soon after, in 2003, the government established a committee in charge of coordinating food security across many ministries, known as the Communautaire d'orientation et de coordination du Systeme Alimentaire (hereinafter COCCSA). This committee is housed under the Ministry of Solidarity, Humanitarian Assistance, and Reconstruction of the North.
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- The Institutional Framework for Food Security (Dispositif National de Sécurité Alimentaire, hereinafter DNSA) is the main mechanism in place for assessing and responding to food insecurity. In effect since the 1980s, the DNSA was funded by a mix of technical and financial partners (PTs). However, as of 2014, the DNSA has been fully funded by the Government of Mali. This mechanism includes decision-making bodies, as well as international agencies, that are part of the Carde Harmonize. It provides reserves of food security (stocks), distributed from the national level to local communities.
- The Strategic Plan for the Prevention and Management of Disasters (2007-2011), was established with the mandate of managing of disasters and post-crises reconstruction. The National Policy for Humanitarian Action is expected to be adopted soon. The main objective behind this policy is to coordinate and strengthen existing bodies that are responsible for managing emergency situations, to assist the handling of humanitarian crises, and to strengthen the resilience of affected communities.
- The National Directorate of Social Development (hereinafter DNDS) was established in 2000. The DNDS's mission is to develop the national policy on improving the living conditions of the population,

and implement the principles of national solidarity, the fight against poverty and exclusion, and the protection and promotion of disabled, elderly, and underprivileged groups. In 2009, the Decree No. 09-558 P–RM established the organization and the functional modalities of the DNDS. This included a section on humanitarian and emergency relief functions and gave way to the existence of the Regional Directorate of Social Development and Solidarity (DRDSES), a sub-regional committee on Social Development Services and Solidarity (SDSES), and local committees of Social Development and Solidarity (CCDSES) at the regional, local, and community levels.

- Recently, the Malian Government adopted the National Social Protection Policy, together with the National Action Plan for the Extension of Social Protection to 2016-2018.

Civil protection

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- In 2016, the Decree No. 0346/P-RM approved the National Disaster Risk Reduction Strategy, which aims to help build more resilient communities and better prepare the country in disaster response.
- Recently, in 2015, the government adopted the ORSEC Plan (Plan for Relief Organizations), which serves as the principal tool for managing disaster response. This plan is activated during major crises or disasters endangering human lives and causing considerable material losses to the social and economic infrastructure.

Other related legislation

- Agricultural legislation does exist in Mali, however, the laws apply to (and favor) big farmers and do not include building resilience for small agriculture producers.
- Overall, there is a major lack of coordination among governing bodies, particularly with respect to disaster response post-drought.

2.1.2 Key institutions / ministries involved Government institutions and departments

- The Commissariat for Food Security (Commissariat à la Sécurité Alimentaire, hereinafter CSA), established in 2004, and housed under the Office of the President of the Republic, is in charge of preparing all the necessary steps involved in free food distribution (also known as DAG). It oversees the coordination of food interventions by various actors, monitors those interventions, and completes the final reporting of activities in each community before and during food insecurity crises. The CSA is a part of the DNSA (see 2.1.1) and has supplemental roles (explained further in 2.3.2 Institutional/local governance collaboration).
- The Early Warning Systems (EWS) are housed under the CSA. They identify the areas and populations at risk of food insecurity and nutrition across the country, draw up reports, and make recommendations for vulnerable people.
- The National Council on Food Security (CNSA) is the main framework for dialogue between the government, technical and financial partners, and stakeholders for the governance of food security, food, and nutrition in Mali. The decision making bodies that fall under the CNSA include:
 1. Regional Committee of Food Security (CRSA)
 2. Local Committee of Food Security (CLSA)
 3. Communal Committee of Food Security (CRSA)
- The Ministry of Finance and Economy is the main body in charge of providing the budget and financing in response to drought.
- The Ministry of Solidarity and Humanitarian Action, on the other hand, is the main institution in charge of planning and implementing social protection in the country. The ministry has a dedicated budget line for disasters and calamities in each region, in order to respond to crises. The values of this budget varies depending on the magnitude of the crises.
- The General Directorate of Civil Protection, housed under the Ministry of Interior, is the main body in charge of disaster planning and disaster response at the national level. This, however, is more useful in times of fast-onset disasters.

- The Ministry of Agriculture's food security wing aims to: diversify the activities of rural producers, reduce the current massive surge of rural populations to cities within Mali, and create jobs for rural and urban youth by inserting them into the processing and marketing channels of agro-sylvo-pastoral productions.
- The Ministry of Employment and Vocational Training implements labor-intensive public works in response to drought and floods.

International community

- The World Food Program (WFP) is one of the main international agencies involved in food insecurity response in Mali. In times of food security crises, the WFP employs several programs including general food distribution, food assistance, and nutrition/school feeding programs.
- The Food and Agriculture Organization (FAO) is also present and active in Mali, particularly in response to food insecurity. Active as of 2012, FAO's main activities, during and after crises, include the provision of agriculture inputs, seed and fuel coupon distribution to rice producers, technical supervision, and nutritional education.
- ECHO provides seasonal cash transfers to food insecure households through 5 NGOs, known as Cadre Commune de Filets Sociaux (including OXFAM and Danish Relief Council).
- The World Bank, through the Jigisemejiri project, aims to increase access to targeted cash transfers for poor and vulnerable households and build an adaptive national safety net system.
- In the northern part of Mali, given the fragile situation, government functions and provision of basic services, as well as donor aid, are carried out by NGOs.

3. Instruments

2.2 Finance

2.2.1 Financing schemes

- The Government of Mali has various tools for financing drought-response activities and the resulting food insecurity. Nevertheless, such devices are fragmented and face major constraints with regard to timely scale-up.
- The Ministry of Economy, Finance, and Budget has a dedicated budget line for responding to disasters. However, this budget line is not specifically allocated to line ministries (nor central ones) or in response to specific shocks such as drought.
- Each Ministry must make a request to the Prime Minister to mobilize the funds required for their response activities, delaying or potentially limiting their interventions.
- For instance, the Ministry of Social Development Affairs call for funds from the Prime Minister's office. They can deliver food in conjunction with CSA, but don't have an allocated fund like the CSA does
- During drought and the resulting food insecurity in the country, the Commissariat for Food Security (CSA) is the main provider of food and has the necessary funding for response. The funds are used to buy the needed cereal when the crises occur and distribute it to those who are affected.

2.3 Capacities and Coordination

2.3.1 Human resources and capacities

- Technical capacity for disaster planning is highly concentrated in central government agencies. The capacity to undertake planning, coordination, and response to slow-onset disasters in Mali is currently low.

2.3.2 Institutional/local government collaboration

- Before and during crises, the Early Warning System (EWS) identifies the areas and populations at risk of food insecurity. These recommendations are translated into the National Response Plan by the CSA.
- Overall, the Commissariat à la Sécurité Alimentaire (CSA) is mandated to coordinate the national system for food safety, the instruments of management, the prevention of food crises, and watch over the functioning of the grain markets and the recovery of stock of security.
- The Observatory of Agricultural Markets (OMA) follows the level of market supply and agricultural prices. OMA analyzes the evolution of prices and other indicators to assess the situation of the agricultural market and its short, medium, and long term evolution. That information is used by the CSA to intervene in areas where prices are above average, regulating the instability of prices in the market.

- The social protection sphere in Mali includes a mix of the following:
 - Food subsidies: Used by the government to limit the impact of increased food prices on consumers. However, they remain untargeted.
 - In-kind support and cash transfers: They are carried out by 15 agencies that are part of the Cash Working Group Jigisemejiri: The World Bank, WFP, OXFAM, ACF, RED-CROSS, Merci Corps, Care Mali, Plan Mali, ECHO, and Save the Children.
 - School feeding programs: They are provided by the WB, UNICEF, WFP, Plan MALI, CATHOLIC RELIEF SERVICES, or the diaspora.



4. Delivery System

- Given the low capacity in Mali and the country's reliance on humanitarian aid and donor contributions, especially when situations become acute, disaster response is generally not preceded by risk prevention or mitigation activities.

4.1 ID System

- The EWS mechanism, housed under the CSA, collects the necessary information for drought response. Based on the information collected, it is then possible to identify the areas and populations at risk of food insecurity.
- This is conducted during both the lean season and in times of drought. The cadre harmonize system which decides food security responses is used twice a year, in November and March (the beginning and the end of the lean season).
- The National Response Plan (NRP) as a result of this information, is conducted annually, and includes both short-term and long-term food security planning. The NRP is subject to validation from the Conseil National de Securite Alimentaire (CNSA).

4.2 Targeting

- The Early Warning System (EWS) collects the necessary data for drought response and is able to generate annual lists of communes that are vulnerable to food insecurity. This list is provided to the CSA, who is then able to determine the number of people in need of help and the amount of food aid needed to be distributed.
- Community based targeting: An additional level of targeting is conducted in the communities by linking the vulnerability lists created by EWS with the final list of beneficiaries per community. The CSA is the main body in charge, along with national NGOs and local authorities.

4.3 Partner Agencies

- The WFP uses a mix of targeting methods for food distribution, including community based targeting for labor intensive public works to select the beneficiaries.
- The upcoming World Bank supported public works program will be carried out using a combination of community based targeting (as in the parent Jigisemejiri project) and self-targeting. Half of the communities that benefit the LIPW activity are within the project parent interventions areas, the other half are not receiving cash transfers from the project. The income generating activities will utilize community-based targeting, since communities are better positioned to identify the households/individuals that would benefit from such activities. All poor and vulnerable households currently enrolled in the social registry who are receiving quarterly cash transfers will be eligible to participate.

4.4 Partner Mechanism

- In drought response, food support is the most common tool for assisting the poor. The "payment" in this case is food distribution.
- During drought and the resulting food insecurity in the country, the Commissariat for Food Security (CSA) is the main provider of food and has the necessary funding for response. The funds are used to buy the needed cereal when the crises occur and distribute it to those who are affected.

5. Information

5.1 Information on Disaster Risk

- The EWS, along with other data collection, is used to identify the areas and populations at risk of food insecurity country-wide. This information is used to draft reports and recommendations on how to support those most in need, inform the Cadre Harmonize, and is implemented into the National Response Plan (NRP) by the CSA.

5.2 Information on Social Protection Beneficiaries

- Currently, the lack of a social registry that is able to link SP programs with information on household vulnerability, makes SP and drought response actions much less effective.
- Nevertheless, a Social Registry (SR) is being developed under the main SP program Jigisemejiri. Housed under the Ministry of Solidarity and Humanitarian Assistance, the SR will be guided and implemented by the SP Steering Committee. It is planned to be completed and in effect within the next five years.
- Drought response, mainly in the form of food support, remains mainly geographically targeted, with some community-based targeting added.



6. Communication

6.1 Communication Management

- There is a need for better communication by policymakers on slow onset events and risk management options, so that more can be done before such shocks arise.



Case of Mali

- The nature of slow onset disasters, in this case drought, require years of coordination, constant political will, as well as dedicated financing.
- Both the institutional setup, planning, and response (time and instruments), will be different from that of a fast-onset disaster.
- Mali is a low-capacity country with high exposure to droughts. The relationship between social protection and the international donor community is low for the prevention/management of a food crisis following a drought.
- In the management of drought and food security, the donor community plays a much more significant role (before, during, and after disaster) than in fast onset scenarios.
- The costs of responding to disasters are borne jointly by the Government of Mali and international actors.
- Fragility and conflict in the northern part of the country add an extra layer of complexity, as government functions are not available in all areas and basic services and drought response are provided through NGOs.

1. Introduction

1.1 About The Scenario

This scenario looks into the formal institutional setup with regard to drought response and the actions taken after food insecurity becomes more acute in Mali. As in many other low-income countries that are prone to droughts, the international community plays a major role and will be included throughout the analysis.

Relevant Country Facts

- Mali is regularly exposed to different types of disasters, particularly drought, locust invasions, and flooding. 8 of the 10 largest disasters in Mali took place during the last decade, affecting 5 million people, including the 1998 and 2005 droughts.¹
- Two-thirds of the territory are arid and semi-arid areas, with very low levels of rainfall. Rainfall also varies across communities, with more than 1,000mm per year in the South, and less than 200mm per year in the Northern Saharan area. The persistence of drought has led to a strong North-to-South migration.
- Food insecurity, caused primarily by the impact of drought, remains a major difficulty for the Malian population. The most recent drought of 2011/12, together with the security, political, and nutrition crises, led to 28% of the population being food insecure and a 10% prevalence of malnutrition. Vulnerability was further exacerbated by fluctuations in commodity prices, land degradation, and recent political and security events.
- Fragility and conflict in the northern regions of Mali is a great challenge, particularly with respect to the provision of basic services and the presence of government institutions.

1. UNFCCC 2012: Slow onset events were identified to include “sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification.”

2. Institutional Setting

2.1 Institutions and Legislation

2.1.1 Key DRM legislation linked to social protection Social protection

- The National Strategy for Food Security (adopted in 2002) set the initial legal foundation for social protection in the country. Soon after, in 2003, the government established a committee in charge of coordinating food security across many ministries, known as the Communautaire d’orientation et de coordination du Systeme Alimentaire (hereinafter COCCSA). This committee is housed under the Ministry of Solidarity, Humanitarian Assistance, and Reconstruction of the North.
- The Commissariat for Food Security (hereinafter CSA) was established in 2004, and is housed under the Office of the President of the Republic. It is mandated to coordinate the national system for food safety, all instruments for the management and prevention of food crises, as well as the functioning of the grain markets and the recovery of security stock.
- The Institutional Framework for Food Security (Dispositif National de Security Alimentaire, hereinafter DNSA) is the main mechanism in place for assessing and responding to food insecurity. In effect since the 1980s, the DNSA was funded by a mix of technical and financial partners (PTs). However, as of 2014, the DNSA has been fully funded by the Government of Mali. This mechanism includes decision-making bodies, as well as international agencies, that are part of the Carde Harmonize. It provides reserves of food security (stocks), distributed from the national level to local communities.
- The Strategic Plan for the Prevention and Management of Disasters (2007-2011), was established with the mandate of managing of disasters and post-crises reconstruction. The National Policy for Humanitarian Action is expected to be adopted soon. The main objective behind this policy is to coordinate and strengthen existing bodies that are responsible for managing emergency situations, to assist the handling of humanitarian crises, and to strengthen the resilience of affected communities.
- The National Directorate of Social Development (hereinafter DNDS) was established in 2000. The DNDS’s mission is to develop the national policy on improving the living conditions of the population,

and implement the principles of national solidarity, the fight against poverty and exclusion, and the protection and promotion of disabled, elderly, and underprivileged groups. In 2009, the Decree No. 09-558 P–RM established the organization and the functional modalities of the DNDS. This included a section on humanitarian and emergency relief functions and gave way to the existence of the Regional Directorate of Social Development and Solidarity (DRDSES), a sub-regional committee on Social Development Services and Solidarity (SDSES), and local committees of Social Development and Solidarity (CCDSES) at the regional, local, and community levels.

- Recently, the Malian Government adopted the National Social Protection Policy, together with the National Action Plan for the Extension of Social Protection to 2016-2018.

Civil protection

- The law No. 06-004, in 2006, officially established the General Directorate of Civil Protection, The General Directorate of Civil Protection has a mandate to coordinate the disaster response at the national level. It is also responsible for the coordination and control of relief actions and the implementation of rehabilitation operations post-disaster. This is more commonly used in times of fast-onset disasters.
- In 2016, the Decree No. 0346/P-RM approved the National Disaster Risk Reduction Strategy, which aims to help build more resilient communities and better prepare the country in disaster response.
- Recently, in 2015, the government adopted the ORSEC Plan (Plan for Relief Organizations), which serves as the principal tool for managing disaster response. This plan is activated during major crises or disasters endangering human lives and causing considerable material losses to the social and economic infrastructure.

Other related legislation

- Agricultural legislation does exist in Mali, however, the laws apply to (and favor) big farmers and do not include building resilience for small agriculture producers.
- Overall, there is a major lack of coordination among governing bodies, particularly with respect to disaster response post-drought.

2.1.2 Key institutions / ministries involved

Government institutions and departments

- The Commissariat for Food Security (Commissariat à la Sécurité Alimentaire, hereinafter CSA), established in 2004, and housed under the Office of the President of the Republic, is in charge of preparing all the necessary steps involved in free food distribution (also known as DAG). It oversees the coordination of food interventions by various actors, monitors those interventions, and completes the final reporting of activities in each community before and during food insecurity crises. The CSA is a part of the DNSA (see 2.1.1) and has supplemental roles (explained further in 2.3.2 Institutional/local governance collaboration).
- The Early Warning Systems (EWS) are housed under the CSA. They identify the areas and populations at risk of food insecurity and nutrition across the country, draw up reports, and make recommendations for vulnerable people.
- The National Council on Food Security (CNSA) is the main framework for dialogue between the government, technical and financial partners, and stakeholders for the governance of food security, food, and nutrition in Mali. The decision making bodies that fall under the CNSA include:
 1. Regional Committee of Food Security (CRSA)
 2. Local Committee of Food Security (CLSA)
 3. Communal Committee of Food Security (CRSA)
- The Ministry of Finance and Economy is the main body in charge of providing the budget and financing in response to drought.
- The Ministry of Solidarity and Humanitarian Action, on the other hand, is the main institution in charge of planning and implementing social protection in the country. The ministry has a dedicated budget line for disasters and calamities in each region, in order to respond to crises. The values of this budget varies depending on the magnitude of the crises.
- The General Directorate of Civil Protection, housed under the Ministry of Interior, is the main body in charge of disaster planning and disaster response at the national level. This, however, is more useful in times of fast-onset disasters.

- The Ministry of Agriculture's food security wing aims to: diversify the activities of rural producers, reduce the current massive surge of rural populations to cities within Mali, and create jobs for rural and urban youth by inserting them into the processing and marketing channels of agro-sylvo-pastoral productions.
- The Ministry of Employment and Vocational Training implements labor-intensive public works in response to drought and floods.

International community

- The World Food Program (WFP) is one of the main international agencies involved in food-insecurity response in Mali. In times of food-security crises, the WFP employs several programs, including:
 - General food distribution (food vouchers) for the vulnerable and displaced. Main regions of intervention are: Mopti, Timbuktu, Kidal and Gao.
 - Food assistance for the creation of community assets, also known as the 3A Program, aims at building or improving community resilience. The main regions benefiting from this intervention are: Gao, Koulikoro, Kayes, Mopti, Ségou, and Timbuktu.
- The WFP also implements several nutrition and school feeding programs.
- The Food and Agriculture Organization (FAO) is also present and active in Mali, particularly in response to food insecurity. Active as of 2012, FAO's main activities during and after crises include:
 - Provision of agriculture inputs (mainly seeds and agricultural equipment), as well as the distribution of small poultry, followed by nutrition and education interventions. Main regions of intervention are: Segou, Sikasso, and Koulikoro.
 - Seed and fuel coupon distribution to rice producers in Timbuktu and Mopti during the conflict in the North.
 - Small livestock/poultry distribution, as well as nutritional education, in Kayes and Niore.
 - Distribution of seeds, technical supervision, as well as nutritional education in the northern region and Mopti.

- ECHO provides seasonal cash transfers to food insecure households through 5 NGOs, known as Cadre Commune de Filets Sociaux (including OXFAM and Danish Relief Council).
- The World Bank, through the Jigisemejiri project, aims to increase access to targeted cash transfers for poor and vulnerable households and build an adaptive national safety net system. Through this program and the additional financing, the WB is involved in building the SP system and working on long-run food insecurity issues by combining cash transfers interventions with labor intensive public works and income generating activities to improve community resilience to shocks. In this manner, poor households and small subsistence farmers will have the minimum income needed to revitalize local production and local markets.
- In the northern part of Mali, given the fragile situation, government functions and provision of basic services, as well as donor aid, are carried out by NGOs.

2.2 Finance

2.2.1 Financing schemes

- The Government of Mali has various tools for financing drought-response activities and the resulting food insecurity. Nevertheless, such devices are fragmented and face major constraints with regard to timely scale-up.
- The Ministry of Economy, Finance, and Budget has a dedicated budget line for responding to disasters. However, this budget line is not specifically allocated to line ministries (nor central ones) or in response to specific shocks such as drought.
- Execution of funds can take several months, given the time needed to collect and analyze the data (from EWS, as well as the institutions that contribute to the National Response Plan) and coordinate the necessary actions to be taken.
- Each department must also make a request to the Prime Minister to mobilize the funds required for their response activities, delaying or potentially limiting their interventions.
 - For instance, the Ministry of Social Development Affairs calls for funds from the Prime Minister's office. They can deliver food in conjunction with CSA, but do not have an allocated fund like the CSA does.

- Additionally, a reallocation of public funds and multi-sectoral coordination is often required to mobilize funds and meet the crisis (excluding donor contributions).
- The execution of the disaster response, therefore, is usually a long process for all stakeholders.
- The costs of responding to disaster risks are borne jointly by the Government of Mali and international actors. The sources of these public funds are national and regional. Humanitarian agencies report a total committed fund of 52.76 million dollars in June 2015 for projects related to food security.
- In the case of drought, the costs can vary considerably depending on the severity of the episode. In 2012, 100,000 tons of cereal have been mobilized to respond to a major crisis, including 46,000 tons mobilized by the government (compared to an annual maximum quantity of 35,000 tons) and over 55,000 tons mobilized by international partners, compared to 15,000 tons in 2015.
- Under the national budget, there are two specific funds used for drought-response:
 - The Fund for Food Security (FSA) is established with the mandate of recovering the stock of food in the country. It has an annual budget of 5.5 billion FCFA, which is equivalent to 25,000 tons of grain. The fund is supported by the Malian Government and Financial and Technical Partners (PTF).
 - However, regulatory barriers make it very difficult for the fund to be disbursed on time.
 - The Common Counterpart Fund (FCC) is in place to finance the work of the Institutional Framework for Food Security (DNSA). From 2006 to 2015, the average disbursement amount was 1.6 billion FCFA per year.
- In the management of drought and food security, the donor community plays a much more significant role than they do in rapid onset scenarios. The international donors are involved in financing and distribution of food, and they are in coordination with the CSA and government when response is needed.

2.3 Capacities and Coordination

2.3.1 Human resources and capacities

- Technical capacity for disaster response is concentrated in central government agencies. The capacity to undertake planning, coordination, and response to slow-onset disasters in Mali is currently low.

2.3.2 Institutional/local government collaboration

- Overall, the Commissariat à la Sécurité Alimentaire (CSA) is mandated to coordinate the national system for food safety, the instruments of management, the prevention of food crises, and watch over the functioning of the grain markets and the recovery of stock of security.
- After drought and the resulting food insecurity, response coordination is as follows:
 1. Information from the Early Warning System (EWS) and the Observatory of Agricultural Markets (OMA) generates a National Response Plan (NRP).

2. The NRP is used by the Commissariat à la Sécurité Alimentaire (CSA) to determine which communes are in need of food intervention and to coordinate the national system for food support distribution.
3. The Office of the Agricultural Products of Mali (OPAM) houses the institutional security stocks and food aid from the State.
4. The Dispositif National de Sécurité Alimentaire (DNSA) then makes it possible for the food stock reserves of OPAM to be channeled from national to local levels (see definition of DNSA in 2.1).



3. Instruments

The most effective way to protect communities against food insecurity and famine resulting from drought is to strengthen diverse mitigation strategies well in advance, especially those that enable them to preserve their productive assets, such as animals, seeds, and tools. Despite this, most external interventions are still in response to drought, not helping to create more drought-resistant communities.

- The social protection sphere in Mali includes a mix of the following:
 - Food subsidies: Used by the government to limit the impact of increased food prices on consumers. However, they remain untargeted.
 - In-kind support and cash transfers: They are carried out by 15 agencies that are part of the Cash Working Group Jigisemejiri: The World Bank, WFP, OXFAM, ACF, RED-CROSS, Merci Corps, Care Mali, Plan Mali, ECHO, and Save the Children.
 - School feeding programs: They are provided by the WB, UNICEF, WFP, Plan MALI, CATHOLIC RELIEF SERVICES, or the diaspora.
 - Labor-intensive public works: These programs are mainly in response to floods and droughts, are developed by the Ministry of Employment and Vocational training, and are implemented by the Agency for the Promotion of Employment of the Young (known as APEJ). The new SP program under Jigisemejiri will include public works components, as well as income generating activities with a climate-responsive angle.
- The Government of Mali has several types of financial and physical instruments at its disposal for post-drought shocks and food insecurity:
 - Food distribution (physical instrument) includes the National Food Security Stock (SNS), State Stocks of Rice (SIE), and Grain Banks (BC).
 - National Food Security Stock (SNS) is managed by the OPAM and consists of the national stock of millet, housed in public storage. The stock has 40,500 tons of food stock per year. It is used for food distribution and food sales in areas where the level of stock is low and in areas where the consumer prices are well beyond the national average. The CSA uses the SNS to conduct free food distribution to vulnerable households during the lean season (March to November), through a contractual arrangement with NGOs. The CSA also allows for the sale of subsidized food in landlocked and food deficit areas. This counts as an indirect support to agriculture producers through a direct purchase from producers at non-prohibitive prices. Nevertheless, the mobilization of the SNS is a lengthy task.
 - Intervention of the State Stocks (SIE) consists only of rice stock, with 25,000 tons a year available to support grain markets. This stock makes it possible to overcome the lengthy time it takes to mobilize the SNS, especially in times of crises. The SIE is more readily available. Under the SIE, the state is also able to undertake price sales and conduct free rice distribution in times of crises.
 - Grain Banks (BC) consist of grain stocks in almost 703 communes throughout the country. The stock is collected during the harvest season. The stock is available for purchase and collection of local surplus during lean seasons. Stocks are used during food crises through local sales.
- In response to the drought episodes in 2013 and 2015, the Government of Mali mobilized 26 billion CFA francs, in addition to the SNS physical inventory, granted tax exemptions of 6-8 billion CFA francs a year for food imports, and granted subsidies to agricultural inputs reaching more than 32 billion CFA francs per year.
- The Ministry of Solidarity, through DNDS, has recently initiated a program of emergency response for northern populations affected by food insecurity and man-made crises known as the “income generating activities support project in favor of the people of the three regions of the North of the center (Douentza circle) and the Ségou region.” The program mainly targets women’s associations.

4. Delivery System

- Given the low capacity in Mali and the country's reliance on humanitarian aid and donor contributions, especially when situations become acute, disaster response is generally not preceded by risk prevention or mitigation activities.
- Support after disasters strike is mainly conducted through food distribution or cash-for-work type programs.

4.1 ID System

- The EWS mechanism, housed under the CSA, collects the necessary information for drought response. Based on the information collected, it is then possible to identify the areas and populations at risk of food insecurity.
- This is conducted during both the lean season and in times of drought. The cadre harmonize system which decides food security responses is used twice a year, in November and March (the beginning and the end of the lean season).
- The National Response Plan (NRP) as a result of this information, is conducted annually, and includes both short-term and long-term food security planning. The NRP is subject to validation from the Conseil National de Sécurité Alimentaire (CNSA).

4.2 Targeting

- The Early Warning System (EWS) collects the necessary data for drought response and is able to generate annual lists of communes that are vulnerable to food insecurity. This list is provided to the CSA, who is then able to determine the number of people in need of help and the amount of food aid needed to be distributed.
- Community based targeting: An additional level of targeting is conducted in the communities by linking the vulnerability lists created by EWS with the final list of beneficiaries per community. The CSA is the main body in charge, along with national NGOs and local authorities.

Partner agencies

- The WFP uses a mix of targeting methods for food distribution, including community based targeting for labor intensive public works to select the beneficiaries.
- The upcoming World Bank supported public works program will be carried out using a combination of community based targeting (as in the parent Jigisemejiri project) and self-targeting. Half of the communities that benefit the LIPW activity are within the project parent interventions areas, the other half are not receiving cash transfers from the project. The income generating activities will utilize community-based targeting, since communities are better positioned to identify the households/individuals that would benefit from such activities. All poor and vulnerable households currently enrolled in the social registry who are receiving quarterly cash transfers will be eligible to participate.

4.3 Payment Mechanism

- In drought response, food support is the most common tool for assisting the poor. The "payment" in this case is food distribution.
- Following the identification and targeting of communities in need of food support, the National Response Plan focuses on the following actions:
 1. Free food distribution: Based on the available National Security Stock (NSS) and targeted in collaboration with local NGOs.
 2. OPAM intervention sales: Another mechanism of indirect payment to vulnerable populations. This tool comes into effect by disrupting price surges and bringing prices to a level comparable to a national average, by purchasing food stock or selling it.
 3. Other recovery and resilience activities: These activities are generally conducted by international partners (i.e. the World Bank) and will include public works in the near future.

5. Information

5.1 Information on Disaster Risk

- The EWS, along with other data collection, is used to identify the areas and populations at risk of food insecurity country-wide. This information is used to draft reports and recommendations on how to support those most in need, inform the Cadre Harmonize, and is implemented into the National Response Plan (NRP) by the CSA.

5.2 Information on Social Protection Beneficiaries

- Currently, the lack of a social registry that is able to link SP programs with information on household vulnerability, makes SP and drought response actions much less effective.
- Nevertheless, a Social Registry (SR) is being developed under the main SP program Jigisemejiri. Housed under the Ministry of Solidarity and Humanitarian Assistance, the SR will be guided and implemented by the SP Steering Committee. It is planned to be completed and in effect within the next five years.
- Drought response, mainly in the form of food support, remains mainly geographically targeted, with some community-based targeting added.

6. Communication

6.1 Communication Management

- In times of drought, the Malian population is not well informed of the risks and coping mechanisms available. The civil society, which is part of the regional (CRSA), local (CLSA), and communal (CRSA) committees on food security, undertakes some communication but it generally comes after the situation is more acute.
- There is a need for better communication by policymakers on slow onset events and risk management options, so that more can be done before such shocks arise.

DRFI: When Does It Come Into Play?

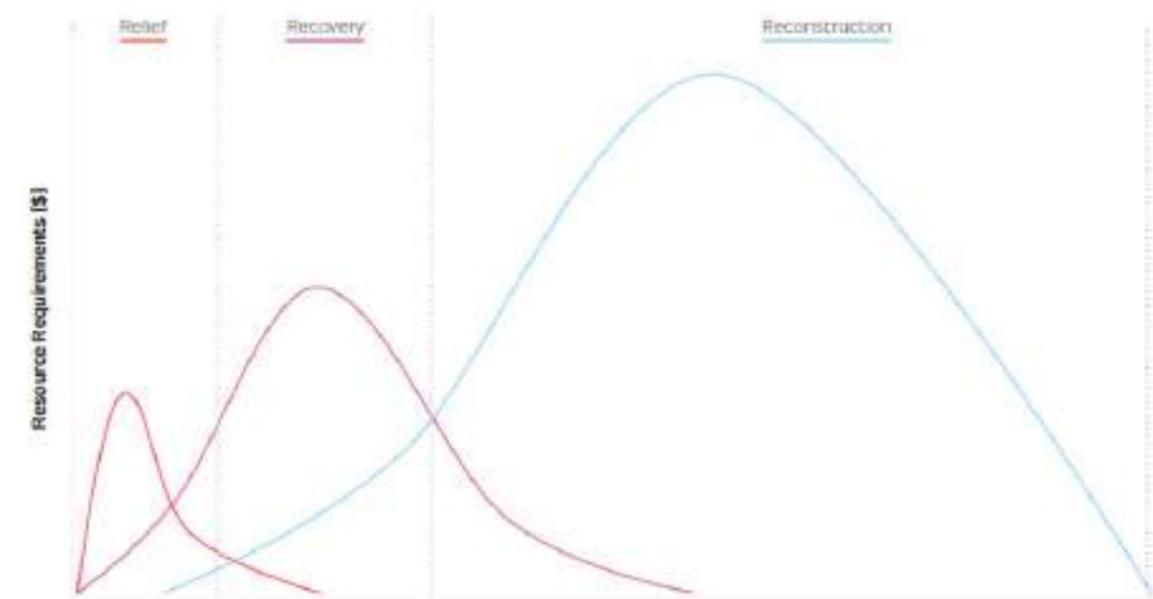
Disaster risk financing and insurance helps minimize the cost and optimize the timing of meeting post-disaster funding needs without compromising development goals, fiscal stability, or well-being. It promotes comprehensive financial protection strategies to ensure that governments, homeowners, small and medium-sized enterprises, agricultural producers, and the most vulnerable populations can meet post-disaster funding needs as they arrive.

Financial Costs of Disasters

Financial losses from natural disasters continue to rise with developing countries and their low-income populations feeling the greatest effect. In 2015, 61% of GDP in damage and loss was suffered by Vanuatu from Cyclone Pam in 2015. The Philippines experienced a 15% increase in poverty rate in the worst affected areas

following Typhon Yolanda in 2013. The severe impact of natural hazards can have long-lasting consequences for the socio-economic development of countries. Rapid urbanization and the impacts of climate change further increase the vulnerability of developing countries to natural disasters.

Timing of post-disaster funding needs



Quick post-shock assistance is essential, but many developing countries rely heavily on humanitarian responses by the international community. Costs of shocks are unknown, making budgeting difficult for both government and donors. Even if needs can be assessed, fundraising efforts often result in insufficient

aid budgets and delays in delivering urgently needed assistance. The disbursement of aid is further complicated by the fact that many governmental and non-governmental organizations need to coordinate their efforts.

Disaster Risk Finance as Part of Disaster Risk Management

Disaster risk financing and insurance is an integral part of disaster and climate risk management. The financial impact of disasters is best managed when integrated into holistic risk management practices. It complements disaster risk management activities by securing adequate financial resources to cover

residual risks that cannot be mitigated and by creating the right financial incentives to invest in risk reduction and prevention. By quantifying the financial and fiscal impact of risk, it elevates risk management within the ministries that control public investment.

Financial protection, a key pillar of disaster risk management



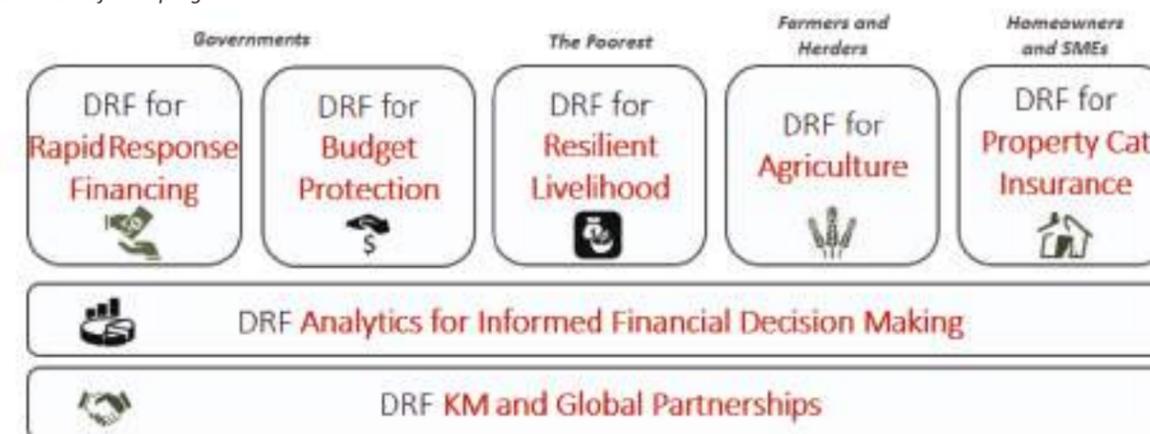
What Does DRFI Do? How Is It Done? How Has It Been Done?

DRFI Operations

Financial protection policies and instruments help governments to shift from emergency borrowers to effective risk managers. The Disaster Risk Financing & Insurance Program (DRFIP) leads the dialogue on

financial resilience as a component of the World Bank Group's support to countries on better managing disasters and climate shocks.

Overview of DRFI program



DRF for Rapid Response

Supports sovereign and sub-sovereign governments to better plan for and implement mechanisms to provide access to rapid response financing post disaster.

DRF for Homeowners & SMEs

Supports governments to strengthen supervision and promote the development of private property catastrophe risk insurance markets.

DRF for Budget Protection

Supports countries to become proactive financial risk managers to meet the cost of disasters and climate shocks.

DRF Analytics

Provides public officials with the information and tools to make risk-informed financial decisions on managing disaster and climate shocks.

DRF for Resilient Livelihoods

Supports governments to integrate social protection schemes in their DRF strategies to offer rapid & timely assistance to vulnerable households affected by shocks.

DRF Global Policy & Knowledge Mgmt.

Leverages the WBGs convening power to invest in policy advice and knowledge that support policy reforms and financial instruments.

DRF for Agriculture

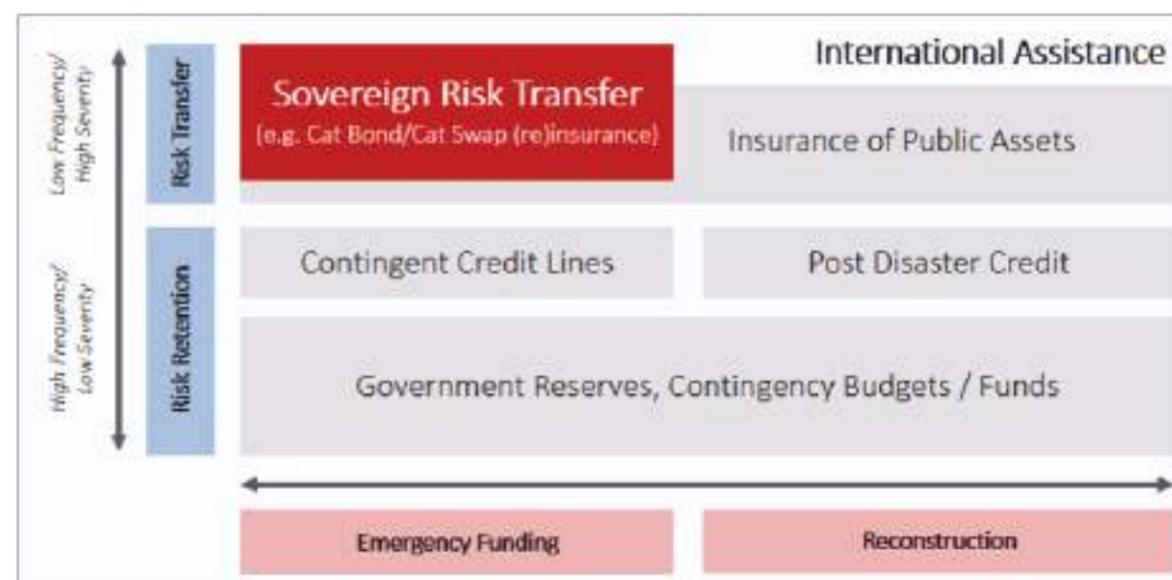
Supports countries to implement cost-effective public-private partnerships in agricultural insurance as part of a broader agricultural risk management.

DRFI Strategies & Products

Disaster risk financing and insurance strategies commonly build on some combination of policy options and financing instruments. Together, they help the government clarify, reduce, and manage its contingent liabilities to natural disasters. These options do so by using financial risk information to clarify the financial

costs and benefits of disaster risk reduction, retention, and transfer; by enabling greater risk transfer to the private sector; and by providing strategies and tools for more responsible management of the remaining costs associated with natural disaster risk.

Disaster risk-layering framework



Contingent credit is a financial instrument that allows governments to secure funds in advance of a disaster to be available immediately in case of emergency. In 2008, the World Bank approved the first such loan, called a Catastrophe Deferred Drawdown Option (CAT-DDO). Contingent credit complements other instruments such as national reserves to finance high frequency, low severity events and catastrophe risk transfer solutions to finance low frequency, high severity events.

Property catastrophe risk insurance aims to protect homeowners and SMEs against loss arising from property damage. In Turkey, the Turkish Catastrophe Insurance Pool (TCIP), a public-private partnership between the government of Turkey and the domestic insurance industry, provides earthquake insurance to homeowners.

Agricultural insurance aims to protect farmers, herders, and fishermen from loss arising from damage to their productive assets. In India, the national government adopted risk financing and insurance principles to transition its National Crop Insurance Program from a social crop insurance scheme to a market-based crop insurance program. Thus, farmers receive the claims payments much faster and have improved coverage of their assets.

Disaster-linked social protection helps governments strengthen the resilience of the poorest and most vulnerable to the debilitating effects of natural disasters. It does this by applying insurance principles and tools to enable social protection programs such as social safety nets to scale up and scale out assistance to beneficiaries immediately following disaster shocks. The government of Ethiopia is integrating disaster risk contingency planning and financing into the Productive Safety Net Program, its food security safety net.

Case Studies

DRFIP provides technical assistance to more than 50 countries worldwide:

Overview of global DRFI engagements



Selected DRFI engagements:

DRF for Agriculture: Agriculture Insurance in Kenya

- Crop Insurance: Area Yield Index Insurance, Initial coverage: maize and wheat farmers, Linkage to agricultural credit and inputs, Government targets 170,000 farmers by 2019
- Livestock Insurance: Pasture degradation asset protection index insurance, Insurance-linked social protection for vulnerable pastoralists, Government targets 70,000 pastoralists by 2017

DRF for Homeowners & SMEs: Property Cat Risk Insurance in Morocco

- Enacted by law in September 2016
- Market-based catastrophe risk insurance to homeowners and SMEs (as compulsory extension of guarantee in property insurance policies)
- Solidarity Fund to compensate non-insured households

DRF for Rapid Response: Caribbean Catastrophe Risk Insurance Facility (CCRIF)

- Segregated portfolio company (SPC)
- First multi-country parametric catastrophe insurance pool
- Coverage: tropical cyclones, earthquakes, excess rainfall
- Members: sixteen Caribbean islands and Nicaragua
- Since 2007, 21 payouts to 10 members totaling ca. US\$68m, all within 14 days of the event

DRF for Resilient Livelihoods: Social Security Net in Uganda

- Disaster Risk Financing sub-component; part of Northern Uganda Social Action Fund Project
- Targets households in the Karamoja region
- Benefits include additional unconditional cash transfers and upscaled Labour Intensive Public Works (LIPW)
- Triggered by objective, pre-agreed, and quantitative indicators: NDVI data and Integrated Food Security Phase Classification (IPC) report
- Successfully scaled up in response to the drought in 2016, expected to reach up to 30,000 HHs through the LIPW program

DRF for Budget Protection: Sovereign Disaster Risk Finance in the Philippines

- Comprehensive DRFI strategy building on 3 levels:
- National level: line of credit for rapid response financing (including US\$500m WB CAT DDO); insurance of critical public assets
- Local level: development of a Local Disaster Resilience Insurance Fund to provide parametric insurance to local governments units
- Individual level: development of a catastrophe risk insurance pool for homeowners and SMEs

