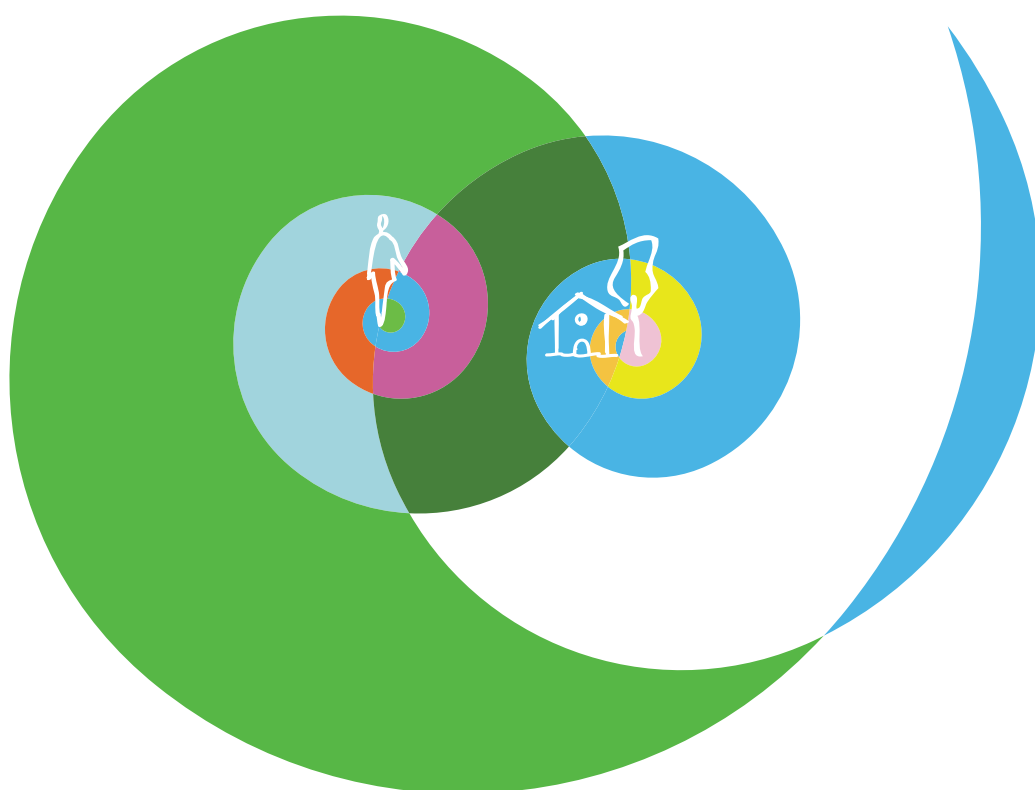


METHODOLOGICAL GUIDE FOR POST-DISASTER RECOVERY PLANNING PROCESSES

Guidelines and actions for national,
regional and local governments

DOCUMENT FOR DISCUSSION



EUROPEAN COMMISSION



Humanitarian aid



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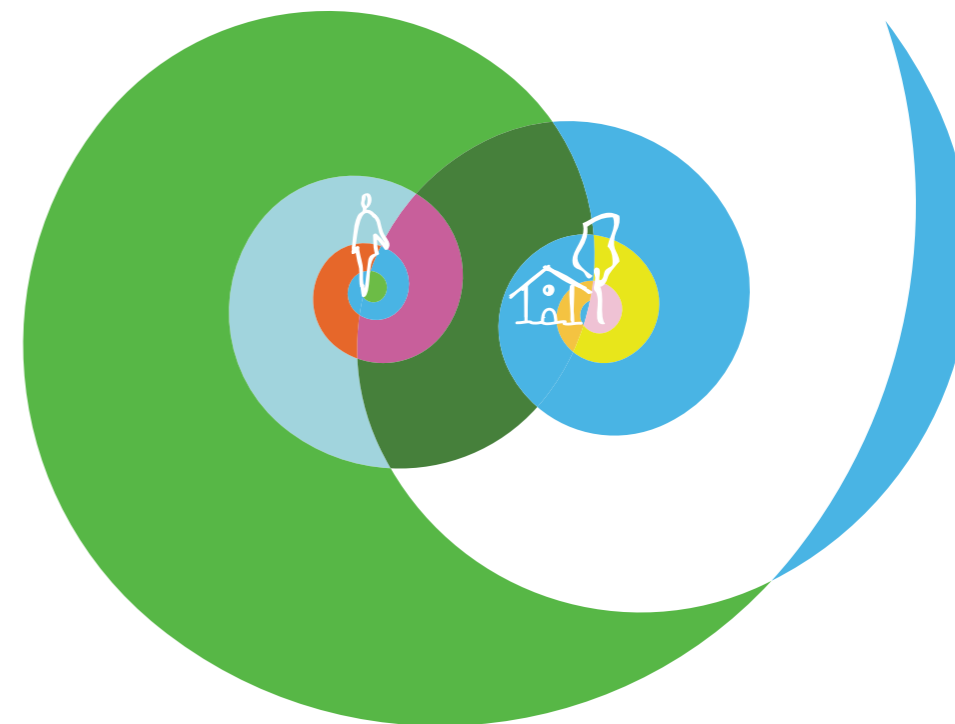
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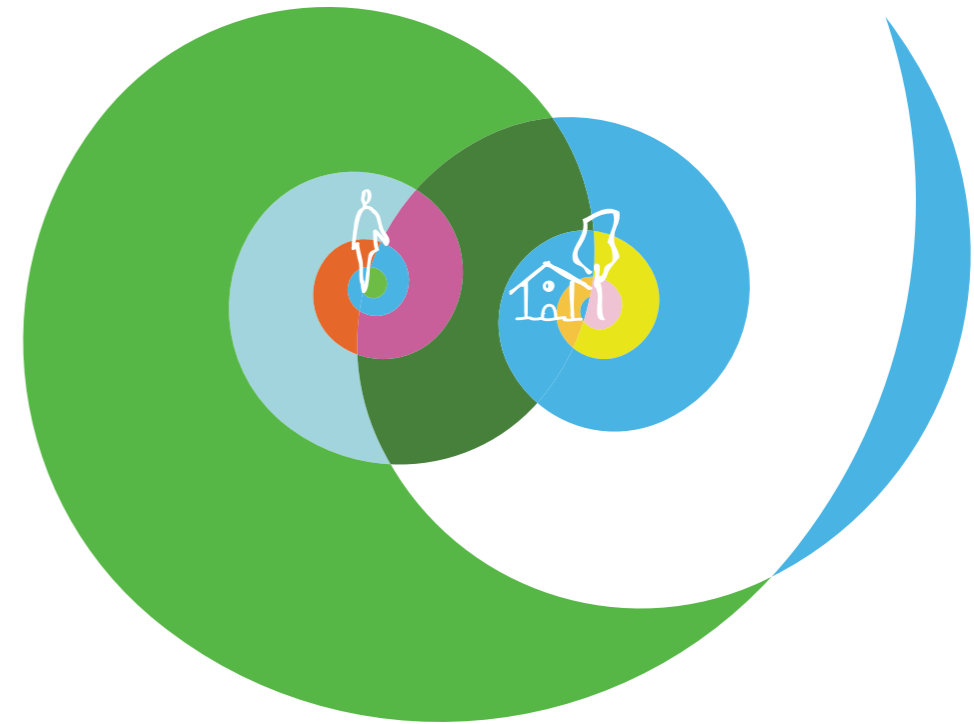
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INTRODUCTION

Management for risk reduction is a relatively new field in the policy agendas of local and national governments. Until recently, the efforts made by authorities were aimed at attending to the consequences of a disaster and to reconstructing the affected infrastructure. Most times, the humanitarian aid and the reconstruction processes were carried out without a risk reduction focus, and thus increased, unintentionally, the physical, social, economic, and environmental vulnerability of the population to new events.

Incorporating a risk reduction approach into the humanitarian aid phase itself, both during and after the emergency, requires political will and capacities. Doing this implies a significant difference and can help to break the vicious cycle of “development-disaster-development.”

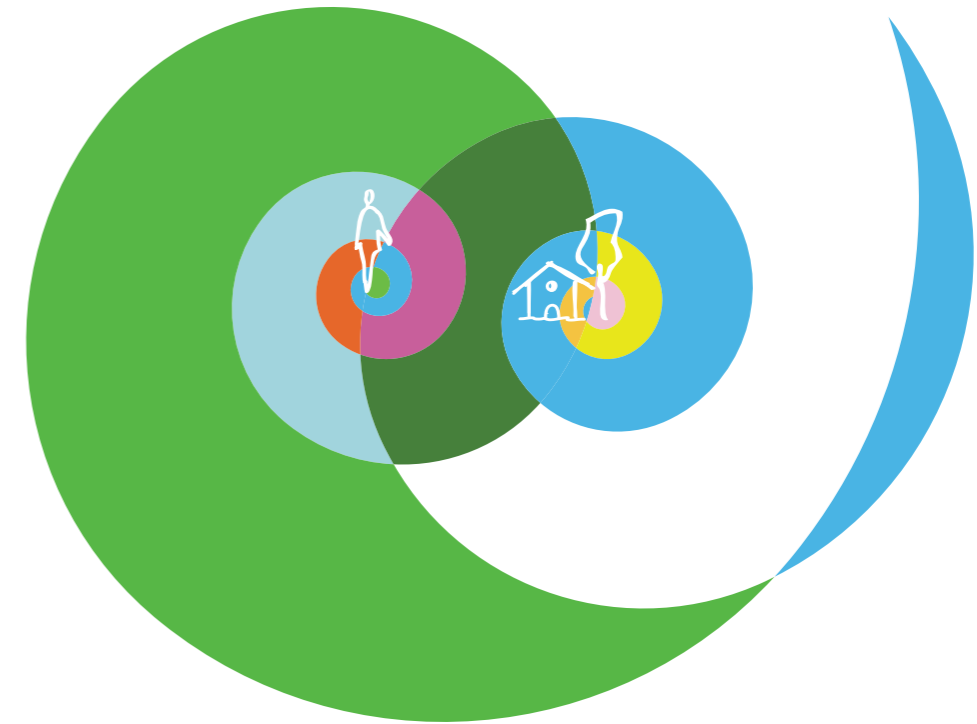
What is new about this Methodological Guide for Post-Disaster Recovery Planning Processes: guidelines and actions for national, regional and local governments?

First of all, the intention is to familiarize the national and local decision-maker with the concept of recovery, understood as the decisions and actions taken after a disaster in order to restore or improve the living conditions of the affected community, while facilitating the adjustments necessary to reduce the risk of future disastersⁱ.

It is also an attempt to persuade those who govern a country or a locality that it is not only desirable but it is possible to plan what the recovery will look like after a disaster occurs. That is, we can act in advance and prepare the national, regional and local institutional structure, and the public; adopt ahead of time the necessary policies, mechanisms and instruments and formulate guidelines, reach institutional agreements and arrangements so that the post-

disaster recovery process will be carried out in a timely and effective manner, so that there is proper linkage between emergency assistance and recovery, and so that the recovery efforts are sustainable and do not reproduce the risk.

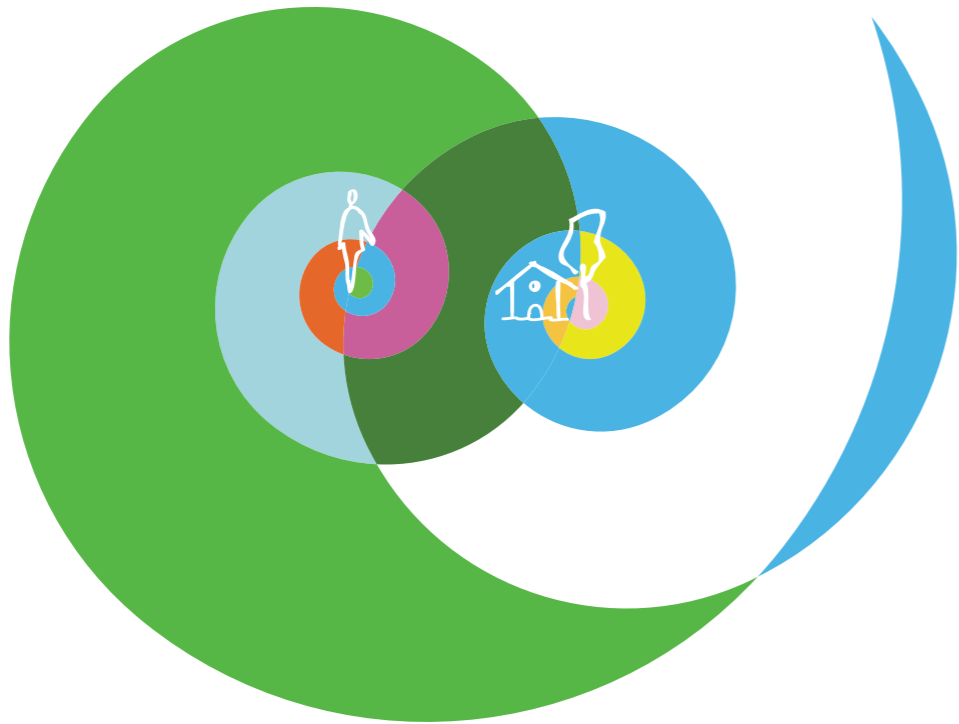
Finally, this guide shares the pre-disaster recovery planning methodology used in response to the predicted occurrence of an earthquake in Bogota, that the Mayor's office of that city has been leading for some years. The experience of Bogota is pioneering and can clearly illustrate a type of methodology that can be used to plan for post-disaster recovery processes. There are also lessons learned shared from various experiences in Latin America, which highlight the importance of planning with special care the process of recovering livelihoods of those who are affected by a disaster.



OBJECTIVES OF THE GUIDE

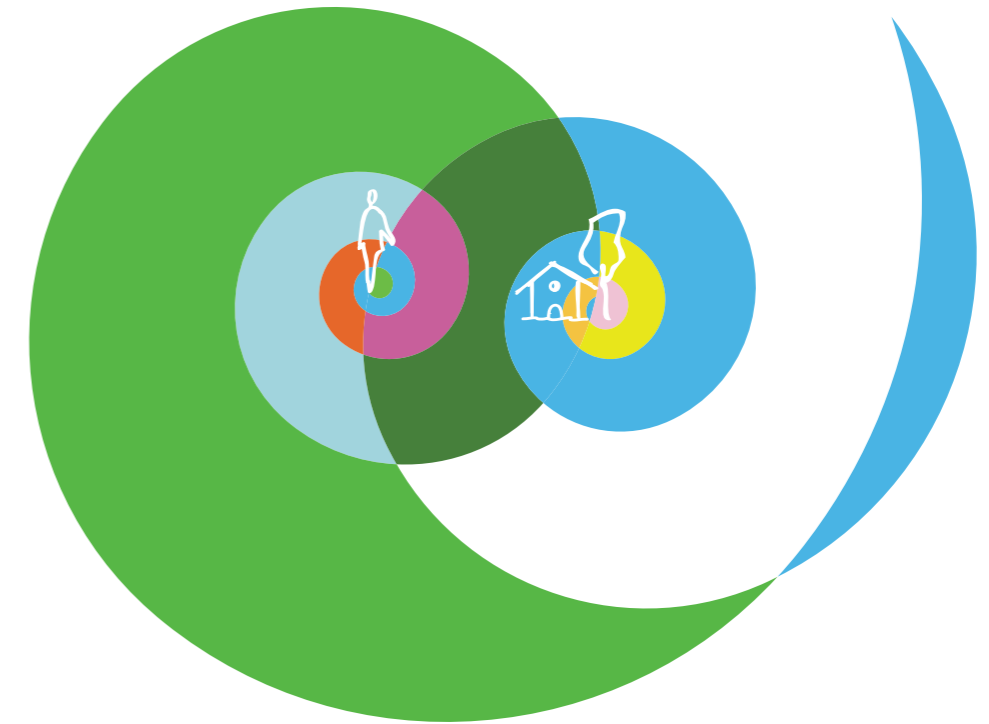
This Guide seeks to contribute to building the operational and programmatic capacities of national, regional and local governments in the early management of post-disaster recovery, with a sustainability-based approach.

1. Offering public, private and community decision-makers and stakeholders a new vision – that of recovery – to face and lead post-disaster processes, with effective contributions that ensure the recovery of the livelihoods of the affected populations and territories.
2. Arguing for the relevance and effectiveness of doing recovery planning before a disaster occurs, based on identifying those policies or actions that must appear in their institutional plans and budgets and which, therefore, must be carried out before the disaster, since these efforts will significantly contribute to better recovery processes after the disaster occurs, without recreating previous risks or creating new ones.
3. Developing a recovery planning methodological guide that makes it possible to effectively and properly lead the pre-disaster, and therefore the post-disaster, processes.



WHO IS THIS GUIDE FOR?

This Guide is aimed at people who make public policy decisions in national, regional and local governments, who are more and more frequently having to manage disasters, whether natural or man-made, and who after they occur, must immediately lead recovery efforts. It is also intended for public, private or social-community stakeholders who play a part in the implementation of these post-disaster policies or actions, the results of which determine whether or not livelihoods and a functioning society will be restored, while reducing risks and taking advantage of all opportunities for change in order to achieve the sustainability of recovery efforts and to establish the foundation for future development.



APPROACH AND SCOPE OF THE GUIDE

A review of rehabilitation and reconstruction experiences in different places around the world shows that sometimes, deficiencies or inefficiencies in the recovery process can be worse than the disaster itself. In developing a new approach to post-disaster recovery planning, this Guide is aimed at decision-makers within national, regional and local governments, with the objective of identifying relevant approaches and actions that make it possible to put processes in place to plan and prepare for post-disaster recovery.

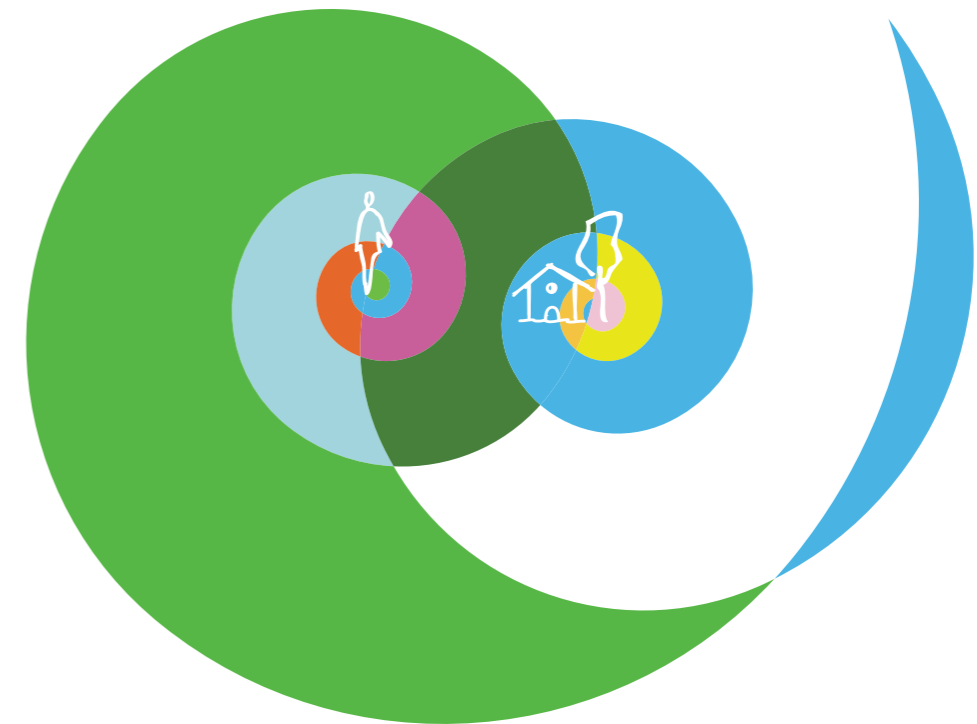
In order to achieve this objective, this Guide has been produced for those interested in initiating post-disaster recovery planning process. This methodological document is of an indicative nature and its scope is limited to listing and describing, in an integrated way, the steps, processes, actions and results based on an analysis of recovery experiences that have been identified as critical, or those cases where adequate preparation would have facilitated the recovery planning or implementation processes.

The first part of the Guide is intended to introduce the topic and convince the reader of the importance of planning for post-disaster recovery, by discussing the definition of this concept and putting the problem in context at its different levels.

Secondly, the document establishes the guidelines that should drive the social, political, institutional, and regulatory aspects of recovery planning and the planning and information systems.

The third part of the Guide is focused on proposing steps so that the national, regional and local governments can implement a process of early action for post-disaster planning; that is the “how-to”.

The final part of the document analyzes, by way of example, some employment and livelihood recovery initiatives carried out by various institutions in Ecuador after the floods which affected a large part of the country in 2008, as well as efforts made to overcome the impacts of the fall of ash resulting from the prolonged eruptive process of the Tungurahua volcano. The objective is to describe the process by which the interventions were designed, as well as the project implemented in both cases.



CHAPTER 1: What is post-disaster recovery?

The International Strategy for Disaster Reduction (ISDR) defines post-disaster recovery as: “decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk.” The Bureau for Crisis Prevention and Recovery (BCPR) of UNDP states that “Managing recovery will require building national capacities, restoring coping mechanisms, empowering communities and determining root causes and vulnerabilities which make societies disaster-prone.”

Disasters can turn into opportunities for sustainable development. In this perspective, recovery must go beyond replacing or repairing the affected infrastructure, and work on the factors that contribute to unsustainability and risk. While responding to the most urgent needs of the affected population, one must take advantage of all opportunities for change to achieve the sustainability of the recovery efforts, and set the foundations for new development.

Post-disaster recovery is part of a continuum that begins with actions that happen before the occurrence of an event (known as Early Recovery Planning), to immediate emergency attention and recovery; from humanitarian aid for the victims in order to save lives, to the restoration of a functioning society. In the initial moments, the response institutions focus their efforts on counting the victims and costs of the disaster (assessing losses and damages),

the rescue efforts, caring for the wounded and satisfying basic needs like water, shelter and health of affected persons. Progressively, the situation shifts toward facilitating people's access and mobility, ensuring the livability of those buildings that are still standing, removing debris, restoring livelihoods and ensuring national governance and sovereignty.

Identifying relevant lines and actions that make it possible to put into place post-disaster recovery planning and preparation processes is not only a novel experience compared to traditional approaches geared toward preventing and preparing for emergencies, but it also opens up various paths, many of them yet to be explored. Planning for recovery before a disaster occurs can be addressed from multiple and at time simultaneous points of view, points of entry or perspectives:

- Based on the objectives pursued by recovery: among others, making the territory inhabitable again, ensuring that the public administration is functioning, intervening in the area of public goods and services, and restoring livelihoods.
- Based on the existing social and natural threats and their different scenarios.
- Based on the affected sectors and the main fields of action, like housing and public buildings, public services, infrastructure, production and livelihoods.
- Based on the different dimensions and stakeholders involved in planning: financial, knowledge and information systems.
- Based on the territory and levels of government – national, regional or local – that are involved and their scope of responsibility.

Despite the variety of variables and the apparent complexity of the issue, Recovery Planning has three overall objectives:

- Preparing national, regional and local institutions, as well as the general public,** to achieve in advance conditions that will allow them to carry out a post-disaster recovery process in a timely and effective manner, focused on:
 - Building citizen capacities through processes of education, awareness-raising and practices to develop and achieve the ownership of policies that will guide post-disaster recovery.
 - Strengthening the public, private and community institutional structure at the national, regional and local levels, by facilitating agreements on how to coordinate efforts during recovery processes.
 - Developing and building consensus around policies, mechanisms and instruments that constitute the foundation of recovery processes, in order to facilitate decision-making and implementation in the days following a disaster.
 - Incorporating into the daily practices of the economic sector, the institutional structure and the community the provisions necessary to guarantee the continuity of the activities, a quick recovery of routines and the facilities for reestablishing normalcy in the least amount of time possible.
- Establish in advance the policies, mechanisms and instruments** that will make possible to achieve an effective linkage between medium and long-term recovery and emergency attention, in order to:
 - Minimize the uncertainties that can lead to inappropriate decisions which, because they are made “in the heat of the moment,” generate difficulties in the

medium and long-term recovery processes.

- Establish the foundations for effective medium and long-term recovery.
 - Restore governance and security within the territory affected by the disaster.
 - Restore sustainable livelihoods for the population, which allow people to have stable incomes during and after the recovery process.
 - Define and implement humanitarian aid efforts required by the population and adjusted to the needs generated by the disaster.
- Formulate guidelines, reach agreements and institutional arrangements** and develop instruments in advance of the occurrence of a disaster, which will contribute to a situation in which once the disaster occurs, the recovery is quick, sustainable and does not reproduce the risk, in order to:
 - Reestablish the routines of the territory and the population as soon as possible.
 - Recover the conditions of social, emotional, economic and physical well-being of affected people and communities.
 - Minimize the consequences of the catastrophe.
 - Develop opportunities to adapt and to satisfy social, economic, natural and physical planning needs for the future.
 - Reduce exposure to future risks.

In terms of the steps that national, regional and local governments must take into account in order to implement a process of early post-disaster recovery, that is the “how-to”, this Guide defines five basic moments:

- 1) Specify how to put in place a recovery planning process, including the organization of the process, the planning itself, and finally, preparing for the recovery, which involves carrying out various kinds of actions in order to guarantee increased resilience to disaster.
- 2) Identify recovery as a process that has different facets over time and specify the most important variables to be taken into account for each.
- 3) Define the most relevant issues to address within recovery processes, especially those related to early, medium and long-term recovery.
- 4) Recommendations and foundations for achieving the institutional arrangements that will make it possible to have the ideal mechanism according to the particularities of each region to plan, coordinate and execute recovery efforts.
- 5) Finally, for each of the different development dimensions or sectors, present the topics which, as a minimum, should be considered as part of the recovery planning process.

Why prepare for post-disaster recovery?

The world is experiencing obvious conditions of risk. Year after year, people live through, or rather survive, crisis and/or disaster situations. One of the most disastrous events of all time, classified as a true global catastrophe, hit Japan on March 11, 2011, when a magnitude 9 earthquake generated a huge wave over 10 meters high, causing death and destruction in its wake, and even creating the risk of a nuclear event due to damages to three nuclear reactors. In February of the same year, Canterbury, New Zealand was severely shaken by a magnitude 6.3 earthquake. The first months of 2010 were no different, and were proof of this assertion: thousands of vulnerable families were affected by the earthquakes in Chile and Haiti, by the activity of the Pacaya volcano in Guatemala and the Tungurahua volcano in Ecuador, by the intense rains and flooding in the wake of the Agatha and Alex storms in Central American, or the flooding in Brazil or the intense cold front that has fallen upon the countries of southern South America.

These disasters – which leave behind them the loss of lives and property, devastated communities and groups and societies that are more and more fragile -- strongly impact local and national economies. The affected populations see that their situation becomes even more precarious after recovery efforts, which are generally aimed at restoring the conditions that existed before the disaster, which make them therefore more vulnerable to future events, since a recovery designed in this way just invites future disasters.

In general, the reflections and lessons learned from recovery processes only remain in the memory of those who witnessed them, and therefore it is difficult to assess to what extent there has been an improvement in the capacities and abilities to appropriately and efficiently lead and participate in these interventions.

In recent years, there has been important progress made in producing knowledge, developing and applying tools, and in risk reduction practices and experiences. Nevertheless, in the area of post-disaster recovery, there are still many gaps and not enough attention has been paid to it, despite the fact that recovery scenarios occur nearly constantly. With much effort, the issue of risk reduction has been included in development agendas, but the issue of recovery has not: there is no thought given ahead of time to the most pressing needs of victims immediately after a disaster, nor has there been an effort to build capacities and develop tools that can help to learn about and attend to these requirements in a planned way, much less the accompaniment required by these processes, which are generally spontaneous, anarchical, delayed and assumed directly by the victims of the disasters.

Disasters: a growing global trend

Disasters are the product of processes of transformation and growth of the society, which do not guarantee a proper relationship with the natural and built environment that sustain them. They are, as some have said, unresolved development problems, and the existing vulnerability is a manifestation of development deficits (Lavell 1999).

The risk of disasters is increasing around the world with respect to most threats, and the risk of economic losses increases more quickly than that of deaths. The main factor driving this trend is the increase in exposure, which is associated with broader processes of urbanization, economic and territorial development, and decaying ecosystems.

According to the International Disaster Database EM-DATⁱⁱ, between January 1975 and October 2008, there were 8,866 recorded events which caused the deaths of 2,283,767 people. 78.2% of those deaths occurred in 0.26% of recorded events, mainly in developing countries. During the same period, the economic losses were estimated at US\$1.53 trillionⁱⁱⁱ.

In the last decade, in Latin America and the Caribbean, there has been a greater accumulation of disasters, especially in rural and urban communities that are underdeveloped, excluded and marginalized. The increase in everyday disasters is an indicator of this accumulation, and corresponds, above all, to small or medium-impact events that are not taken into account in official statistics, despite the fact that they are that undermine the livelihoods of a growing contingent of vulnerable populations. For example, according to the database of DesInventar^{iv}, in Guatemala from 1988-1995, the average number of disasters per year was 130, and this number increased during the 1996-2000 period to 275, without taking into account the 529 local disasters that occurred as a result of Hurricane Mitch in 1998. Without records on the

thousands of local disasters that occur every year in the region, we would be ignoring the situation of the affected population, for example the residents of precarious urban settlements, or dispersed and remote rural communities that are many times isolated and cut off from others^v.

The link between disaster risk and poverty is unquestionable. The poorest countries are disproportionately affected by the risks of mortality and economic losses when compared to other non-poor countries with similar exposure to threats. 39% of the exposure to tropical cyclones is in high-income countries, but mortality there is only 1%, while among low-income countries, the level of exposure is 13%, while the risk of mortality is 81%. At the local level, there are empirical data that show that poor areas suffer significantly more damage during disasters, and that this is related to factors like the lack of appropriate structural designs for housing. There is abundant information and data showing that losses from disasters cause a significant reduction in income, consumption and in human development indicators, and that these effects are most severe among the poorest households^{vi}.

Disasters, along with conflicts, are among the most common causes of migration. In Central America, the effects of Hurricane Mitch “exacerbated at all levels the factors that explain and determine migratory movements, accentuating the economic and social development gaps between countries and regions and aggravating the risks of the most vulnerable groups, which is now added to by the inability of ecosystems in affected areas to retain the population and reactivate sources of employment.^{vii}” In the face of the occurrence of disasters, affected groups often migrate to unaffected territories, whether in surrounding regions or to cities and even neighboring countries. In many cases, this migratory effect tends to increase the concentration in the marginal areas of cities, which tend to lack the proper conditions for livability, in terms of security, public services and the supply of goods. This post-disaster migratory phenomenon has consequences for the receiving territories, but also for the affected territories, where there is a loss of the labor force and a “brain drain” in addition to a decrease in productivity for the sending country or region.^{viii}

Disasters are increasing, and as the Bureau for Crisis Prevention and Recovery of UNDP states:

“Recurrent natural disasters disrupt economic political and social systems and are contributing to a steady and increasing erosion of development gains in a growing number of countries. Successive natural disasters are pushing many countries into a downward spiral, where losses outweigh limited development gains and the disaster risk continues to accumulate. Increasing disaster loss will seriously compromise and undermine the achievement of the Millennium Development Goals unless decisive action is taken to reduce disaster risk.”^{ix}

Development processes – Mechanisms and practices that contribute to risks

Disasters bring to light an erroneous conception of development; the bad and even harmful way our cities and communities are planned; the inappropriate way we settle the territory by occupying high-risk areas (prone to floods, landslides, etc.) and the failure to adapt to those risks; the effects of rapid, uncontrolled and unorganized growth in cities, accompanied by urbanization that is controlled by the private sector with little government presence to regulate it. They also reveal the existing conditions of poverty and exclusion; the poor use (or rather abuse) of the resources offered by nature; the absence of policies or laws that regulate how the land is used and built on; the insufficient capacity of organizations and institutions to control or regulate land use; the way in which profit prevails over sustainability; the weakness of

community and social organizations; the lack of capacity among operational entities to better manage emergency and disaster situations. In conclusion, the “development model” that has been applied in recent years has contributed decisively to the risk conditions that then materialize in the form of disasters.

To the threats of natural origin (geological and hydrometeorological), there have now been added those related to the effects of climate change, which will continue to cause disasters and losses that put at greater risk “particularly [...] those small developing states, where one single event can destroy the progress achieved with so much effort.”^x

In this context, it is essential to address the post-disaster recovery processes as a complex challenge. The actions that are taken after a disaster must incorporate a focus on risk reduction, which involves, among others, the following actions: the ecological restoration of ecosystems; new ways of building the physical environment; public infrastructure and equipment in the cities; building the capacity of people, communities, institutions and governments (national or local) to institutionalize, that is to build a more proactive approach to risk reduction into a regular practice.

Post-disaster recovery – Integrated management of risks and sustainable development

“Post-disaster recovery processes should not be considered as an isolated problem of risk reduction and emergency response. On the contrary, they should be part of an integrated and ongoing process, with a long-term vision, incorporating the formal and informal development practices of the territories [...] There is not enough awareness of the seriousness of the risks among public and private actors, nor among citizens; a short-term outlook still prevails in public investments, and, therefore, the issue of post-disaster recovery is absent from public policies, from planning and from legislation.”^{xi}

The concept of reconstruction is strongly linked to the restoration or replacement of infrastructure or buildings and, therefore, tends to reproduce or rebuild the same risks. Unlike the concept of reconstruction, recovery is based on a rights-focused approach, which puts human beings at the center. Housing, infrastructure, schools are all rebuilt...but emphasis is placed on restoring people’s livelihoods.

In contexts of crisis and/or disasters, humanitarian actions – especially attention and aid – dominate the scene: the national government actors and the cooperation agencies are obliged to facilitate and provide support in terms of food, shelter and health care, with the only goal of “saving lives”. Meanwhile, after the process is over and while they are receiving emergency assistance, the affected populations are seeking above all to restart their lives, to again take up their day-to-day existence. That is, they begin to recover early and immediately after the impact.

The transition process that comes next will require both a reestablishment of trust as well as restoring the human and physical capital: national capacities, mechanisms to address the situation, raising the awareness of communities with regard to determining the causes that are at the root of the problem and that make them vulnerable to disasters^{xii}.

According to the United Nations, the foundation for sustainable recovery and the return to long-term development have to be planned from the beginning of the humanitarian emergency.^{xiii}

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

“Recovery [...] integrates risk management in a cross-cutting manner in order to avoid reconstructing vulnerability, and must be linked to the National Development Plan and sectoral and territorial plans.”^{xiv} In other words, it is a “continuous process that builds opportunities and capacities, reduces vulnerabilities so people can live well and with less risk.”^{xv}

The premises on which the recovery approach are based are the following:

- It is the responsibility of the governments (national or local) to ensure respect for human rights throughout people’s entire lives and particularly during the occurrence of a political conflict or disaster of natural or man-made origin. To put it another way, both humanitarian aid and post-disaster recovery tend to be addressed from a approach and perspective based on rights and therefore on their enforceability.
- There is a close relationship between disaster management and governance. It is not only that the governance of a territory can be put at risk if the affected population feels that the government (national or local) is not fulfilling its function as the guarantor of human rights during the humanitarian assistance phase, but also when, after the disaster, the population feels that the State and those who govern it are not capable of making timely decisions that will allow them to “get up quickly and well”, returning livability and functionality to the territory, facilitating the recovery, as soon as possible, of livelihoods and ways of life.
- In the event that the disaster occurs, the impact on people, on livelihoods and on infrastructure can be reduced if the response is appropriate and if there is the ability to embark upon recovery efforts in a timely, quick and effective manner.
- Recovery processes that are guided from the perspective of reducing risks can contribute effectively to sustainable development.
- Risk management and post-disaster recovery must cross-cut the entire institutional structure and not just one entity.
- Guiding policies under a sustainable development approach is the only lasting way to achieve a significant reduction in risks, the occurrence of disasters and their negative spiral effect on development.
- The occurrence of socio-natural disasters can be avoided to the extent that the modes of development are oriented from a sustainability perspective.

- Recovery processes are a part of integrated risk reduction and risk management.
- The existing relationships between prevention, mitigation, preparation, response and recovery are dynamic and interrelated.

Building on this approach, recovery can be the opportunity to contribute to breaking the vicious cycle and the negative spiral that disasters imprint on development and also a chance to avoid recurring to the use of practices and/or proposals that only (re)create new risks.

Post-disaster recovery processes that are approached properly have the possibility to effectively address the main causal factors of risk from a new vision of development, a central aspect of which is a new organization of the territory. An adequate recovery can foster resilience, that is the capacity that people or economies have to absorb the losses and recover. This entails having a broad base of knowledge about the livelihoods and ways of life of the population, especially the poorest, and how the social fabric functions after a disaster^{vi}.

Post-disaster recovery: Planning vs. improvisation

Most times, national or local governments make post-disaster decisions that do not contribute to risk reduction nor to sustainable development. Political and economic concerns guide their efforts in another direction. Among the main problems which, from that perspective, occur in post-disaster actions, we can highlight the following:

- Political leaders tend to be very concerned with “governing” the disaster and overcoming as quickly as possible its repercussions in the lives of people. The issues related to humanitarian aid and assistance are normally highly visible politically, while recovery efforts are not, since recovery often times means making unpopular decisions that require planning: zoning, enhanced enforcements of building codes and standards, the resettlement of public infrastructure, housing, and others.
- A short-term vision, which is almost always dependent on the obtaining of political benefits, puts an emphasis on replacing the damaged infrastructure, without incorporating a risk assessment, which means that the repaired or new infrastructure is installed on a recurring basis in areas that are highly disaster-prone, which is without a doubt not very efficient from the point of view of optimizing scarce public resources.
- Most times, public decision-makers prepare a list of projects, many of them designed before a disaster occurs, that are not based on an analysis of damages and needs, do not start from a risk reduction approach nor are integrated into a plan that links recovery efforts over the short, medium and long-terms.
- The absence of a multi-dimensional analysis of risks derives from decisions that do not include interventions in other areas – economic, social and environmental – and that limit the opportunities of the affected people and communities to reduce their vulnerabilities and overcome their problems. This frustrates the opportunities to reorient development toward more sustainable behaviors and practices that can contribute over the medium and long-term, and as part of a properly planned agenda, to prevent the occurrence of new disasters.

- The lack of coordination policies and mechanisms, according to their responsibilities, among the different levels of government (national, regional and local) impedes the integrated management of post-disaster recovery and generates conflicts within the territory because the roles and responsibilities of the different governmental institutions are not clearly defined. In many cases, this hinders the achievement of the objectives within the desired timeframes, and in others, it creates competition between actors and duplicated efforts and resources.
- There are post-disaster recovery actions that are done exclusively under the leadership of the national level of government, and which often result in a “presidentialist” type of management, highly concentrated and not very participatory, which ends up taking away responsibility from local governments and the affected communities. In addition, there are no legal frameworks or agreements between different levels of government or institutions nor are there administrative and financing mechanisms that make it possible to have resources available to operate on the ground. This hinders the efforts and slows recovery down, and as a result many times before the recovery can even get started, or soon after it is underway, another disaster occurs.
- It is also a frequent practice that in an effort to achieve efficiency, timeliness and effectiveness, government decision-makers delegate the recovery actions and resources that fund them to a “third party that is assumed to be reliable,” which implies ad hoc arrangements to the detriment of national and local institutions, and a deviation of resources (public and private) allocated to development, and regarding which the mechanisms for transparency and accountability are not always clear.

There is evidence of the progress that has been made in terms of reducing losses with the application and development of preventative measures. Knowing what to do in the event of an earthquake, flood, landslides, etc. makes it possible to be prepared and to plan how to act, evacuate, protect lives, etc. It is precisely in this field where the differences between an improved reaction and a planned action are most clear.

In line with the lessons learned on the relevance and efficacy that are associated with preparing for recovery, and as there is a general roadmap followed by efforts in this area, the idea is to identify the key intervention areas or sectors and to determine policies or actions that can maximize the benefits of recovery, improve performance, and minimize the costs that are associated with doing nothing, doing it late, rebuilding old risks or creating new ones.

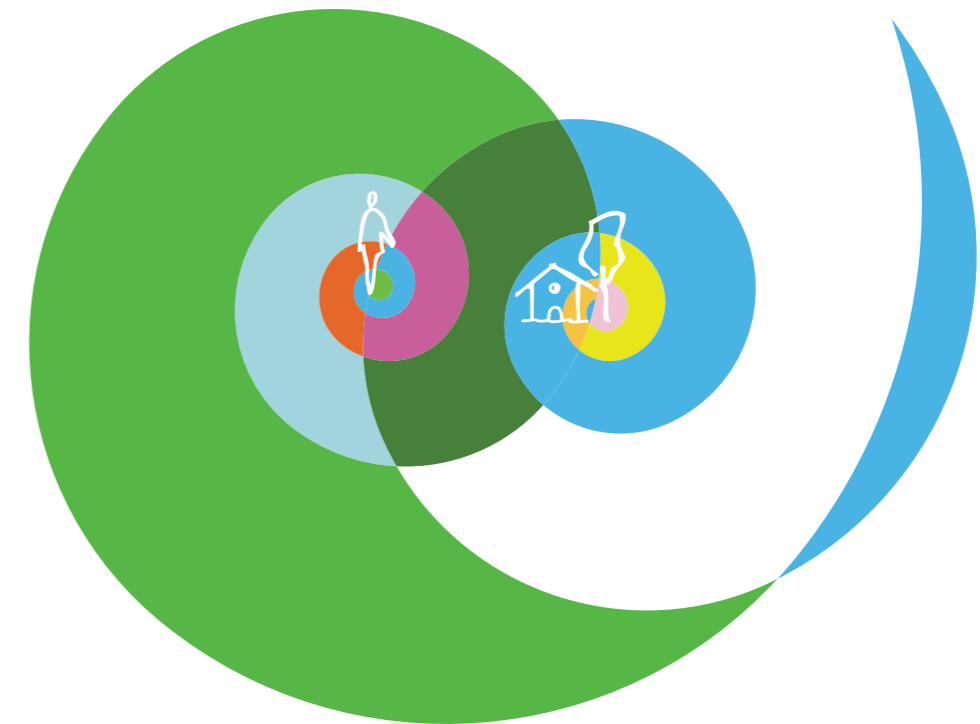
We begin with Matus’ notion that “planning precedes and presides over action, it never stops, it is a continuous, dynamic process that accompanies the changing reality.”^{xvii} The goal is to reduce improvisation in recovery processes and the negative effects that improvisation has on disaster and development management, by incorporating planning as “an action consisting of using a set of procedures, through which greater rationality and organization is introduced into a set of activities and actions, which are linked together and which, designed ahead of time, are intended to influence the course of a certain occurrence, in order to achieve a situation that is chosen as desirable, through the efficient use of scarce and limited means and resources.”^{xviii}

Following John Friedman, the idea is to “link scientific and technical knowledge with actions in the public sphere, making scientific and technical knowledge useful for the specific protagonists of the public sphere.”^{xix}

Since this is a process based on a rights-based approach, focused on people, which is done alongside of other prevention, mitigation and preparation processes, associated with a territory and multi-dimensional, the ideal is to, as Federico Aguilera says, to:

[...] incorporate into the actions planned in the public sphere [...] a cultural rationality or rationality of context [...] and not a compendium of technical or engineering knowledge, since we begin with the idea that complex problems – in this case, post-disaster recovery – are not exclusively environmental or physical, but above all cultural. Said context in turn is multidimensional (political, economic, ethical, social) and in it there are conflicts that arise between different logics and rationalities as a result of the tensions between different opposing values and interests.”^{xx}

This brief conceptual framework is useful for addressing recovery, particularly during the period preceding the occurrence of a disaster, since the idea is to anticipate all those aspects (actions, results, policies, laws, etc.) which, once the event occurs, steer the course of post-disaster interventions toward a recovery that is focused on people and sustainable human development, that is without reconstructing old risks or creating new ones.



CHAPTER 2: Preliminary Guidelines for a Post-Disaster Recovery Action Plan

As a corollary to the Post-disaster Recovery Planning process, this chapter applies strategic guidelines to political, normative, institutional, planning, information, social and financial aspects, which together serve as a basis for developing strategies and action plans for the post-disaster recovery plans in countries in the region. These guidelines were developed in the document Strategic Guidelines for Post-disaster Recovery Processes, prepared for UNDP’s BCPR by Camilo Cárdenas, within the framework of the Project “Lessons learned in post-disaster recovery and development process in Latin America and the Caribbean^{xxi}”.

Post-disaster recovery is a complex process, it is multi-dimensional and involves many different institutions. Due to its nature, the process must involve stakeholders from national, regional and local levels, as well as those from the international cooperation sector.

Planning recovery requires a process of anticipating the events and developing capacities, procedures, responsibilities and abilities that can be implemented and/or applied in or for a post-disaster context, at any time; but, these conditions must be “prepared for” in advance. In this chapter some recommendations and lessons learned will be identified, which could serve as a basis for governments formulating strategies, intervention guidelines and national plans for recovery. These recommendations were grouped by thematic aspects or lines in order to facilitate their use and adaptation to each context and reality, when formulating the strategies or proposals.

Political Aspects

Create political conditions among public, private and civic, national and local leaders, in order to put in place preparedness efforts aimed at ensuring a timely, effective and comprehensive recovery after a disaster takes place.

Increase awareness, political commitment and promote the adoption of State policies required in order to support the formulation of post-disaster recovery strategies, as part of comprehensive risk reduction policies.

PRELIMINARY GUIDELINES FOR AN ACTION PLAN

- Strengthen programs that are designed to raise institutional and citizen awareness regarding the importance of incorporating risk reduction and post-disaster recovery actions into development activities. These actions should protect the full exercise of rights, the population's quality of life and promote sound governance.
- Design and develop programs that raise awareness and commitment among public and private sector and individual decision-makers, about the opportunity of reducing risks during the recovery processes.
- Develop and strengthen State policies and strategies for comprehensively incorporating risk reduction and recovery preparedness efforts into all development activities, with approaches that are long-lasting and promote sustainable development.
- Define State policies designed to ensure that the post-disaster recovery processes are carried out in a decentralized, standardized and financially sound manner. For this, it is important to have full agreement and coordination between the central and territorial entities, as well as the effective participation of the social stakeholders linked to this process.
- Carry out the activities needed to clarify the concept of sustainable development and to make it operational within the recovery processes, promote sustainable development and have a common approach used by all development stakeholders.
- Adopt State policies that are conducive to ensuring that the recovery processes to be used make full use of existing public institutions, without creating parallel organizations, and take full advantage of the capacities available at the local and national levels. In addition, seek to adjust and strengthen these institutional structures so as to ensure the proper execution of these processes.

Institutional Aspects

Build the capacities of the existing national risk management systems, whether through the process of creation or transformation. Adjust their structure to enable them to lead and coordinate the activities of all government, civil society and international cooperation entities during the post-disaster recovery processes.

Adapt, strengthen and connect the existing institutional apparatus, specify the responsibilities of the different entities involved and identify the instruments needed so that it is possible to execute the post-disaster recovery processes in a timely, agile, coordinated and effective manner.

PRELIMINARY GUIDELINES FOR AN ACTION PLAN

- Conduct assessments and analyses of the current legislation in each country in order to identify strengths and weaknesses in the areas of risk reduction and post-disaster recovery.
- Issue a law – or add to and adjust current legislation – stipulating an obligation to include risk management in the different development processes, programs and projects and into national, sector and regional plans, stating explicitly post-disaster recovery.
- Encourage a legal framework that establishes and defines the responsibilities of the national, sector and territorial public bodies, as well as the private sector and citizens in general, with respect to risk creation and reduction and attention to post-disaster situations.
- Enact laws that provide an incentive for territorial physical/land use plans to include the concept of risk prevention and mitigation and facilitate control over the occupation of high risk or threat zones.
- Systematize and disseminate among the different institutional and social stakeholders the current laws and regulations on risk management. In addition, create mechanisms, instruments and incentives to ensure that these are complied with.

Legal/Regulatory Aspects

Promote a diagnosis and analysis of the strengths and weaknesses of current legislation, focusing on risk management and also including the subject of recovery.

Support the passage of legislation and regulations related to risk management and recovery. Facilitate debate and consensus building exercises.

Identify and define functions and specify the responsibilities of the institutional and social stakeholders involved in these processes.

Strengthen, expand and link together the legal-regulatory framework so that the governments can have the appropriate legal instruments.

PRELIMINARY GUIDELINES FOR AN ACTION PLAN

- Diagnose and analyze the strengths and weaknesses of the institutional apparatus with a view to identifying the measures required to strengthen it: guidelines, definitions of responsibilities, protocols and instruments needed to ensure that actions are implemented with greater leadership, coordination and flexibility in post-disaster situations.
- Define policies and instruments so that in future post-disaster situations the country uses the institutional system available, with a decentralized, systematic, multi-sectoral and interdisciplinary approach. In addition, the policies and instruments should include the concept of subsidiarity and emphasize local responsibilities, in order to avoid the creation of parallel entities.
- Create national systems, where they don't exist, for managing risk and strengthen those already in place, placing an emphasis on local levels. The goal of this is to improve management capacities and, in particular, to effectively roll out post-disaster recovery processes.
- Evaluate and systemize the management of the different post-disaster situations in each country, analyze the good and bad ideas and widely disseminate the conclusions. This process will have the effect of feeding back into institutional performance.
- Raise awareness of the need to attend, as an immediate priority, to institutional recovery processes in order to avoid a crisis of governance in the aftermath of a disaster.
- Look at the appropriateness of designing a governing body, which is exclusively responsible for coordinating and integrating all the activities, entities and stakeholders involved with formulating and executing recovery processes.

Planning Systems

Strengthen and prepare national, sector and territorial planning systems so that they have the capacity to construct and formulate, prior to disasters, strategies for recovery that can be implemented swiftly as soon as an event occurs.

Raise the human, technical and institutional capacities of State entities in the area of establishing policies, criteria, processes, instruments and procedures that are needed to continue with incorporating risk management into development and physical planning processes.

Design national, regional and local plans for post-disaster recovery, taking into account the different risk scenarios in each region, these plans must also be agile and flexible in order to adjust to the real situation on the ground after an event has occurred.

PRELIMINARY GUIDELINES FOR AN ACTION PLAN

- Diagnose and analyze the strengths and weaknesses of the planning systems in order to mainstream risk reduction into national, sector and local development activities.
- Evaluate the planning instruments which each country and region can take advantage of, to ensure that the recovery plans and programs are linked with development processes.
- Evaluate, document and disseminate national experiences on planning for recovery processes.
- Promote measures to assist the incorporation of post-disaster recovery processes into the national, sectoral and above all local planning systems.
- Create policies and instruments to ensure that the approach of recovery plans and programs incorporates the social, economic, environmental, political and institutional perspectives.
- Carry out seminars and workshops in the different countries with the national, sector-specific and territorial planning and/or public investment entities, with the goal of disseminating and promoting the existing strategic guidelines, in order to ensure that these guidelines are successfully applied.
- Carry out training seminars, workshops and programs for the officials from the relevant State bodies, with an emphasis on those at local level. These activities should be designed to promote and support the formulation and adoption of strategies and plans for post-disaster recovery, and for preparing said officials to correctly carry out their responsibilities during the recovery processes.
- Create permanent networks of national experts trained in the subject.
- Develop procedures and instruments to ensure that the recovery plans and programs are formulated with consideration of the macro and micro vision of the problems involved.
- Promote the development of methodologies for designing post-disaster recovery plans and programs. These methodologies should be designed with sufficient flexibility so that they may be adapted to the specific conditions and distinct risk scenarios in each country.
- Ensure that the national, sector and local planning and/or public investment entities have in place the necessary policies, directives, procedures and instruments to allow them to intervene in the most coordinated, timely and effective manner possible in post-disaster situations.
- Analyze the existing interrelations between the interventions during the emergency and disaster response phases and the recovery phase to ensure that there is coherent articulation between them.

Information Systems

Improve information systems, using real time information, which is up-to-date and integrated, in order to prepare and execute recovery plans that are adjusted to the reality and the needs of each region.

Deepen analysis and systematize knowledge about past disasters, the recovery processes carried out and the risks still present.

Modernize and/or expand and integrate of the existing information systems.

Create procedures so that the information is easily and rapidly available to all the national, local and international stakeholders that are involved in the recovery processes.

PRELIMINARY GUIDELINES FOR AN ACTION PLAN

- Analyze the existing information systems to identify strengths and weaknesses in managing information on risks, disasters and recovery.
- Develop programs and projects to strengthen and integrate these information systems, taking into account: a) that there are different types of information that fulfill distinct functions, they are: warning information, response information and information for recovery; b) there are different stakeholders: those that generate information, those that transmit and disseminate information and those that use it.
- Compile, evaluate, systematize and disseminate information on the history of disasters and the post-disaster recovery processes in each territory.
- Establish unified information management systems for disaster situations to ensure the availability and timely, comprehensive and dynamic dissemination of said information. The dissemination and availability should be in accordance with the needs of all the local, national and international stakeholders participating in the processes and making decisions during these disaster situations.
- Increase support for analysis, evaluation and zoning of the risks, as well as dissemination of the information to make it available for institutional and social stakeholders.
- Develop risk indicator systems for monitoring recovery processes.
- Expand and strengthen monitoring and early warning systems.

Social Aspects

Raise awareness among citizens on the importance of risks, their relation to the population's quality of life and the population's responsibilities in dealing with these risks. Additionally it is important to strengthen citizen participation and commitment to post-disaster recovery processes.

Develop public information, education and training programs.

Develop policies, procedures and instruments so that social participation and oversight is active and measurable.

Plan these processes and implement them based on the concrete needs of the communities affected.

PRELIMINARY GUIDELINES FOR AN ACTION PLAN

- Public information campaigns on the risks present (causes and consequences), the responsibilities of the private sector and citizens dealing with the risks, the disasters and outcomes, and deficiencies of and problems with the recovery processes. The campaigns should also focus on the importance of their involvement in seeking solutions, particularly in post-disaster situations.
- Deepen the analysis into the social and institutional perception of risks and post-disaster recovery, taking into account among other things, the cultural differences between regions and between urban and rural populations.
- Promote the participation of the population in the recovery phase, which should be planned with a rights and gender equity approach.
- Create procedures and instruments so that the affected communities have the true ability to participate in the social oversight processes, from the formulation up to the execution of the recovery plans, thus helping to ensure that these plans are based on the real needs of the affected populations.
- Develop education and training programs which are designed to improve the capacity of distinct stakeholders, to participate for the full duration of the post-disaster recovery processes.
- Establish methodologies that ensure that the recovery plans and programs consider and respect the cultural diversity and social condition of the affected. Additionally that they should take into account the informal recovery processes that the communities themselves carry out, as well as contemplate and integrate the problems resulting from the conflict situations that exists or could arise in the affected area. These methodologies should incorporate a population and gender approach.

Financial Aspects

National strategies that include a specific strategy for financing activities prior to and after a disaster, endeavoring to make full use of the public and private resources available, and establishing frameworks which address the intervention of international cooperation.

Seek to reduce the fiscal vulnerability of the Nation and in its regions.

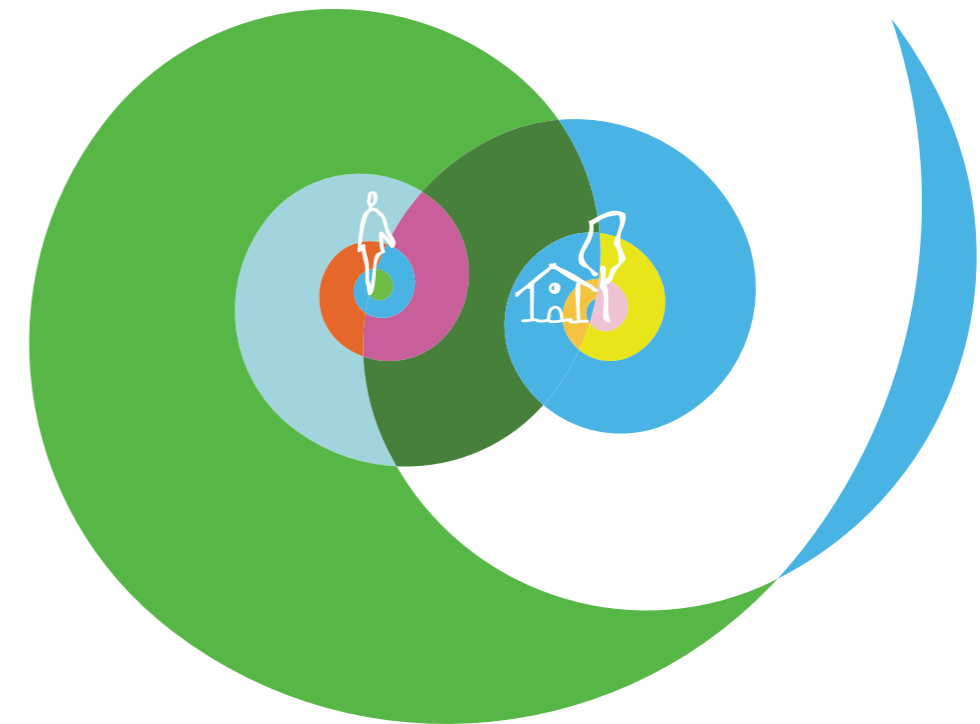
Establish insurance policies and programs.

Define the financial responsibilities of each one of the stakeholders.

Define policies, criterion and priority areas that can steer the support coming from international institutions.

PRELIMINARY GUIDELINES FOR AN ACTION PLAN

- Define policies and establish regulations that specify the responsibilities of the private sector and citizens, and national and regional entities, with respect to financing activities during the post-disaster recovery process and reduce pre-disaster risks.
- In the recovery plans, include financial strategies for the execution of said plans.
- Governments establish frameworks for cooperation that include policies, criteria, communication and coordination procedures and priority areas for international cooperation intervention. These frameworks are designed to support the post-disaster recovery processes.
- Develop studies and establish policies for reducing the fiscal vulnerability of the Nation and its territories, in dealing with risks and disasters.
- Establish insurance policies, rules and programs for state infrastructure and buildings of all levels and types.
- Establish policies and programs which encourage private insurance.



CHAPTER 3: HOW CAN WE DO IT? Early Action Guide for national, regional and local governments

This chapter summarizes the systemization of the Methodology Guide for Recovery Planning Processes, produced by the Bureau for Crisis Prevention and Recovery (BCPR) of the UNDP^{xxii}. The guide was based on the results and findings of the Recovery Planning Project carried out by the Mayor's Department of Bogota city, between 2007 and 2009, which aimed to plan recovery from a possible earthquake in the city.

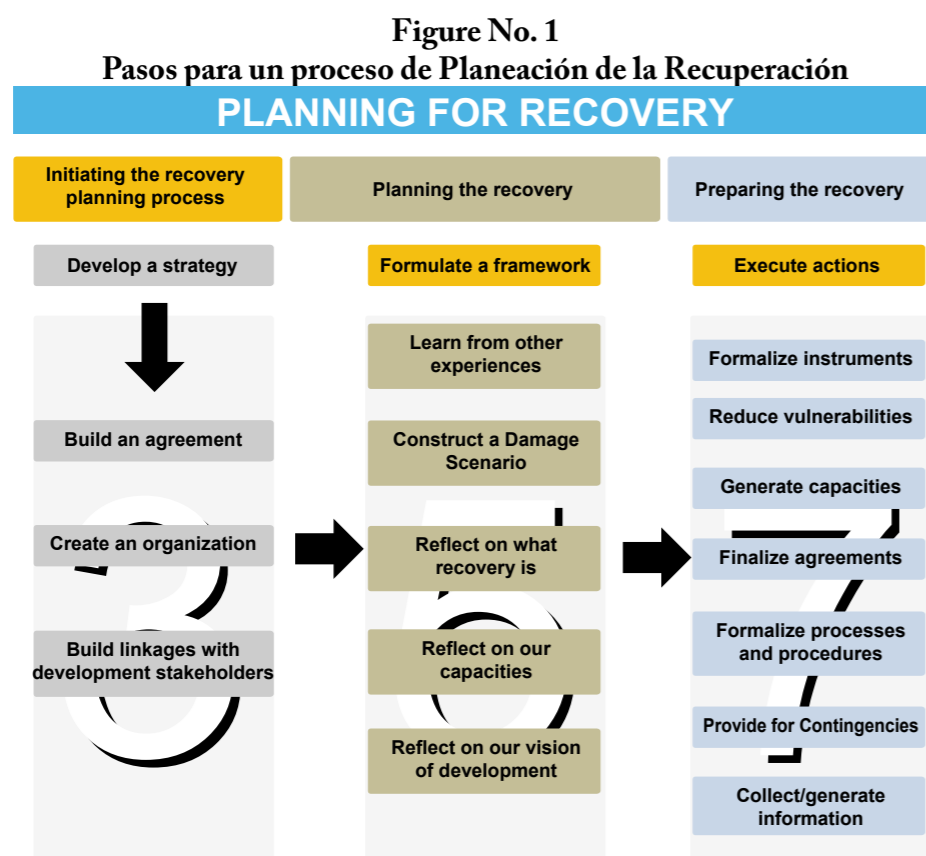
It is important to highlight that it deals with one of the few –or maybe the only- intentional experience in planning the recovery from a threatened disaster in our region. It forms part of actions undertaken by the Colombian Emergency Prevention and Attention Department (DPAE).

Recovery planning is a process that is a part of development planning and comprehensive risk management. As such, it is not just a product or plan in and of itself, but rather it implies a sustained set of actions of various kinds that are intended to make a society more resilient to disasters, not only by reducing the vulnerabilities to prevent the disaster from “hitting hard,” but also generating the capacity to “get back up quickly and well”

and to adapt to the changed conditions resulting from a disaster that are necessary to continue on the path of sustainable development.

Within this order of ideas, this Guide is structured based on THREE PHASES (see figure No. 1):

First of all, **INITIATING RECOVERY PLANNING** constitutes the phase of generating a strategy that is politically accepted, and supported technically, financially and logistically, which makes it possible to incorporate the issue of Recovery Planning into the national or local development processes.



Source: "Methodology guide for Recovery Planning Processes", 2010^{xxxx}.

A second phase, **PLANNING THE RECOVERY**, involves the process of creating knowledge and generating the agreements that can provide a national, regional or local framework that prioritizes the probable risk scenarios, establishes recovery policies and strategies, identifies the gaps and strengths in terms of management capacity and defines the main instruments to be used to facilitate a possible recovery process and the agenda to be followed in order to carry out the initially planned guidelines.

Finally, **PREPARING FOR RECOVERY**, is the set of actions derived from the previous phase which develop and complement the results obtained, especially those aimed at building national and local capacities, reducing vulnerabilities and increasing economic, social, territorial and institutional resilience, formalizing and testing processes and procedures, and adopting instruments and regulatory frameworks that will serve as the backbone of the eventual recovery process.

Below is a detailed description of each phase:

1. Initiating Recovery Planning

Initiating a process to plan Post-Disaster Recovery in contexts where development and physical planning themselves are still in their early stages and where emergency assistance efforts prevail, would seem, to say the least, unorthodox. However, as shown in the initial chapter, disasters are recurring with increased frequency, and from the perspective of planning, they demand the creation of a culture of prevention.

The challenge of a recovery planning process is in bringing together the society as a whole, so that they are able to visualize not only the probability of the occurrence of a large-scale disaster, but also the fact that they may be affected and that not being prepared for recovery could be worse than the disaster itself.

In this sense, beginning and recovery planning process will initially require taking into account the following elements:

1.1. The bare minimums

A recovery planning process will be successful, if from the beginning its sustainability over time is guaranteed. For this purpose, the national, regional or local level will need to take into account at least the following aspects:

- a. The existence of political will to support the process.
- b. An integrated risk management policy that includes the issue of recovery.
- c. A development planning sector that is open to incorporating the recovery issue.
- d. Guaranteeing some resources to allocate to recovery planning.
- e. The existence of medium or large-scale disaster experiences in recent history will facilitate the progress of the process.
- f. Having clarity about the main threats or risks of medium or large-scale disasters, will help to focus recovery planning efforts.
- g. Having a regulatory framework at the national and/or local level that addresses disaster recovery will make it easier to institutionally position the issue of recovery.

1.2. The Process

Putting in motion a recovery planning process involves at least the following steps:

a. Reaching agreements to initiate Recovery Planning

The success of any public policy lies in the ability of the proponents to motivate and involve other stakeholders to take ownership of the process, in particular when dealing with a novel issue which is not perceived of as an urgent priority. A good start is to recruit leaders that are close to the political power center – the closer they are, the better their possibilities for bringing people together, mobilizing resources and moving forward.

Creating agreements between the public sector, private sector, social organizations and different levels of government to embark upon a recovery planning process will help to create synergies, join and complement efforts and resources and put in place a process that mobilizes the public. Some suggestions for accomplishing these kinds of agreements:

Objective	Suggested Actions
Justify the need	Rapid assessment of weaknesses and strengths through workshops, discussions or position papers. Use the most probable critical scenario as support.
Generate a critical mass	Engage strategic partners to support the initiative, from international cooperation, the academic sector, and other countries or regions with experiences in disaster recovery, among others.
Raise awareness about the issue	Seminars or workshops on recovery experiences in the country or local area. Media Plan.
Formulate objectives and desired results	Create a technical group in charge of designing the project.
Formalize a project	Adopt an agreement, contract or similar mechanism that defines objectives, responsibilities and management arrangements.
Launch the process	Public act. Media plan.

b. Create a minimal organization to lead the process

Preparing for recovery in advance requires strong leadership that can mobilize all of the stakeholders involved under the assumption that one does not have to wait for a disaster to begin thinking about recovery, as there are many issues which, if addressed ahead of time, will make the difference in the pace and quality of recovery efforts. There is no one recipe which defines who should play that leadership role, since it depends on many factors such as the structure and the architecture of the state, the territorial organization, the way responsibilities for different areas are distributed, awareness of and commitment to managing risks, leadership and political will. One good option is a leadership group that combines those responsible for planning with those responsible for risk management. It is valid to mention some suggestions:

- The leader(s) of the process should be located as close as possible to the center of power.
- Create a broad-based policy, leadership and monitoring entity that brings together different levels (national, regional, local) from the planning sector, integrated risk management and from those sectors which are key or which display marked leadership, depending on the most probable type of disaster.
- Create a basic technical unit in charge of leading the process which is exclusively dedicated to recovery preparedness, which is preferably a part of the planning system.
- Ensure resources for the functioning of the technical unit.

c. Engage the stakeholders and agencies necessary for the process

Recovery planning is not a technical product, rather it is a process of mobilizing society as a whole to enhance their ability to resist disasters. In that sense, the design of a process with a

high degree of participation from those in charge of taking ownership of recovery preparation and putting it in motion, is the most desirable. To these ends, from the very beginning of the process, the following things are useful:

- Spaces have been agreed upon to collectively discuss the issue.
- There are goals and objectives to achieve.
- Progress and participation can be monitored.
- There are permanent channels for the flow of information. The use of web 2.0 mechanisms, for example, can contribute to this objective

1.3. Expected Results

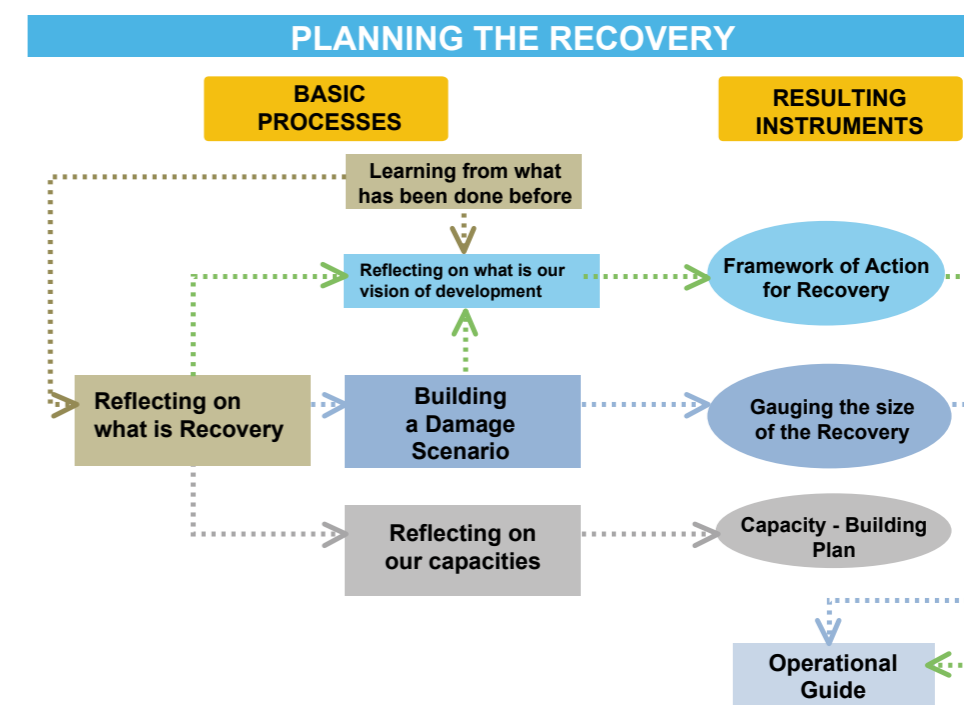
A consensus of wills among national, regional and local stakeholders from the public, private, and academic sectors around the need to plan for recovery, who have taken ownership of the issue and are motivated to play their part.

2. Recovery Planning

2.1. Planning the recovery

Recovery planning can be structured around five lines, which interact among themselves, and make it possible to obtain the main instruments that can contribute to a framework for action for post-disaster recovery, as presented in figure No. 2.

**Figure No. 2
Elements and instruments for Recovery Planning**



Here follows a description of each one of the resulting lines and instruments.

2.1.1. Reflection on what recovery is

The first step in recovery planning is a reflection on what this implies. It relates to a concept that is more humanistic, focused on rights, and which seeks to attend to not only the mere physical rehabilitation and reconstruction. Equally it is a non-linear process that depends to a great extent on the preventative actions to reduce vulnerabilities and the emergency attention phase: many decisions taken “in the heat of the moment” can have negative impacts during posterior recovery processes.

Each type of disaster has its own particularities in terms of recovery demands – origin, magnitude, national economic situation, conditions of vulnerability -- these are just some of the elements that make each disaster unique. Nonetheless, trying to understand the implications and challenges of a process of this type, gaining a deeper knowledge and analysis of the challenges that are involved in acting both in normal times and during disasters, makes it possible to prepare, anticipate and take steps to significantly reduce the times and uncertainties in decision-making and in the work done in the territories and with the affected society.

Table No. 1
Elements involved in a reflection on recovery

OBJECTIVES	Define what recovery is; identify how it relates to response; define the relevant issues involved in recovery; define the moments and characteristics of a recovery process according to the type and origin of the disaster.		
	Issues to address	Information required	Methodologies used
	<ul style="list-style-type: none"> The notion of Recovery Implications of Recovery Phases of a Recovery process The relationship between recovery and prevention The relationship between recovery and response Early Recovery Sector-specific topics related to Recovery Critical Recovery issues Legal Framework 	<ul style="list-style-type: none"> International recovery policies National policies and the legal-regulatory framework regarding recovery Technical documents on rehabilitation and reconstruction Policies and the legal framework of the national and local planning systems 	<ul style="list-style-type: none"> Workshops with institutional stakeholders of the emergency response, planning and development sectors Generate a research program with the academic sector Prepare a baseline document to discuss and enhance during the process
	Results	<ul style="list-style-type: none"> A shared definition of recovery A conceptual framework for how recovery is to be understood and what its emphases are A notion of a recovery process and the needs to take on during each moment of said process An identification and definition of the relevant general and specific topics of a sectoral nature (economic development, mobility, habitat, etc) which must be addressed depending on the type of disaster An identification and definition of the institutional, financial, and coordination arrangements needed to move forward with a recovery process 	

Results	<ul style="list-style-type: none"> An assessment of the legal and regulatory framework at the national and local level regarding recovery A proposal of how prevention, emergency response and early recovery are interrelated
Instruments contributed to	Support to structure the Framework of Action for Recovery Inputs to formulate the Capacity-Building Plan Inputs to design the Operational Guide

2.1.2. Learning from what has been created

There are no recovery processes or methodologies that are universally valid and applicable to every recovery process; however, at the international level, from national and regional governments, from the academic sector and third-sector organizations, there is a wide variety of material available on experiences and lessons learned, which are valuable inputs when it comes time to embark upon a recovery planning process.

Table No. 2
Main actions to take to incorporate experiences and lessons learned

OBJECTIVE	Take advantage of lessons learned at the national, international and local context about recovery processes, as an input for Recovery Planning		
	Issues to address	Information required	Methodologies to be used
	<ul style="list-style-type: none"> Lessons learned Experiences in recovery 	<ul style="list-style-type: none"> Documentation of national recovery experiences Documentation of experiences from other countries Documentation of experiences of multi-lateral organizations and international cooperation agencies 	<ul style="list-style-type: none"> Internet research Seminars to exchange experiences Visits to recovery efforts in progress Workshops with experts on managing recovery processes
	Results	Database and systematization of lessons learned Examples of good and bad practices from national and international experiences, with national and local reflection on recovery	
	Instruments contributed to	Support for structuring the Framework For Action	

2.1.3. Building a damage, losses and needs scenario

Knowledge about threats, vulnerability and risks constitutes one of the most important elements for the purposes of recovery planning. Preparing the damage, losses and needs scenarios for the different types of threats makes it possible to estimate the scope and magnitude of the recovery process and the technical, human and financial resources needed, as well as to identify critical issues that require special advance attention in order to reduce vulnerabilities or to design programs to facilitate recovery.

Table No. 3
Developing damage, losses, and needs scenarios

OBJECTIVE	To generate technical instruments that can calculate probable scenarios in terms of damages, losses and needs, in order to prioritize threats and identify vulnerabilities, as a contribution to assessing the scope of and preparing for the recovery	
Issues to address	Information required	Methodologies to be used
<ul style="list-style-type: none"> • Knowledge of the main and most impactful threats • Knowledge of socio-economic and territorial vulnerabilities • Knowledge of the territory, its characteristics and functionality • Theoretical methods of calculating damages and losses • Identification of related events 	<ul style="list-style-type: none"> • Geo-referenced information about threats • Cadastre information • Socio-economic information about the territory (population, income, living conditions) • Information about infrastructure networks in the territory • Theoretical models for building information to identify vulnerability of buildings, infrastructure, and the population 	<ul style="list-style-type: none"> • Identify those threats with the greatest capacity to impact a territory • Compile information on threats • Compile information on vulnerability (cadastre records, building censuses, socio-economic censuses) • Generate probable scenarios • Estimate damages and losses, associate them with possible identifications of needs of the affected population • Determine critical issues resulting from the scenario • Employ methodologies to prioritize threats and scenarios • Build models • Calibrate and validate models • Continually feed new information back into the models to ensure their consistency • Compare with local baseline assessments on the national or local situation to evaluate effects and impacts
Results	Scenarios of damages, losses and estimated needs (estimated socio-economic impact)	
Instruments contributed to	Support for structuring the Framework for Action Support for formulating the Capacity-Building Plan	

2.1.4. Reflecting on our vision of development

While guiding a recovery process requires specific policies that respond to the conditions of the place and time of the disaster, these policies are not invented on the spot, but on the contrary, come from, continue or are a part of policies and plans established at the national, regional and local level. For this reason, having solid national or local policies and reviewing them in the light of

a disaster, their implications and their capacity to support recovery efforts, will help to very quickly identify particular elements that should be prepared, those that could become the principles and focuses of the recovery and those that will depend on the particular conditions of each disaster.

Table No. 4
Reflecting on development and recovery policies

OBJECTIVE	To determine the baselines of a national and local level development process in terms of their public policy orientation. The orientation of a recovery process is not isolated from existing policies. Planning for recovery should be supported by existing policies, adapt and adjust as those policies evolve over time, and project them toward more sustainable development		
Issues to address	Information required	Methodologies to be used	
<ul style="list-style-type: none"> • International human rights policies • National and local policies regarding human rights and the territory • National and local economic development policies 	<ul style="list-style-type: none"> • Development and physical/land-use plans • Sector-specific policies (social, economic, physical, etc.) • Instruments used in development and territorial planning and management • Assessments of the socio-economic and development situation of the territory as a baseline 	<ul style="list-style-type: none"> • Compiled and systematize baselines • Cross-check with damage scenarios in order to gauge possible impacts and damages and to establish the relevance of existing policies in the event of a disaster 	
Results	Baselines, guiding policies, principles of action for recovery efforts		
Instruments contributed to	Support for structuring the Framework for Action Support for developing the Operational Guide		

As a result of this component, crossed with the damage scenario and the lessons learned from other experiences, it is possible to formulate the **Framework of Action for Post-Disaster Recovery**, which constitutes the main thrust of recovery planning.

2.1.5. Reflecting on our capacities

One of the critical issues of post-disaster recovery is related to the simultaneousness and magnitude of decisions, actors and resources, which converge together in a very short period of time in a specific territory. In that sense, the main challenge is to establish systems for decision-making, coordination, allocation and execution of resources, which are highly effective for responding to the affected population in the shortest amount of time and in accordance with established policies and objectives.

In planning for recovery, it is possible to advance significantly, reduce uncertainties and fill any possible gaps in the operation, through a thorough reflection on the existing institutional, financial, planning, project implementation, coordination and other capacities, and to think in advance about special mechanisms that will allow for the normal development of society and the recovery of those territories and groups of people affected by the disaster.

Table No. 5
Reflecting on our capacities

OBJECTIVE	To determine weaknesses and strengths in terms of technical management and institutional capacities and resources to take on a recovery process	
Issues to address	Information required	Methodologies to be used
<ul style="list-style-type: none"> Assessing institutional capacity Assessing financial capacity to leverage the recovery process Assessing the level of coordination in planning and the execution of policies, programs, plans and projects 	<ul style="list-style-type: none"> Damage, loss and need scenarios Analysis of institutional vulnerability Medium-term and long-term financial frameworks Analysis of the processes and instruments for administrative, contractual, human resources and other kinds of management. Analysis of the territorial planning and land-use instruments 	<ul style="list-style-type: none"> Identify project execution capacities during normal times: for example, resettlement time Analyze processes and resources Cross-check with the damage and loss scenario Assess capacity-building needs Design capacity-building activities
Results	Assessment of institutional, financial, coordination, decision-making, management, administration and program and project monitoring vulnerabilities	
Instruments contributed to	Support for structuring the CAPACITY-BUILDING PLAN Support for structuring the management components of the FRAMEWORK FOR ACTION	

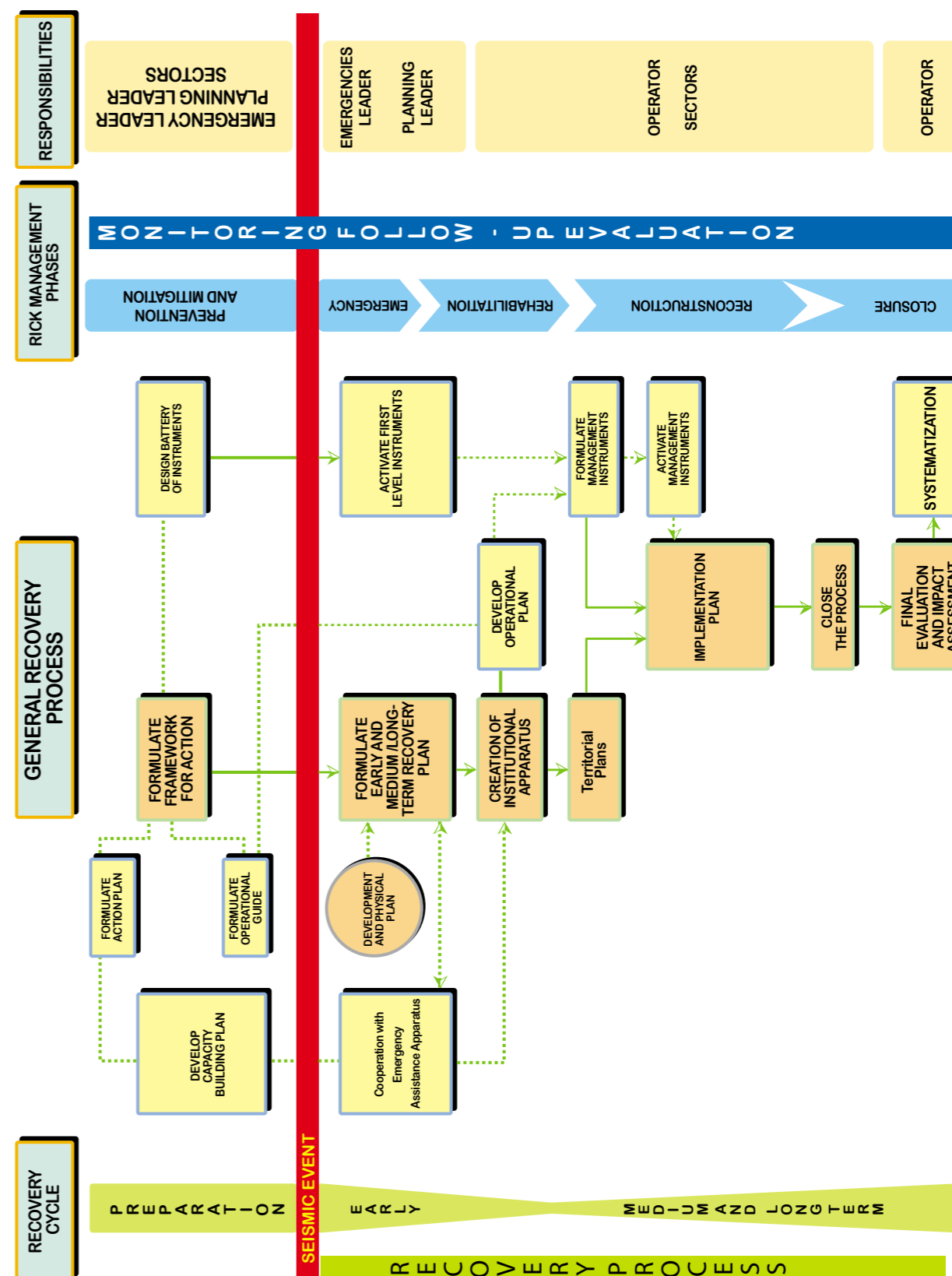
2.2. Understanding the recovery process better

As established in the conceptual framework, recovery does not need to begin only after a disaster, but rather it can be planned beforehand. In this context, and based on the systematization of experiences in recovery processes, it is possible to affirm that this is a process that begins with planning the recovery, and in which five stages can be established: preparing for recovery (ex ante), the moment of the disaster and the relationship with disaster attention, early recovery, medium and long-term recovery and the closure of the recovery, as a finite process in time. For each of these stages there are basic processes and procedures, responsibilities and relevant aspects to be taken in to account.

Figure No. 3 on the next page uses developments in the city of Bogota, Colombia to exemplify post-earthquake planning, a way of understanding the inter-relationship between integrated risk management, the stages of recovery and the integration of the instruments resulting from a process.

Figure No. 3

Structure of a Recovery process in the context of integrated risk management and the incorporation of instruments resulting from the recovery planning.



2.2.1. From Emergency Response to Recovery

When a disaster strikes, the recovery mechanisms are activated. In many countries, by the mere declaration of a state of emergency or a disaster, decisions are being made about the allocation of responsibilities or resources such as subsidies; recovery planning can anticipate the scope of these instruments as the foundation for making decisions in the most difficult moment of the emergency.

Equally relevant is that with the operational emergency response actions, decisions are already being made that can set the path that recovery will take. That is why it is important to reflect on and anticipate the relationships between emergency decisions and actions as a function of the established protocols and the recovery policies and later actions. Many response decisions can have major impacts or costs over the medium and long-term. Table No. 6 shows some of the relationships between emergency actions, early recovery and medium and long-term recovery (see Table No. 6).

Table No. 6
Relationship of Emergency Actions with Recovery

EMERGENCY RESPONSE ACTIONS	EARLY RECOVERY ACTIONS	MEDIUM AND LONG-TERM RECOVERY ACTIONS
Providing emergency services: fire control, search and rescue	Does not continue	Does not continue
Handling corpses		
Emergency administration, reconditioning and recovering staff, managing supplies		
Delivery of Humanitarian Aid	Aid distribution to vulnerable groups	Does not continue
Damage assessment	Assessment of Early Recovery needs	Impact and needs assessment
Provisional lodging	Mounting and operation of temporary shelter	Habitat reconstruction
Rehabilitation of accessibility for emergency response	Restoration of mobility for employment and social services	Restoration of mobility for sustainable development
Clearing debris	Transportation and separation of debris	Sustainable transformation and use of debris
Evacuation and return	Conditions for managing migration processes Conditions for managing displaced people	Resettlement policy
Emergency medical attention	Access to health services Support for the rehabilitation of equipment and donations Epidemiological control	Public health and social insurance
Public Health (Basic Sanitation, Mental Health)	Development of psycho-affective recovery programs Prevention of sexual and gender violence Reproductive health programs	
Public security	Co-existence and participation	Political participation
National and international cooperation for humanitarian aid	National and international cooperation for early recovery	National and international cooperation for medium and long-term recovery

Source: Created by author

2.2.2. Early Recovery

Early recovery is a substantial step forward in the existing gap between the emergency and emergency response, and medium and long-term recovery. An early recovery approach, on the one hand, “encourages emergency response actions to take place with a long-term perspective, so that immediately the first recovery initiatives are channeled to the communities with a focus on human rights, to guarantee the conditions of governability and coordination necessary not only for response but also for recovery, and immediate results are produced for the most vulnerable populations following the disaster, so that the city has the conditions in its government, economic and social systems to face the transition between the moment of crisis and long-term recovery.”^{xxiv}

In this context, the early recovery cluster (CWGER) highlights the following as general objectives:

Table No. 7
Early Recovery Objectives

Objectives	Actions
Develop humanitarian programs, to ensure that their inputs become assets for long-term development and thereby foster the self-reliance of affected populations and help rebuild livelihoods	<ul style="list-style-type: none"> • Re-establish and facilitate access to essential services • Ensure appropriate transitional shelter • Distribute tools and other goods and services that help to revive socioeconomic activities • Provide temporary wage employment • Restore environments needed to allow for the rebuilding of livelihoods and basic levels of collective and human security • Prevent risks from being recreated • Ensure the integration of cross-cutting issues like gender, environment, security, human rights and HIV/AIDS • Promote gender equality
Support spontaneous recovery initiatives by affected communities and change the risk and conflict dynamics	<ul style="list-style-type: none"> • Strengthen the self-help efforts and capacity of the affected population • Promote community approaches to restore basic levels of security • Identify mechanisms to guarantee that the recovery of the community does not generate discriminatory practices or secondary risks • Identify critical ecosystems (goods and services) that require restoration to support the development of sustainable livelihoods • Foster equality and local capacity-building to prevent any kind of discrimination

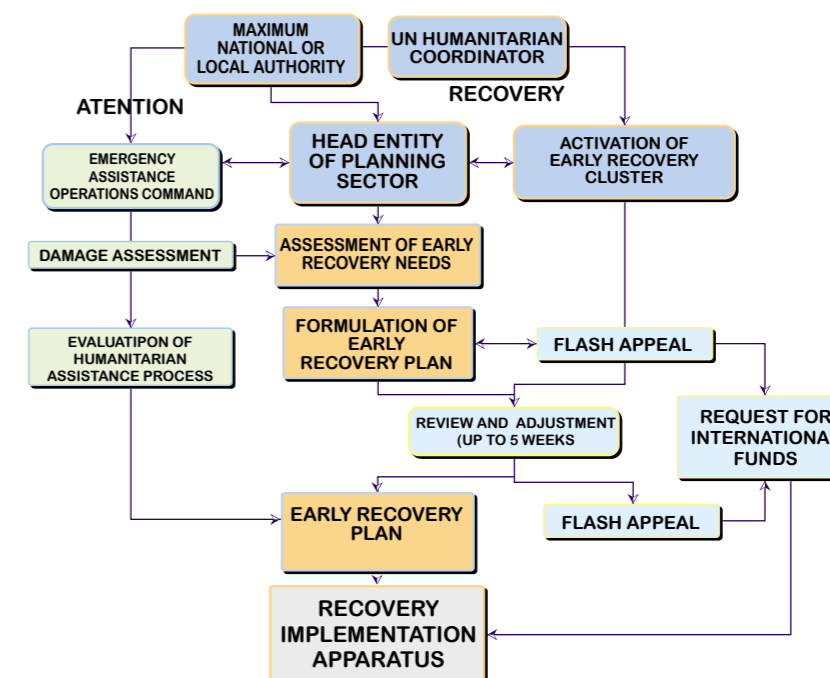
<p>Establish the foundations of longer-term recovery, through:</p>	<ul style="list-style-type: none"> • Conduct an early needs assessment, plan and mobilize resources for recovery • Engage in coordinated planning among stakeholders with clear roles and citizen participation • Create strategic alliances between communities and local authorities ensuring the participation and inclusion of vulnerable, marginalized and discriminated groups • Raise human rights awareness and strengthening the capacities of local communities to claim their rights • Review and/or develop essential policy to guide recovery efforts that aims to improve and not replace pre-crisis conditions and vulnerabilities
<p>Strengthening the governance and management of the recovery</p>	<ul style="list-style-type: none"> • Strengthen the Rule of Law • Restore and strengthen the capacities of government • Encourage ownership of national and local authorities • Develop systems of monitoring, evaluation and learning • Reorient development initiatives in progress to guarantee that they contribute to building resilience and capacity among the affected communities • Increase capacity to strengthen accountability systems • Effective needs and capacities assessments • Build governmental capacities to plan and manage recovery based on local knowledge and practices • Generate efficient coordination processes among stakeholders

Source: CWGER – UNDP adapted for Project COL 54244 - Bogota.

The United Nations system has made progress in the formulation of a framework for early recovery^{xxv}, which helps to guide actions and define the institutional arrangements to be implemented. Figure No. 4 synthesizes and complements this framework, highlighting the most relevant instruments:

- Post-Disaster Needs Assessment for early recovery^{xxvi}
- The formulation of an Early Recovery Plan
- The Flash Appeal as the basis for accessing international resources to support the ER phase.

Figure No. 4
Early Recovery Process, relationship with Assistance and main derived instrumentsa



2.2.3. Medium and Long-Term Recovery

The orientation toward actions that open up windows of opportunity for a transformation toward sustainable development, which ensures that the risk will not be reproduced and re-establishes the rights of people and the functionality of the territory, is developed out of two phases: the planning of the recovery and its execution. As for the former, the formulation of the Recovery Plan constitutes the driving force of the process, while the execution is supported by the work to be done by the institutional apparatus, in accordance with the Plan and in application of five processes that are considered indispensable to guarantee proper implementation.

1. **The assessment of the needs** of the population affected by the disaster.
2. **Systematization and comparison of the results of the assessment** with the foundations and inputs of the needs assessment.
3. **Formulation of the Strategic Component** aimed at defining the integrated objectives that will link the different sectoral components in coordinated actions within the territory. The definition of these objectives must be consistent with the needs assessment and have a broad consensus at the level of institutional, political, private sector and community representational bodies.
4. **Formulation of Sectoral Intervention Components.** This is the definition of specific programs and projects by development sectors, at the regional, urban and local level in terms of the specific needs of the communities.

5. Prioritization. Based on the availability of resources and institutional capacity, compared to the increased demands due to the disaster.

6. Formulation of Territorial Action Plans. Both the strategic component and the sectoral component will be detailed in action plans applied to the target territories, which will be defined by the Plan. The Plan will identify the specific actions to be implemented at the level of specific projects in the affected areas.

2.3. Some Instruments Resulting from Recovery Planning

In order to develop the structure discussed thus far, here we are proposing some instruments that by way of example can be developed as part of the process of recovery planning and that include tools to increase resilience and reduce vulnerability (Capacity-Building Plan and damage, loss and needs scenarios) or to set the foundations to guide the recovery, with instruments that are triggered once the disaster occurs, like the Framework for Action, the Operational Guide or the regulatory instruments for managing recovery.

The contents of these instruments are taken from the Framework for Action for Post-Earthquake Recovery formulated by the city of Bogota, with the support of UNDP and BCPR.

2.3.1. Disaster, Loss and Needs Scenarios

The construction of damage, loss and needs scenarios is a central instrument of the process of recovery planning under the assumption that “the knowledge and evaluation of risks caused by natural threats can help to identify conditions in the city in terms of the exposure of physical and human capital, physical and social vulnerability and their geographic distribution, and the expected damages and losses from such events.”^{xxvii}

Damage scenarios make it possible to propose a series of possible risks and losses from a given threat, based on the most updated information available.

While the scenarios constructed are based primarily on the total estimated economic losses for each scenario, the number of houses and people affected, the number of dead and wounded and their geographic distribution, it is necessary to go beyond these indicators to a broader framework that includes the definition of needs derived from the catastrophic event, within a wider spectrum, as well as to incorporate possible related events from the point of view of the environment, public services technological events, and others.

Building and managing the damage scenarios must be incorporated within the planning, development and risk management functions, so that it is possible to create dynamic and flexible tools that can rapidly produce information that can feed into policy decisions during the preparation process.

Modeling damage scenarios, from the perspective of the recovery process, must emphasize the following actions:

- Incorporate the measurement of impacts and needs, based on damage estimates
- Strengthen the spatial and territorial analysis of damage scenarios as the basis for policymaking

- Strengthen the relationship between emergency assistance and early recovery
- Generate mechanisms to encourage linkages between organizations and to define the territorial structure for managing the recovery process.
- Make approximations of possible recovery costs and resource flows.
- Adjust strategic territorial planning and development decisions in accordance with the proposed damage scenarios.
- Systematically apply recovery processes in simulation exercises/drills at the local and/or national level.

2.3.2. The Needs Assessment

One of the issues to be included in a recovery planning process is the needs assessment, regardless of what decision-making structure has been set, in light of the impact of the disaster and of the desired future projection of the territory and the society toward sustainable development.

Having agreements in place on the methodologies to use to assess damages (during the initial emergency phase), early recovery needs and economic, social and territorial needs and impacts, provides a solid foundation for a recovery process, prevents errors in measurements or inefficiencies in the implementation of censuses or the measurement approaches.

Under the recovery planning approach, it is not enough to assess damages to infrastructure; there must be tools that are previously designed and tested that respond to policy and recovery objectives and that can go beyond the physical and show the effects on social conditions, incomes and livelihoods, on networks and basic needs of affected families.

To this we can add the global assessment of the effects on society as a whole, the economic and micro-economic impact, and the alteration of institutional capacity. In order to work on these two fronts, there are methodologies that can serve as a basis for planning the processes of assessing damages, needs and impacts.

Table No. 8
Some available methodologies

- | |
|---|
| <ul style="list-style-type: none"> • Post-Disaster Needs Assessment (PDNA) • Guide to Assessing Needs for Recovery Processes (BCPR-UNDP) • “Manual for the evaluation of the socioeconomic and environmental impact of disasters. ECLAC, 2003. • “Economic Aspects of Disasters” (UNDP, DHA, 1994), (DMTP) in partnership with the Disaster Management Center of the University of Wisconsin. |
|---|

Below are some components to take into account in a damage or needs assessment or when measuring impacts.

Assessment Components	Objective
Effects on fundamental rights	<ul style="list-style-type: none"> Identify factors that affect rights and calculate the damages and losses caused by the disaster to people, families, groups and the social fabric Identify effects and estimate damages and losses to human security and the quality of life Identify effects on employment and incomes Identify effects on the state's ability to provide services and on governance
Effects on the environmental sustainability of the city	<ul style="list-style-type: none"> Identify and measure the effects the ecological structure and footprint, including recovery and the provision of environmental services in the region Identify and measure the effect of the environmental damages to the population
Direct damage	<ul style="list-style-type: none"> Measure the effect and impact on immobilized assets and inventories (both of final goods and goods in process) Identify and measure the effect on the livability of the city (habitat-housing) Identify and measure damages to fixed public and private assets (infrastructure)
Indirect damage	<ul style="list-style-type: none"> Measure the effect and impact on the flows of goods and services that stop being produced or provided during a period beginning after the disaster and which could extend through the rehabilitation and recovery process
Macroeconomic effects	<ul style="list-style-type: none"> Measure the effect of the disaster on the behavior of the primary macroeconomic variables
Intangible damages	<ul style="list-style-type: none"> Identify effects on components of social functioning, like social capital, culture, cultural heritage, and others
Capacity analysis	<ul style="list-style-type: none"> Identify and value the institutional capacity and resources at the different levels of government

2.3.3. The Framework for Action for Post-Disaster Recovery

The Framework for Action is an general and indicative instrument that is adaptable to different types, scales and magnitudes of disasters, with three objectives:

- Define beforehand the set of principles, policies and coordinated processes that can advance, once a catastrophic event has occurred, the planning, institutional organization, and management actions for short, medium and long-term recovery, that lead to the re-establishment of rights and the quality of life of the population.
- Identify, orient and promote capacity-building and increased resilience at the national or local level to recovery quickly and efficiently. This should entail a set of actions intended to make recovery planning a part of permanent planning and risk management policies.

- Generate in advance a technical and instrumental platform that provides institutions, once the disaster has occurred, with a framework of reference and orientation at the level of policy and organization for the decision-making processes and the actions taken on the ground aimed at a recovery process with a long-term vision, within a perspective of sustainable development and preventing the reproduction of the risk.

ELEMENTS OF A FRAMEWORK FOR ACTION

- Principles, policies and guidelines to use to move forward with a recovery process
- Definition of the criteria, procedures, components, and way of preparing the Early Recovery and Medium and Long-Term Recovery Plans, and their relationship with the territorial and development planning instruments in use.
- Mechanisms to sustain governance, through prior institutional arrangements, previously established special regulations and instruments, for example an institutional apparatus for recovery, institutional responsibilities, inter-level coordination, and mechanisms for political and citizen participation in the recovery process.
- Reduction of the economic and fiscal losses and burdens through strategies that reduce vulnerabilities, encourage the continuity of businesses, identify sources of financing for recovery, and provide insurance and transfer risk.
- Recovery policies and strategies in different sectors of social and economic development, mobility, habitat, depending on the critical issues resulting from the projected damage scenarios or existing vulnerabilities.
- Actions necessary to facilitate the restoration of routines and livelihoods.
- Mechanisms to link communities together and enhance their preparedness so that they are more resilient during recovery processes.

2.3.4. Capacity-Building Plans

Derived from the Framework for Action for Post-Disaster Recovery, the Capacity-Building Plan is an indicative instrument that seeks to guide and coordinate recovery preparation efforts in order to:

- Increase resilience for recovery
- Be more resistant
- Get people “back on their feet” more quickly
- Improve adaptation capacity
- Generate redundant systems
- Develop a Framework for Action
- Guide the allocation of resources in preparation for recovery

Its objective is to identify those actions that must be carried out by each of the sectors of the national and/or local public administration, the private sector and civil society in order to increase the capacities needed to take on the tasks of early recovery and medium and long-term recovery.

It is organized around four components:

- A general component, which defines the objectives and goals to be achieved by the country, region or municipality to increase their resilience and ability to embark on a process of recovery.

- b. An indicative component, which contains the action plans for each sector, detailing the responsibilities of the public and private sectors as well as the social actors in the city. These actions can include institutional, legal, technical, financial or planning aspects.
- c. The definition of a program of information, awareness-raising and education that accompanies the development of the plans of action and positions the issue in the city's agenda.
- d. The development of a system of follow-up and monitoring that makes it possible to constantly evaluate the progress made in building capacities.

The Capacity-Building Plan must provide for mechanisms that will guarantee the periodic updating of the Plan, the indicators to be used in monitoring and evaluation, encourage the entities responsible for different aspects of the plan to allocate sufficient resources, ensure compatibility with the city's development plan and promote public and private efforts with civil society and community stakeholders.

2.3.5. The operational guides for recovery

The Operational Guide is an instrument containing protocols that define the central actions that must be taken by each of the relevant parts of the institutional apparatus in charge of different aspects of disaster recovery. It is activated once a disaster has happened, and is focused on defining the actions and procedures which the different entities involved in recovery must carry out in an ordered and systematic way.

The objectives of the Operational Guide are:

- Identify the actions and procedures for each of the sectors involved in the recovery process.
- Identify stakeholders related to the process.
- Define the conditions needed to coordinate the execution of recovery efforts.
- Clearly identify the responsibilities of each government entity, private sector company or institution and other organizations in the recovery process.

Section 5.2 contains an example of the Operational Guide for the Social Component, developed in Bogota for the Recovery Planning Project.

3. Preparing the Recovery

The Recovery Planning Process does not end with the formulation of a Framework for Action, some guides or a set of protocols. On the contrary, it requires guaranteeing the time for continuity, permanent evaluation and feedback and especially, the development of actions detected at the time of the Recovery Planning with the goal of having a more resilient and prepared society in the event of disasters and their inherent recovery processes.

While it may be possible to reach many agreements during the "RECOVERY PLANNING" phase, especially in terms of policies, focus, or institutional arrangements, the magnitude and complexity of the subject implies the need to establish a mechanism that will ensure that the process is sustainable and that many needed actions take place, such as proposed laws, public-private agreements, efforts to reduce infrastructure vulnerability, training programs, among others.

Based on the experience carried out in Bogota, this section seeks to illustrate the main thematic that need attention to develop a Recovery Planning Process.

3.1. Main Processes to be Carried Out in Preparing for Recovery

3.1.1. Building and Sustaining Information Systems

Keeping up-to-date information on the various sectors involved in the recovery operation is one of the most critical processes: the more information available, the less uncertainty there is, and the easier it is to make the right decisions. Recovery information is intimately linked to planning information and sector-specific information. If the country or local institutions can make progress in creating databases and information systems, they will contribute indirectly to a better recovery.

A recovery process requires information at the following levels.

- a. Collecting and updating socio-economic baseline data, as support for assessing the impact of a disaster and the resulting needs.
- b. Collecting and updating basic information on the functionality of the territory, infrastructure, equipment and buildings.
- c. Collecting and updating information related to knowledge about the territory, environmental conditions, current land use patterns, and a model of the future vision for land use.
- d. Collecting information on institutional capacity, management capacity and capacity for mobilizing various types of resources.
- e. Policies for custody, management, redundancy and backup of the State's strategic information (databases, public services, citizen registries, property registries); as well as that of the private sector (for example, the financial sector or strategic business information).
- f. Policies and procedures for collecting and processing information on effects, needs, impacts and updating of baseline data after the disaster.
- g. Criteria for managing information about the recovery, follow-up and monitoring systems.

3.1.2. Reducing Vulnerabilities

Along with risk prevention policies, the preparation and implementation of actions to reduce the territory's vulnerability - in economic, social, institutional and physical aspects - become a major factor in reducing the impact of a disaster, and consequently reducing the level of recovery efforts needed.

Although each prevention or preparation task is oriented toward reducing some type of vulnerability, for purposes of recovery planning they are aimed at the following main actions:

- a. Safe construction practices, beginning with reducing physical vulnerability, preparing infrastructure and public and private buildings to resist the impact of the most probable type of large-scale disaster. This includes the monitoring and control of construction work, structural reinforcement (for example, for seismic movements), technological adaptations (periodic floods), etc.

- b. Safely locating residential areas, by developing and enforcing planning and zoning regulations; identifying threats and risk areas; encouraging the relocation of populations living in high-risk areas where the risk cannot be mitigated; mitigating risk wherever possible; and controlling unregulated development.
- c. Reducing the fiscal vulnerability of the State and private entities by implementing risk-transfer policies, insuring infrastructure and private buildings, finding ways to reduce premiums through economies of scale and contingency planning, and carrying out joint initiatives with the private sector to assume the costs of a recovery.
- d. Reducing the economic vulnerability of the economy, establishing policies in advance to help various sectors of the economy, encouraging the application of policies for business continuity, reducing the vulnerability of strategic processes of the economy, sustaining good economic and fiscal indicators, and establishing policies that will support people's livelihoods.
- e. Increasing the levels of insurance coverage, social security insurance, employment, and formal employment among the poorest sectors of the population; reducing the vulnerability of the social services infrastructure; establishing programs for post-disaster epidemiological control, and access to health and education; providing temporary housing and psycho-emotional recovery, etc.
- f. Improving the conditions needed to ensure good governance; recognizing the real management capacity of the public administration sector; making agreements with the private sector; developing leadership and opportunities for participation in Government decisions; and building confidence in institutions.

3.1.3. Reaching Agreements

A recovery process is characterized by extreme complexity in the short term, a narrow margin of error in decision-making processes, and the multiple interests that come into play – international, national, local, political and economic.

Having made agreements and institutional arrangements prior to the occurrence of a disaster contributes to reducing the costs of the event, puts a value on time as a strategic resource for recovery, facilitates the processes of coordination and decision-making, and creates the fluidity and trust needed to carry out the recovery process. Consequently, the following actions, as part the process of PREPARING THE RECOVERY, contribute to significantly reducing conflicts during the recovery process:

- a. Institutional arrangements and political agreements about authority or jurisdiction at the national, regional, and local levels, in the areas of intervention, political responsibility, the institutional apparatus, conditions for decision-making, and participation on every level.
- b. Public-private agreements concerning contractual processes in the case of State services being provided by private individuals or firms, such as public utilities, transportation and infrastructure concessions, including arrangements for financing the costs of recovery, rate schedules, access to public resources, among others.

- c. Agreements among various sectors responsible for implementing the recovery, in order to define common parameters for recovery policies; institutional agreements regarding authority or jurisdiction for determining planning activities, and managing recovery in the short, medium and long-term.
- d. Prior agreements with multilateral and international cooperation organizations to establish criteria for cooperation, assistance, access to resources and administrative procedures, among others.
- e. Agreements on mechanisms for citizen participation in recovery, promotion of social organization, systems for accountability and the transparent mobilization of resources for recovery.
- f. Agreements on institutional recovery mechanisms; the entities responsible for leading the implementation; mechanisms for allocating resources; planning instruments to be used to define programs and projects; and the degree of openness to citizen participation, among others.

3.1.4. Capacity Building

To implement a recovery process, as with carrying out emergency assistance, it is not enough to just have agreements, protocols and procedures. It is also necessary to be continuously building up the capacity of the public, private and community stakeholders at various levels, to manage and take ownership of those agreements and procedures.

In this sense, the preparation for recovery should include the development of initiatives intended to increase the capacities of those stakeholders, by:

- a. Developing public information programs, raising awareness and encouraging all of society to become involved in the processes of recovery planning.
- b. Holding simulation exercises based on various damage scenarios in which each participant can see how they will most likely be affected, and also to put into practice the agreements, instruments and procedures.
- c. Promoting the involvement of the academic sector in research and development of training programs for recovery planning.
- d. Developing institutional skills related to post-disaster recovery within the national and local entities; and adjusting the national and local framework of standards for planning and comprehensive risk management to include the subject in the daily processes of developing policies, programs and projects.
- e. Engaging the communications media to prepare them for coordinated management of public information during a recovery; and so they can help build the social organization, and promote social participation.
- f. Engaging communities, especially in terms of raising their awareness of the implications of a recovery process; their capacity to get involved; their expectations, and the conditions

for exercising leadership and participating in decision-making.

3.1.5. Formalizing Instruments

The majority of actions required for a recovery require legal support, either regulatory or contractual, which assumes operation under “exceptional” processes and procedures whose scope and conditions differ from those followed in “normal” times. Table No. 9 identifies legal objectives and summarizes the most relevant legal instruments to be considered in disaster recovery, and what is required to prepare for or regulate them prior to the occurrence of a disaster.

**Table No. 9
Legal Instruments**

LEGAL OBJECTIVE	DESCRIPTION
Repair damage/loss	Seeks to repair damages caused directly by the disaster; like those caused to persons or entities that are activated because of the disaster, but are not attributable only to the disaster because they are caused by acts or omissions committed before or after its occurrence, but associated with the disaster.
Reestablish Equality in the assumption of Public Burdens	Seeks to maintain a balance, and if that balance must be upset, employs compensatory mechanisms to reestablish the equality of those who must assume obligations in the public interest.
Reorganize the Territory	The occurrence of a disaster may require the activation of this authority in response to an accident that suddenly rearranges the territory.
Intervene in the Economy	Seeks quick economic reactivation after the event for the purpose of ensuring that the affected population can be incorporated into the formal economy, building subsistence economies and in general influencing the behavior of the markets for real estate, goods and services and in the local and national economies.
Establish or Reestablish Contractual Agreements	Make adjustments to existing contracts prior to a disaster or when a disaster occurs, if it is not possible to comply with them or when compliance would cause damage or undesired consequences. These adjustments may include mechanisms to redistribute services provided, or to review, reverse, terminate or re-interpret the contract.
Establish Administrative Responsibilities and Procedures	The occurrence of a disaster triggers many institutional mechanisms, decision-making bodies, professional organizations, or other organizations having functions or responsibilities that could require regulatory or contractual support, associated with the establishment of an appropriate framework for institutional action which designates authority, jurisdiction and exact procedures.
Facilitate Access to Basic Services and the Exercise of Fundamental Economic and Social Rights.	When a large scale event occurs, the State becomes responsible for reconstructing the social and institutional fabric that facilitates the community’s access to basic social services and the exercise of their fundamental economic and social rights.

Provide Legal Security	An element which recurs in various technical components is the need to provide rapid legal security after a large scale event occurs, especially with regard to property or ownership rights and, consequently, also regarding the obligations, rights and responsibilities associated with economic freedom and property rights.
Strengthening of Democracy and Participation	Citizens have the right to participate in making decisions that may affect them, as well as to participate in implementing and evaluating those decisions. This category also includes instruments oriented toward strengthening the methods for overseeing the recovery management activities carried out by the State, as well as strengthening access to information, and formalizing opportunities for participation.
Planning Intervention and Management	This refers to legal instruments whose principal and essential purpose is to plan or schedule actions that directly or indirectly impact the achievement of recovery objectives, whether at the sector level (e.g., environmental plans, public services, etc.) or at any level of management planning having regulatory support (e.g., development plans).

3.1.6. Formalizing Processes and Procedures

The stages of the project cycle are accelerated during a disaster. Within a very short time, it becomes necessary to identify needs, plan the intervention, define the programs and projects, allocate resources, make contractual agreements, implement the projects and verify their impact, while guaranteeing citizen participation and representation of multiple interests.

For those reasons, having previously established processes and procedures undoubtedly contributes to facilitating recovery and improving the efficiency and effectiveness of the actions intended to minimally reestablish conditions that existed prior to the disaster. So, proceeding in a predetermined manner with the following processes and procedures is one of the most important aspects of preparing for the recovery:

- a. Preparing efficient procedures for procuring and managing public resources under the urgent conditions resulting from a disaster, at the level of personnel as well as at the level of social, economical and physical projects.
- b. Preparing the process for recovery planning once the disaster has occurred, in terms of hierarchy of command, technical content and instruments for planning (early, medium- and long-range).
- c. Defining follow-up, monitoring and evaluation systems integrated with the monitoring systems used to evaluate public administration and development.
- d. Determining the processes for financial administration of resources that involve various sources and procurement procedures.
- e. Establishing technical processes for coordinating public works using cooperation and integration, for example, between public services and reconstruction of roads.
- f. Determining procedures for assigning subsidies and providing access to resources for recovering means of livelihood.

- g. Determining special processes and procedures for acquiring land, resolving title conflicts and clarifying land ownership issues.

3.1.7. Providing for contingencies

Depending on the type of disaster, in addition to direct effects, there will be indirect or intangible effects that require special attention during a recovery. Using various damage and loss scenarios allows us to visualize and better prepare for a variety of contingencies that could occur during the recovery process. Therefore, recovery preparation enables us to take actions in advance, including the following:

- a. Preparing the processes for projecting and monitoring collateral effects on the environment, extraction of building materials, occupation of or impact on environmental areas or urban forest areas.
- b. Planning for ways to control increases in the prices of land, construction supplies and construction materials.
- c. Planning for ways to control the traffic resulting from the reduction of road capacity and the increase in transporting cargo for the physical reconstruction.
- d. Planning for collateral effects on the functioning of the economy, supply chains and markets.
- e. Planning for effects of a possible decrease in tax income at the local and national levels, and establishing contingency plans for that.
- f. Planning for migratory and social mobility phenomena, and changes in production activities in the territory, as consequences of a disaster

3.2. Practical Applications

3.2.1. Example of a Guide resulting from a Capacity-Building Plan

Table No. 10 shows an example of specifications outlined in the Capacity Building Plan used by the City of Bogota for earthquake preparedness, in the area of the environment.

Table No. 10
Capacity Building Plan for the Environmental Component of the Framework for Action for Post-Earthquake Recovery in Bogota

CAPACITY-BUILDING PLAN			
SECTOR	ENVIRONMENT	SUBSECTOR	ENVIRONMENT
OBJECTIVE	To have an environmental sector which is prepared to guide the recovery process toward sustainable development, minimizing the environmental effects of the seismic movement, and promoting the recovery of the ecological structure and functional processes of the city		
LEADER	District Environmental Secretary	ENTITIES	Botanical Garden - Head entities of the sector - Autonomous Regional Corporation

		PRIORITY	SCALE	ACTORS
TECHNICAL	1) Develop contingency plans for extractive activities and for construction materials		U	P
	2) Further pursue eco-urbanism policies to support the orientation of the reconstruction process		R	PP
	3) Include the topic of post-disaster environmental responsibility in institutional contingency and emergency plans		R	PP
	4) Provide for a contingency fund to support recovery tasks		N	P
	5) Promote the creation of businesses for transforming and recycling debris		R	PP
	6) Implement actions outlined for the sector in the PDPAE [Emergency Management Agency Plan] and especially those defined in resolution 138 of 2007			

RESEARCH AND DEVELOPMENT	1) Prepare a study of earthquake-related events such as landslides, dam or sea wall breaches, fires and technological events		R	PP
	2) Design a post-earthquake contingency plan for preventing the occupation or deterioration of areas of ecological value		R	PP
	3) Design a methodology for evaluating environmental needs and impact		R	PP
	4) Develop a study to anticipate the effects on soil, air, water and health during the recovery process and develop a management plan		U	P
	5) Develop a plan for raising awareness and training communities on how to avoid reproducing risks, and on actions for environmental areas or risk areas during the recovery		U-L	P
	6) Conduct a study to identify effects and solutions for climate management in a post-earthquake situation		U	P

INSTITUTIONAL AGREEMENTS	1) Sign technical and economic agreements with waste removal services companies for handling rubble and debris during the recovery process			R		PP
	2) Carry out campaigns to gain cultural acceptance for managing construction materials, beginning with the transformation of rubble			R		P
	3) Design a special plan for supplying construction materials to satisfy demand in the District and the region when a damage scenario occurs			N		PP
	4) Reach an agreement on the temporary management of ecologically significant areas and parks during the recovery process			N		PP

INSTRUMENTS	1) Design an instrument for recovery planning with criteria for environmental sustainability			R		PP
	2) Develop environmental certification and incentives for strategic productive activities during the recovery process			R		P
	3) Include post-disaster recovery in the Environmental Management Plan for Bogota			R		P
	4) Develop standards for temporary use of the ecological structure, parks and areas of environmental value during recovery			U		P
	5) Put in place deductions or incentives for improving the environment (Art 158 E.T.) or reforestation (Art 253 E.T.)			N		PP

Symbols Used:

PRIORITY		SCALE		ACTORS	
	High	U	Urban	P	Public
	Medium	R	Regional	PR	Private
	Low	N	National	PP	Public - Private

3.2.2. Example of a Protocol from the Operational Guide

**Table No. 11
Basic Protocol**

ELEMENTS FOR ORGANIZING MANAGEMENT ^{xviii}	CONSIDERATIONS
Naming the management entity	A name is given to the management body
Management sub-groups	To manage specific areas and provide administrative assistance, establish the most appropriate divisions for each specific area, as well as for the impact scenario expected or confirmed at that moment
To whom do sub-groups report	This refers to clearly establishing the information flow between a sub-group and the management, other sub-groups of the same management entity and other management entities
To whom does the management report	This refers to clearly establishing information flow between the management and the Institutional Authorities or other organizations
Management's role	This refers to explicitly defining the responsibilities of the management team in the most specific manner possible
Minimum group needed	This refers to proposing professional profiles members of the working group, and the institutions from which they should come (remember that it has been proposed that the personnel to be in charge of any specific entity should be professionals with extensive experience whenever possible)
Entities that should be involved	Public and private entities with which management should establish contact and relationships for carrying out the recovery objectives
Degree of "liberty" or "institutional capacity to address the problem" of said entities	This refers to identifying ahead of time those entities which, due to their specific nature, experience or strength could very quickly or from the beginning, assume the planning, implementation and evaluation of the recovery process and/or reconstruction in their own sector without negatively affecting the needs for territorial coordination that might arise. Examples could include certain companies from the public service sector, the health sector, or the education sector. This would help to ensure that the mandate and scope of the Institutional Apparatus will be decreasing and finite over time
Concrete horizontal management tasks	This refers to making a check-list of the key topics and activities that the management should initially assume horizontally
Specific tasks of sub-groups	<i>This refers to making a check-list of the key topics and activities that initially each sub-group should specifically assume</i>
Specific ways of relating to the affected population	This refers to establishing, when possible, specific means (standards, committees, opportunities for consultation, information tools, etc.) to interact with communities in each area or with one of the themes in the area
Specific ways of relating with the private sector	This refers to establishing, when available, specific means (standards, committees, opportunities for consultation, information tools, etc.) to interact with the private sector in the area or one of the themes in the area
Specific ways of relating to the nation, the region, neighboring municipalities or the local government depending on the case	This refers to establishing, when available, specific means (standards, committees, opportunities for consultation, information tools, etc.) for interacting with the appropriate territorial entity (nation, region, neighboring municipality, local government in the sector or of one of the themes in the sector. Also, depending on the distribution of responsibilities or the phenomena of scale, to establish beforehand needs of relating to or discussion with these territorial levels

References of existing inter-institutional exchange	This refers to establishing the principal information flows or inter-existing institutional relations at the moment that are different from relations with the territorial levels (sensu stricto) and considered necessary for the recovery issues
Processes or problems with standards that require attention	This refers to indentifying aspects of standards which, since the pre-disaster phase, have needed correction to enable recovery to function as effectively as possible
Information needs to develop tasks (types of information and sources)	This refers to determining information needs (types of information and sources) considered to be crucial for the proper development of tasks by the Institutional Apparatus

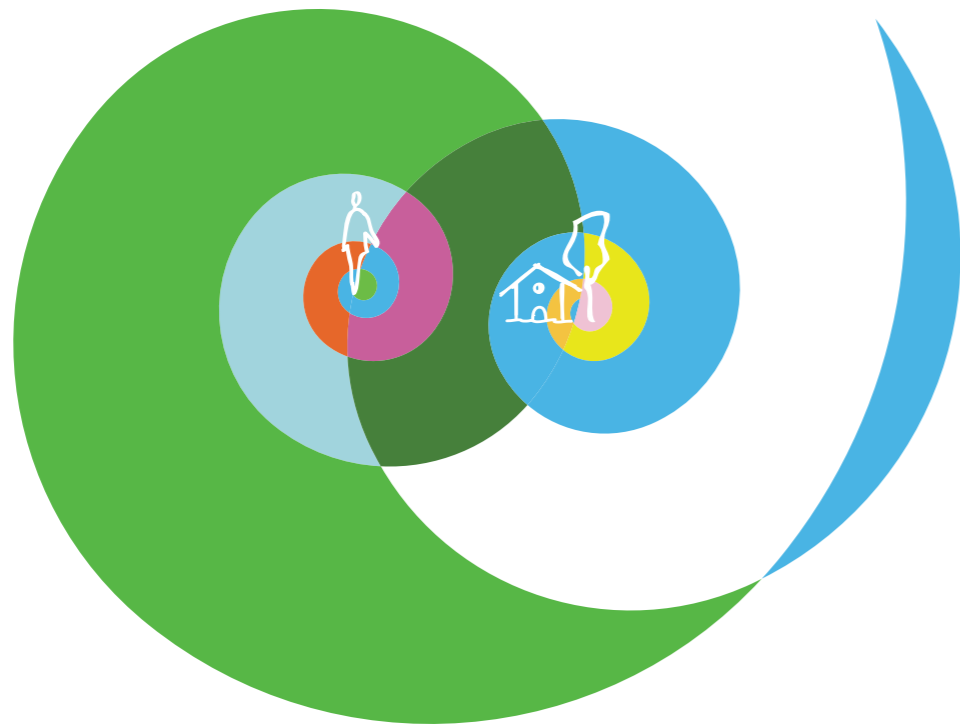
Table No. 12
General Operational Guide Protocol for the Territorial Component

ELEMENTS FOR ORGANIZING MANAGEMENT	CONSIDERATIONS
Name of management body	TERRITORIAL RECOVERY MANAGEMENT
Management sub-groups	Housing and habitat Commercial and industrial infrastructure Urban infrastructure Public services Roads and mobility Infrastructure for education and health Other infrastructure
To whom do the sub-groups report	Physical reconstruction management
To whom does the management report	Executive director
Management's role	Apply strategic decisions for physical reconstruction of the affected city. Advise the executive director and the Board on priorities concerning reconstruction and effects on the population
Minimum group needed	Civil engineers Urban specialists Architects Sanitation engineers Highway engineers Building engineers Mechanical engineers Geographers Economists Regulatory experts for each theme Representatives of the social recovery management team Representatives of the environmental recovery management team Representatives of the economic recovery management team
Minimum number of entities that should be involved	DPAE and DNAPD [Emergency Management and Disaster Planning agencies of the Colombian government] Secretariat for Planning Secretariat for Mobility and relevant entities in the sector Secretariat for Habitat and relevant entities in the sector IDU, ERU [Urban Development and Planning agencies of the Colombian government] Public Service Businesses Ministry of Environment, Housing and Territorial Development

Minimum number of entities that should be involved	Ministry of Transportation and entities in the sector Construction and infrastructure associations (Camacol, Colombian Chamber of Infrastructure, association of engineers, etc.) Ministry of Mining and Energy Universities
Degree of "liberty" or "institutional capacity to address the problem" of said entities	Areas related to infrastructure in health and education could be directly assumed by the respective Secretariats in coordination with this management. Areas related to reconstruction in public services can be directly oriented by the respective businesses without disrupting coordination with the management.
Concrete cross-sectional tasks of management	Operate and implement the general plan for reconstruction and recovery that existed before the earthquake and that was adapted after the evaluation of real damage and impact. Establish relations and specific coordination between the tasks of the different sub-groups and the tasks of other technical or territorial managements. Propose reconstruction themes which because of their size or possibility of involving society should be addressed by territorial managements. Establish a cycle of reconstruction projects: planning, design, feasibility, construction, follow up and evaluation, and implementation.
Specific tasks of sub-groups at the beginning of the process	Housing and habitat Coordinate with DPAE and other entities the evaluation of damages to housing at the moment of the crisis and actions to be taken (demolition, repair, recovery, reinforcement, periods of restricted access due to risk of collapse) Manage and coordinate technical teams to do demolitions and other interventions Coordinate needs for construction materials and needs for temporary and definitive relocation Manage issues related to insurance companies Carry out the physical reconstruction of houses and habitat. Establish the general process and guidelines for the participation of private and construction firms and the community. Incorporate risk mitigation in the reconstruction process. Coordinate legal aspects and public policy (subsidies, mobilization of resources, etc.) for the reconstruction process. Commercial and industrial infrastructure Coordinate with DPAE and other entities to assess damages to industrial and commercial infrastructure at the time of the crisis and to determine the actions to be taken (demolition, repair, recovery, reinforcement, periods of restricted access due to risk of collapse) Manage and coordinate technical teams to do demolitions and other interventions Coordinate needs for construction materials and needs for temporary and definitive relocation of industries and commerce Oversee negotiations and interactions with insurance companies Implement the process of physical reconstruction of commercial and industrial infrastructure. Coordinate actions with industrial and commercial associations Incorporate risk mitigation in the reconstruction process. Coordinate legal aspects and public policy (subsidies, mobilization of resources, etc.) for the reconstruction process. Urban infrastructure and public buildings Coordinate with DPAE, DADEP and each entity responsible for the infrastructure the evaluation of damage to urban infrastructure and public buildings (not including schools and hospitals) at the time of the

<p>Specific tasks of sub-groups at the beginning of the process</p>	<p>crisis and action to be taken (demolition, repair, recovery, reinforcement, periods of restricted access due to risk of collapse) Management and coordination of technical teams for demolition and other interventions Coordinate needs for construction materials and needs for temporary and definitive relocation of functions that use the infrastructure and buildings Manage issues related to insurance companies Implement the process of physical reconstruction of commercial and industrial infrastructure. Coordinate actions with DADEP entities responsible for infrastructure. Incorporate risk mitigation in the reconstruction process. Coordinate legal aspects and public policy for the reconstruction process</p> <p>Public services Coordinate with public service enterprises aspects of evaluating damages, decisions on infrastructure and networks and the entire process of physical reconstruction. Coordinate recovery of public services related to recovery needs in residential areas, commerce and industry. Incorporate risk mitigation in the reconstruction process. Coordinate legal aspects and public policy for the reconstruction process</p> <p>Roads and mobility Coordinate with DPAAE and other entities the evaluation of damages to roads, bridges, tunnels and infrastructure and to the transportation system in Bogota (airport, transport terminals, the “Transmilenio” [Bogota’s mass transit system], subway, train, traffic light systems, toll booths at entrances to Bogota or within the city, etc.) at the time of the crisis and actions to be taken (closure, demolition, repair, recovery, reinforcement, periods of restricting access due to risk of collapse) Assist and coordinate the different enterprises of the transportation system so they can rapidly join the process of reconstruction and reestablishing mobility in the city. Manage and coordinate technical teams for demolition, removing asphalt or concrete and other interventions. Coordinate needs for construction materials and needs, temporary or permanent reorganization of the transportation system and participate in decisions related to recovery of mobility made by respective authorities. Manage issues related to insurance companies Implement the process of physical reconstruction of roads, bridges and transportation infrastructure and equipment. Establish the general process and guidelines for participation of private construction firms Incorporate risk mitigation in the reconstruction process. Coordinate legal aspects and public policy (implementation of resources) for the reconstruction process</p> <p>Health and education infrastructure Coordinate the various aspects of damage assessment, decisions about buildings, and all physical reconstruction processes with the Secretaries of Health and Education. Be aware of statements being made by private health and education institutions about the physical reconstruction process carried out by the Secretaries of Health and Education. Communicate to the other subgroups about actions to be taken Incorporate risk reduction into the reconstruction process Coordinate legal and public policy aspects of the reconstruction process</p>
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<p>Specific ways of relating to the affected population</p>	<p>In coordination with those in charge of the social recovery, mechanisms for providing information to the community should be established, as well as specific ways for citizens to participate in the process of rebuilding housing and habitat. Methods for organizing the community will be very useful and appreciated in the early stages of recovery, for planning and carrying out specific projects.</p>
<p>Specific ways of relating with the private sector</p>	<p>Work groups should be designed to include technical representatives, representatives of guilds or unions, and private sector entities. Ad-hoc committees for resolving specific technical issues may be implemented as needed. A significant part of the operation and execution of reconstruction work will be assumed by the private sector, through the process of granting public contracts, based on established merit-based criteria. On specific topics (health, education, providing public services, etc.) the subgroups will coordinate general activities of the recovery plan with any private entities that may be involved.</p>
<p>Specific ways of relating to the nation, the region ,neighboring municipalities or the local government according to the case</p>	<p>The subgroups incorporate representatives of national entities involved in the topics discussed and the decisions to be made. The subgroups will organize or encourage the formation of ad-hoc committees or commissions that include actors from other jurisdictions, for dealing with certain aspects and solutions. This should be done without interfering with any organization that may already exist at a higher level regarding the recovery process throughout the affected area.</p>
<p>References of existing inter-institutional exchange</p>	<p>The commissions and committees already existing in the city’s administrative structure should be used, as needed, to extend the process of inter-institutional coordination. The area commissions for disaster management already existing in the Capital District can be made available, making appropriate modifications for the situation. The workgroups and mechanisms for coordination between Bogota and the Region, as well as the neighboring municipalities, should be used. The existing inter-institutional committees in fields involved in physical reconstruction and housing should be used as much as possible.</p>
<p>Processes or problems with standards that require attention</p>	<p>Specific aspects of the regulations in any field that could present problems for proper physical reconstruction should be reviewed, such as issues of land ownership, institutional authority, etc.</p>
<p>Information needs to develop tasks (types of information and sources)</p>	<p>As part of the essential information systems needed, the following should be included: a land ownership information system; a database of the structural status and seismic resistance of buildings; availability of machinery in the city; assets insured against earthquakes and related damage. An updated census and record of the residences of all inhabitants is extremely useful in the reconstruction process.</p>



CHAPTER 4: Incorporating employment and livelihoods into pre-disaster recovery planning

In order to take advantage of the analyses and strategies already in place for employment and livelihood recovery in the aftermath of disasters, this chapter is based on the systematization of the following documents: *Development of a specific approach for incorporating employment and livelihoods into the Pre-disaster Recovery Planning*^{xxxix}, prepared for the UNDP's BCPR and the ILO by Emilio Salomón Álvarez, and *Post-disaster recovery in Ecuador: systematization of experiences*, prepared for the BCPR by Cecilia Falconí.

Disasters are becoming more and more frequent, mainly due to the effects of climate change and to man-made factors, usually related to the poverty in which the affected populations live. The disaster-poverty link has become increasingly evident, which places a demand on the countries and the entities involved in disaster attention to focus their recovery actions on the lives of the affected people, and not only on the material and economic damages and losses.

Attention for those affected demands measures that go beyond humanitarian aid. The attention needed requires actions that place a high importance on recovering the livelihoods lost, and that have a development approach. The UNDP notes^{xxxix} with respect to this issue that recovery activities should contribute to improving the living conditions of the communities and sectors affected by reviving production (agriculture, industry), business and services, and

by creating opportunities that provide income and employment. The goal –it is said– should go beyond simply re-establishing the pre-disaster levels, but instead actions should contribute towards creating more sustainable livelihoods for the population.

In this way, it is hoped not only that people can return to the living conditions that they enjoyed prior to the disasters, but that the possibility can be opened to attack the deepest causes of the devastating effects of disasters: poverty. Associating the livelihood recovery processes with development processes implies working with a view to making livelihoods sustainable. There will be no real recovery nor development process if conditions to ensure sustainability of the actions, programs and projects, which are executed as part of the post-disaster recovery processes, are not established.

Disasters and the protection and recovery of employment and wages

In the process of identifying the elements and actions that should be analyzed within the pre-disaster recovery planning process, in order to incorporate protection, recovery and creation of lost livelihoods^{xxxix} and jobs into post-disaster recovery plans, it has been observed that one of the immediate effects of disasters is the total or partial paralysis of the means of production. This has a direct effect on the employment, income and livelihoods of families. It has also been noted that effects are very different depending on if the workers are urban or rural, or if they are part of the formal or informal economy.

This fact has led planners to see that the incorporation of mechanisms for protecting jobs and wages, as well for recovering the lost means of production, has to be one of the principal elements to take into account when considering post-disaster policies and strategies. This approach allows actions to go beyond the mere reconstruction of damaged buildings and placing affected people in temporary shelters.

Upon studying the mechanisms for protecting existing jobs, it has been found that these basically involve legal provisions that seek, above all, to ensure the “labor stability” of workers, which is generally achieved by increasing the costs, to companies, of laying workers off. An analysis of salary protection measures shows that they generally involve governments protecting those who become unemployed for any reason or circumstance, by making payments to unemployed workers directly from governments funds or from accumulated savings (social security programs), or through systems based on private insurance policies. The goal is to maintain, at least for a period, the income of those affected and their families. It has been shown that both policies form part of social security schemes and that the reach of these schemes is directly correlated to the country’s level of development.

It has been found that in the majority of Latin American countries there are employment protection schemes, which adhere to the parameters established above, but that few have schemes for protecting wages, in the sense of offering temporary salary payments for those that have lost their jobs. What does exist, however, are systems which offer “compensation for period employed”. These systems correspond to a certain accumulation of funds, in more or less untouchable accounts, for the workers. The level of funds accumulated is proportional to the amount of time that the workers have been employed. Said funds are freely available only when the worker has stopped working for the employer, said funds thus act in the same way as unemployment insurance.

It has been noted, with concern, that these measures only reach those workers who have formal employment as they automatically come under social security schemes. This means that the minority of workers in most Latin American countries are covered, as in the region informal employment is the most common form^{xxxiii}. Likewise, the concept of informal employment normally refers to urban sectors, it is however a widespread problem in rural sectors as well, as the work carried out in those areas falls naturally into this category.

These observations lead one to conclude that if all a country's workers were formally employed and were part of employment and wage protection mechanisms, said mechanisms would be sufficient to ensure the stability of incomes in post-disaster situations, without affecting workers' immediate subsistence nor that of their families.

Given this situation, a basic premise to be considered within the pre-disaster recovery planning process, is that programs or measures designed to create jobs and protect livelihoods in post-disaster situations are mechanisms which are acting in response to deficiencies within the job and wage protection systems, that is to say structural causes within the economy. This relationship means that actions aimed at promoting employment and recovering livelihoods will always be related to development schemes, and thus should be part of the national or local development strategies.

This does not mean however, that one should forget the issue of employment and wages of those in formal employment, as well as the recovery of formal rural and urban production units.

The basic consideration that one should have in mind is that pre-disaster recovery planning should comprehensively address the issue of employment, the recovery of the means of production and livelihoods, both in the formal and informal sectors, as well as the rural and urban areas.

Strategy for incorporating employment and livelihoods into the Pre-Disaster Recovery Planning Process

Elements of the strategy

The elements which should be taken into consideration as components of a Strategy to Incorporate Employment and Livelihoods into the Pre-disaster Recovery Planning Process are the following:

1. *Policies for protecting employment:* Designed to create regulations that prevent the arbitrary use of rules which facilitate terminating employment as a result of "force majeure" situations.
2. *Policies for protecting salaries:* Designed to protect salary payments to those employed, whose work is affected by the disaster.
3. *Labor intermediation policies and other policies to promote employment:* Designed to have impacts both pre- and post- disaster.
4. *Local policies to funnel decentralized public investment to prevention and recovery works:* Developed in order to increase works executed by the regional governments, both pre-disaster prevention works and post-disaster recovery works.
5. *Policies to aid recovery of the means of production in rural and urban sectors:* Created to recover the operational capacity of the means of production affected by the disasters.
6. *Policies to improve the budget and credit provision mechanisms in pre- and post-disaster situations:* Designed to generate the availability of budget funding and credit resources from the entities in charge of carrying out the recommended recovery policies, prior to any disaster.
7. *Strategy to facilitate access, for those affected, to temporary employment programs:* Devised to extend the benefits of the existing programs to post-disaster situations or for creating ad hoc programs.
8. *Strategy for recovering livelihoods by developing productive projects post-disaster:* Created to generate productive projects that support food security, improve incomes and promote the diversification and innovation of production.
9. *Strategy for recovering livelihoods utilizing the productive housing approach:* Designed to associate the housing recovery programs with the proposed productive housing approaches.
10. *Training Strategies:* Developed in order to associate the post-disaster employment and livelihood recovery programs to improvements in employability and entrepreneurship of the beneficiaries, as well as their capacity for working associatively.

Framework of Intervention

In order to establish mechanisms that will make it possible to apply the elements identified, they have been arranged into thematic groups according to the sphere of intervention to which they belong. Four groups have been established based on the type of actions:

1. *Policy frameworks (which entail legal or regulatory modifications):* In order to improve the employment and wage protection conditions of the affected population. Also necessary for generating policies that allow for current funding to be targeted towards employment generation in the post-disaster phase and for channeling regional government investment into executing pre- and post-disaster works, designed to create jobs.

2. *Framework for budget and credit policies:* These should allow for the availability of budget and credit funds pre-disaster, in order to attend to the prevention demands during this phase. In the post-disaster phase, the funds will be used for the recovery and generation of employment, means of production and livelihoods.
3. *Promotional strategies Framework (information and dissemination):* these must be considered so that the institutions and entities that are involved in the recovery (post-disaster) process are prepared as from the pre-disaster phase to address the thematic of employment and livelihoods.
4. *Training strategies framework:* As in the case of the Promotional strategies Framework, it entails establishing policies that guide the national, regional or local entities involved in training, so that they are prepared during the pre-disaster phase to attend to the training demands that will arise during the post-disaster recovery phase.

Case studies on Employment and Livelihood Recovery in Ecuador:^{xxxiii}

This part of the document summarizes some real initiatives that were carried out locally and regionally in the aftermath of two events in Ecuador: the prolonged eruption of the Tungurahua Volcano, the impacts of which have been felt far beyond the direct influence zone, and the intense rainy season during the first quarter of 2008, which affected 13 of the country's 24 provinces.

Based on a review of the documents, on-site visits and interviews with the principal stakeholders in those processes, the study aimed to compile the strategies used to recover employment and livelihoods of those affected by the disasters. The study describes the intervention and, above all, highlights the lessons learned during them. This study will allow the country to improve its recovery processes for future incidents.

It is clear that the recovery efforts initiated after the eruptions of Tungurahua and the flooding during 2008 in Ecuador were comprised of a series of strategies and plans. This systemization only examines the employment creation and livelihood recovery projects executed, by the Ministry of Environment directed by the Ministry for the Coast, in the case of the flooding disaster and, by the municipal government of the Canton Cevallos, in the case of the Tungurahua eruption.

The experiences studied are unique cases in which recovery has taken place as a deliberate process, which continues the response phase but which has its own characteristics, the ultimate goal of which is to overcome vulnerability. With a view to the pre-planning of post-disaster recovery efforts, it is important to highlight the merits and lessons learned from these processes.

In summary, this section seeks to identify the characteristics that can contribute to the success of a livelihoods recovery program after a disaster, and which should be replicated in future planning processes. The table below tries to establish links between the guidelines and aspects most relevant to the cases studied.

Steps to take in recovery planning – UNDP/BCPR (2008)	Cases studied
Define the institutional framework and the mechanisms to design, coordinate, implement and monitor recovery programs, ideally based on already existing institutions and procedures	In the case of the coastal region, novel institutional arrangements were established: territorially based coordination, a regional Emergency Operations Command (EOC), sectoral working groups...with the exception of the regional EOC, all of the participating institutions already existed. The novel part was the effective coordination that was established. Therefore, this experience marked an innovation in terms of procedures
Define and execute national recovery policies, establishing clear principles that the country will apply in all recovery efforts	The Constitution which was passed in 2008 establishes a national decentralized risk management system, which is the basis for making recovery policies.
Develop a recovery plan, detailing general and sector-specific requirements; and	An examination of various post-flooding recovery experiences (Blacio, 2009) concludes that normally, the recovery is focused on rebuilding infrastructure, with little or no attention paid to other essential aspects related to reducing vulnerability and poverty (jobs and livelihoods, essential infrastructure, environment and water, housing, resettlement)
Assess and improve institutional capacity	In the processes and projects analyzed for this document, one notes an intentional effort to plan recovery using a holistic approach focused on reducing vulnerability. In the case of the coastal region, in the end a recovery plan was approved that was focused on infrastructure, but other kinds of projects (which are examined here) were funded and executed
Identify needs, priorities and capacities for recovery	It is worth noting the effort of the Ministry of the Coastal Region to strengthen more than 80 canton EOCs through capacity-building workshops; the current SNGR "inherited" this capacity. The Municipality of Cevallos carries out ongoing programs to provide training and strengthen productive associations. The sustainability of these efforts can only be tested after future extreme events
Define a strategy of alliances to implement the recovery	Both experiences are examples of coordination and alliances, the strategies of which are examined extensively in the text. Once the Ministry for the Coast has gone, it is important to ask which institution could lead any future recovery process. Similar fears have been expressed in the case of the Mayor of Cevallos, who will not be Mayor after the next elections

- **Both in the case of the 2008 flood season as well as in the process that is taking place in the Cevallos canton, an element that stands out is the importance of leadership in convincing the stakeholders to think about, plan and execute the recovery, thus overcoming the tendency to limit interventions to mere response or to work in an isolated manner. Therefore, the design of institutional arrangements that facilitate leadership and coordination from the pre-disaster phase, will contribute to a faster response and a more efficient implementation of recovery efforts.**

In the case of the Cevallos canton, its mayor is the visible head of the process of production diversification, and its main promoter. At the head of his team, he has been able to put together contributions from a variety of entities in order to keep the process alive; the stability of his leadership and undoubtedly contributed to this success, as he has been in office for ten years now.

In the case of the flood response, the Ministry of the Coast became an effective space for coordination and a facilitator of sectoral efforts: *“In 2008, things worked very well, the Ministry of the Coast was our office, and all of the players were there: health, education, agriculture, social inclusion, MOP [Ministry of Public Works], the militia, with a sense of belonging, with the idea of giving people back their confidence, of thinking about feasible ideas. There were four months of thinking about important solutions, which were finally realized. To the extent that the experience of the state response was categorically very superior to previous experiences...”*^{xxxiv}.

- **The experience, both personal and institutional, improves the governance of the response efforts and facilitates the road toward better recovery.**

The leaders and main stakeholders of the processes described were not unfamiliar with issues related to risk management; on the contrary, from their positions as politicians or technicians they had gone through similar processes before. For instance, the mayor of Cevallos had been a council member during the first years of the eruption of the Tungurahua volcano, and the entire team of undersecretaries of the Coast, as well as the Minister of the Coast, had occupied technical or political positions in institutions or NGOs involved in responding to natural disasters and providing humanitarian aid. These personal experiences and lessons have been transmitted to the institutions led by these actors, both informally as well as through intense training programs. Only time – and the recurrence of new disasters – will tell how much has been achieved in terms of institutionalizing response and recovery capacities.

- **The response and recovery efforts benefitted from the existence of coordinating entities based in the territories, which bring together institutional, territorial and sectoral resources.**

The experience in the coast demonstrates the benefits of taking various perspectives into account: that of institutions (ministries, development organizations, the militia); that related to the organization of the territory through the EOCs; and finally, the treatment of sector-specific issues by the corresponding ministries. Coordination was maintained even during the design of the recovery initiatives, which made it possible to share technical resources, prevent duplications and leverage the international cooperation contributions.

When the projects entered into operation, the management of those operations passed into the hands of the corresponding sectoral entities, and the coordination between institutions was gradually lost. An example of this is that while the MAGAP and the MAE both executed forestry projects, they did not share information on the supply of plants. Local authorities, once the emergency situation had passed and the humanitarian response phase had wound down, left the forums for coordination established in the EOCs and turned their attention to rebuilding infrastructure. The disappearance of the Ministry of the Coast, in late 2009, put an end to that experiment in regional coordination.

In the case of the coastal and Amazon regions, where weather phenomena produce large-scale effects that transcend provincial boundaries, consideration should be given to establishing

regional EOCs that can take on the territorial dimension of response and recovery. Mechanisms must be sought to monitor and accompany efforts so that coordination is maintained even during the project implementation phase, even though at that point sectoral leadership becomes more prominent.

- **Before the disaster, work must be done to characterize and reduce vulnerability**

All of the projects analyzed aim at, at least in their intentions, to fulfill a double role: to reduce the underlying vulnerability that makes victims so susceptible and to facilitate the availability of employment and income so that they can recover after the disaster. In this sense, “saving them” to implement them in the recovery phases is not ethical nor useful; it makes more sense to take actions to reduce vulnerability in the pre-disaster situation, especially in areas that are repeatedly affected by recurring events; or, if the projects are executed as a response to an event, efforts must be made to make them sustainable.

“...when a person or a community does not have economic resources, or a good standard of living, they are much more vulnerable to any emergency that happens... So then if projects are carried out in these communities to strengthen the local economic, the people will be better prepared to be able to withstand the emergency. If a person lives in a flood-prone area, and ... his fields are flooded, but he has savings, and he has the chance of earning income from some other source that is not exclusively agriculture, he could resist the emergency, once the problem passes and obviously he will suffer some economically, but will not be ruined... So one way to prevent disasters is not only with recovering river basins or rebuilding infrastructure, but basically from my point of view, it is to focus on improving the living, socio-environmental and economic conditions of those local communities”^{xxxv}.

“The issue is continuity and sustainability. The nurseries are a strategic kind of project, that can help us to recover from a situation like the one we went through in 2008...” (Velez, 2010).

- **Rather than having portfolios of projects ready to present after a disaster, it is necessary to develop common criteria geared toward recovery to be applied as early on as possible, as an integral part of the response measures.**

Pre-designed projects with the exclusive purpose of creating jobs or recovering income have the disadvantage of not being contextualized – to the type of threat, the characteristics of the terrain, the knowledge and culture of the affected population, etc., and it could be more difficult to take advantage of the unique opportunities that accompany each process. It is more useful to develop criteria ahead of time, with the institutions that will be participating in the response, that all of the interventions should meet: giving employment preferably to affected families, promoting work opportunities for women, appropriately using local resources, encouraging participation in project prioritization....

- **When selecting interventions to recover or diversify livelihoods, the demand for technical accompaniment and material that each type of project could generate must be considered, and institutional resources should be planned accordingly.**

In the case of the Cevallos canton, all of the interventions began with economic activities that were already traditionally practices (raising small animals, shoemaking), and therefore the effort was focused on introducing technological improvements and building capacity, as well as providing the beneficiaries with inputs to expand their businesses. This, together with the length of the process and the continuous political support, make it possible to adjust the sup-

port depending on the availability of technical and financial resources, to end up with strong groups of producers capable of properly managing their businesses.

In the case of the coast, relatively novel initiatives were tested during very short periods of time. One new activity was fish farming; in order to guarantee its success, an extraordinary commitment was required, both from the producers as well as the technicians who accompanied the process:

“What was the main problem? Starting this from scratch. Because it was a new project, and you know that you are working with people who to a certain extent are a little closed-minded. So there was a small problem when we tried to make them see many things... We had an average schedule of visits, visiting 4 pools and we were in the field from 6 in the morning to 10 at night. Imagine! We had an average of 4 inspections per day, 5 people! because really in our zeal to bring life to the project, we went over the edge...”^{xxxvi}.

The forestry nurseries also required a continuous investment of resources and technical support to be maintained, as well as the establishment of commercial ties with the buyers of the species produced. In addition, one has to work on the demand side, encouraging the planting of timber species as well as fruit and more traditional crops, like cacao, coffee or African palm. In that sense, the lack of resources to give continuity to the support is a threat to the sustainability of the intervention.

“... the limiting factor is always the resources needed to be able to refinance, to multiply the plants again. We have done tours, we see that the facilities are being maintained, the nurseries are there... and the people are willing, anxious, to start up again. We are making a re-investment, a re-engineering in order to later, after some discussions, see how we can finance the project again so that the people can continue producing plants, and obviously keep working”^{xxxvii}.

The interventions financed by the MAE rehabilitated tourism infrastructure but did not strengthen local capacities to manage the tourism business. Unless synergies are sought with other projects or programs, it is likely that the infrastructure will deteriorate again.

“...in order to foster sustainable economic development in these communities, it is not enough to rebuild infrastructure, but there has to be accompaniment afterwards ... if that community has no idea how to market tourism, it has no idea because it has no experience in attending to visitors, how can they make any money with that infrastructure? What could happen is that when the infrastructure fails to generate resources because the people don't have the necessary capacities, and don't have the money to maintain the infrastructure, it could deteriorate... So the projects have to go a step farther, and think about ending the project only when the person who received the benefit is fully capable to produce economic resources in a sustainable way, and better yet can incorporate the conservation of nature in the generation of those resources”^{xxxviii}.

- **The funding (both in terms of quantity and availability) is a critical factor. The existing legal framework, which prohibits the establishment of reserve funds, makes it necessary to seek other types of arrangements that can ensure the timely allocation and execution of the necessary resources.**

All of the interventions, and even the immediate response, suffered because they were not able to mobilize resources fast enough. There are no arrangements that allow for a fast release of funds in the event of an emergency, like the one in 2008; in Tungurahua, it was

difficult to use the funds allocated for response in the recovery phase, even if that made more sense in the context of the situation of the Cevallos canton.

In the case of the coast, the humanitarian response began in January, coinciding with the start of the 2008 fiscal year, and the beginning of a new system of financial administration (ESIGEF) which, regardless of the political will to allocate resources, complicated the release of disbursements to attend to the emergency^{xxxix}.

“the Civil Defense told us, because we were using emergency funds, they said what do the cuys have to do with the volcano? Where do the cuys fit in? What you have to do is buy masks for people, buy stuff like that, brooms, that is what you have to do, they said, give them training. So we told them that these are food security projects, basically to ensure the survival of the people. And we kept talking to them and they also began to be interested in the issue, luckily we were clear about where we wanted to go, and we convinced the Civil Defense.... the same thing happened with the people from the Ministry of the Economy, the officials said: but you guys are crazy... putting the cuys there, if you give them that then they will eat the cuys the next day and will be left with nothing, that is not going to work, they said .. so we explained it to them: that is why we have a legally constituted organization, there are commitments involved, etc.”^{xl}.

International cooperation funds, when they are given to the State, are processed in a manner similar to that of public funds, which also makes it difficult to mobilize them: *“They (representatives from international donors) came on February 10... and they said to me: what do you need? 10 million or 10 mattresses? And I said: 10 mattresses, I don't need money because I can't do anything with it”^{xli}.*

Current Ecuadorian legislation prohibits the establishment of emergency funds, under the assumption that good budgetary planning makes them unnecessary. The (relative) unpredictability of the occurrence and the magnitude of natural threats contradicts this idea; in order it to become unnecessary to declare states of emergency, all of the risks would have to be mitigated beforehand, which is impossible in reality.

“...emergency funds would have fewer reasons to exist at the moment that the public institutional system shifts to employing risk reduction as a regular and systematic practice, that everything done is done with this focus, in that case the fund would have fewer reasons for existing, because you would have all public institutions oriented toward this perspective of reducing vulnerability, building capacities, etc., and incorporating these actions into their institutional budgets”^{xlii}.

In the absence of these kinds of funds, the institutions can make use of other mechanisms, like annually requesting funds for settlement, in order to overcome the initial delays in mobilizing resources for response actions.^{xliii}

- **From the point of view of the beneficiaries of productive projects, it is also necessary to provide them with timely access to credit, so that they can replicate or expand successful experiences; as well as to facilitate mechanisms to forgive or refinance debts. As a last resort, it is useful to turn to direct monetary transfers through a careful selection of recipients.**

The only project that concerned itself with establishing sustainable mechanisms to finance the initiatives of the rural residents was the Rural Aquaculture project. From its design phase,

while resources were being negotiated with UNDP to implement the pilot project, an agreement was established through which the National Development Bank would provide credit to producers who wanted to begin this activity, with payment installments that coincided with harvest periods. In those cases, the Sub-secretariat would certify the aptitude of the producer and provide all of the technical support necessary. The problem was putting the mechanism in place – the bureaucratic hurdles made it difficult for small producers to access formal loans. In the case of the Development Bank, the constant turnover among the directors of the branches meant that the new directors didn't know about the project and didn't facilitate the issuance of the loans, despite the fact that there was an agreement in place.

In addition, there need to be policies so that those who have lost their livelihoods can refinance their debts or have them forgiven. In the Ecuadorian case, debts owed to the National Development Bank were renegotiated. Perhaps it would be wise, in order to avoid the misuse of loan funds, to develop criteria ahead of time that would determine whether a loan should be forgiven, based on empirical evidence of the damage, or by using instruments that can more precisely determine the areas affected.

Finally, and in order to restart the economy of the affected regions, it can be helpful to use the mechanism of making direct monetary transfers through the distribution of an Emergency Bond. In the case of Ecuador, the beneficiaries were selected by cross-checking the list of people affected with the SELBEN database, which is used to administer the Human Development Bond; in this way those distributing the bonds were assured that the money would be going to the most economically vulnerable people.^{xliv}

- **The role of the international cooperation community, in addition to providing funds and inputs where necessary, is useful in advising domestic institutions on how to manage certain topics.**

There are technical areas, like the organization of the humanitarian response, ensuring food security, welfare and the emotional recovery of children and women, preventing gender violence and sexual attacks in the shelters, the shift toward recovery, job creation, where the timely provision of technical support by international cooperation institutions can mean the difference between a limited response and the recreation of vulnerabilities, and a process that promotes sustainable development, and that can stave off poverty and environmental degradation.

“...they (the technicians provided by cooperation agencies) spent the entire emergency there and also took part in the working groups, for example the WFO, UNDP, OCHA, UNICEF... and in the case of the recovery focus, I think that UNDP helped us there a lot... With UNICEF, the Population Fund (UNFPA)..., come help us to see how to incorporate gender in all this... and we did. Especially in the shelters, with issues like preventing violence, sexual violence, the support package for women. With UNICEF we did something extraordinary, which was part of the recovery process... which was the part of helping people to recover emotionally, especially boys and girls.”^{xlv}

- **The gender approach must be more fully incorporated into the proposal design process.**

Despite the active inclusion of women in the projects in the coast, they continue to play supporting roles to their spouses: in fish farming, they take over only when their husbands are

away; in the reforestation, they help their husbands. In general, the husbands make the decision on how to manage and sell the production, when there is any.

Thought must be given to projects that ensure that women have a greater control over the resources. To start with, the uses of the money earned from these projects, especially those intended to provide temporary employment, should be studied: Who decides how the money earned is spent? Is the money used to recoup losses and restore the health and nutrition of the family?

- **There must be a database of information documenting the magnitude and recurrence of the impacts of these natural phenomena.**

It is evident that these threats are chronic and recurring; in this sense, it is surprising that there are no estimates of their accumulated impact. It appears that with each new episode, whether a heavy rainy season or new volcanic activity, triggers new chapters of damage assessment, response and recovery efforts that do not benefit from the knowledge of the pre-existing situation. There are many questions whose responses would undoubtedly make it easier to make the right decisions when doing development planning for these regions, and when building up the institutional structure related to disaster risk reduction. Some of these questions are posed below, though this is far from an exhaustive list:

What has happened with the population of the cantons affected since the Tungurahua volcano began erupting? Has it decreased, as people say it has in cantons like Penipe? Or has it increased as a result of the productive development spurred on by the recovery, as some of the residents of the canton of Cevallos think? How are the indicators of poverty, equity, quality of life in the area? The results of the new Census of Population and Housing will help to clear up these doubts. But since this is a region that is so exposed to the threat of the volcano and with so much underlying vulnerability, it would be a good idea to conduct periodic surveys of population and economic activity, which would help to estimate the success or failure of the recovery strategies implemented (or not) in the affected cantons.

In the case of the coastal region, the impacts of rainy seasons are recurring; the only thing that varies is their length and seriousness. There are surely groups of people at risk who are trapped in recurring cycles of losses, incomplete recovery processes, greater vulnerability, greater losses.... Where are these citizens? How can we help to break the vicious cycle?

From the point of view of disaster risk reduction, is it reasonable for the population to remain in the areas where the impacts are recurring? To what point should we be encouraging the occupation of those territories? If it is inevitable, how can the underlying vulnerability be reduced and kept from increasing with each event?

How much money has been spent in all of the response and recovery efforts, and how has this spending influenced the economic recovery of the regions involved? Have the risks been recreated?

What measures have the most impact and sustainability? How can the government evaluate and prioritize investments to respond to each event and strive for recovery?

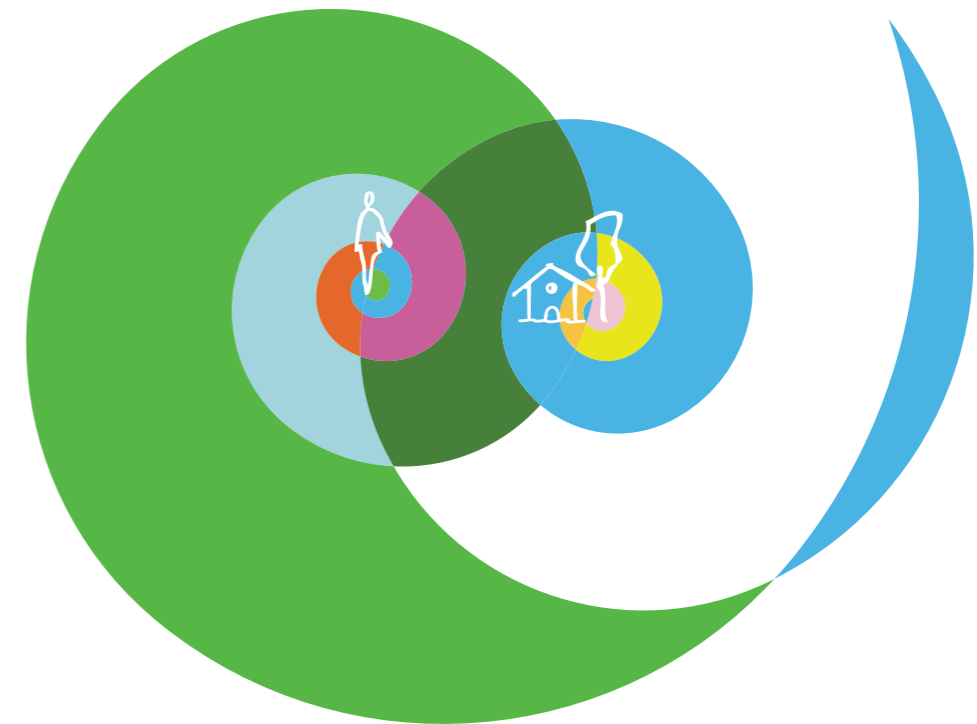
- **In the case of cities at risk, there have to be exploratory and almost experimental approaches to begin to learn about an influence a reality that is not taken into account by those managing disaster response, recovery and local development efforts.**

While many cities and towns were totally or partially covered by water during a large part of the rainy season, there was no information available about how much economic activity was affected there, nor budgets to intervene in urban areas. It can be assumed that the economic impacts were very serious, especially for informal vendors, who usually occupy the streets which are easily flooded.

In the case of urban areas, the information gathering should begin from zero. Research must be done on how the economies of cities at risk work; what is the status of basic services; how much social vulnerability is there; how does the informal sector function; what happens when the threats become real; who are the most affected.

There need to be damage scenarios, vulnerable sectors and activities must be identified and working groups formed to reflect and propose solutions, especially in areas susceptible to flooding, even during winter periods that can be considered within normal range.

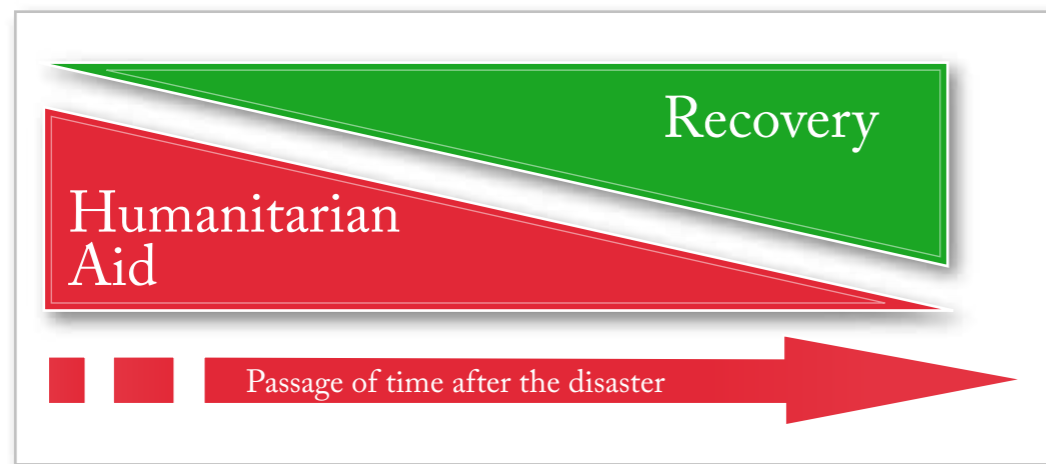
For this case in particular, one recommendation is to develop a portfolio of pilot projects, which include monitoring mechanisms, in order to test them in the event of a new emergency.



CONCLUSIONS

- Disasters can become opportunities for sustainable development. For this to happen, the recovery must go beyond the mere replacement and repair of damaged infrastructure, to address the determining factors of unsustainability and risk. While responding to the most urgent needs of the affected population, those implementing the recovery process must take advantage of the opportunities for change, in order to ensure the sustainability of the recovery efforts and to lay the foundation for new and improved development processes.
- Post-disaster recovery forms part of a continuum that starts with the preparations prior to the occurrence of an event (known as Pre-Disaster Recovery Planning) to the immediate emergency assistance and recovery; from the humanitarian aid for the victims to save lives, to restoring the society's normal functioning. In the first instance, the institutions focus their efforts on accounting for the victims, rescuing victims, attending to the injured and satisfying the basic needs of food, water, shelter and health of those affected. Progressively, the situation shifts toward facilitating the access and mobility of those affected, checking the state of the buildings still standing, removing and clearing debris, recovering the livelihoods of the population and ensuring governance and national sovereignty.

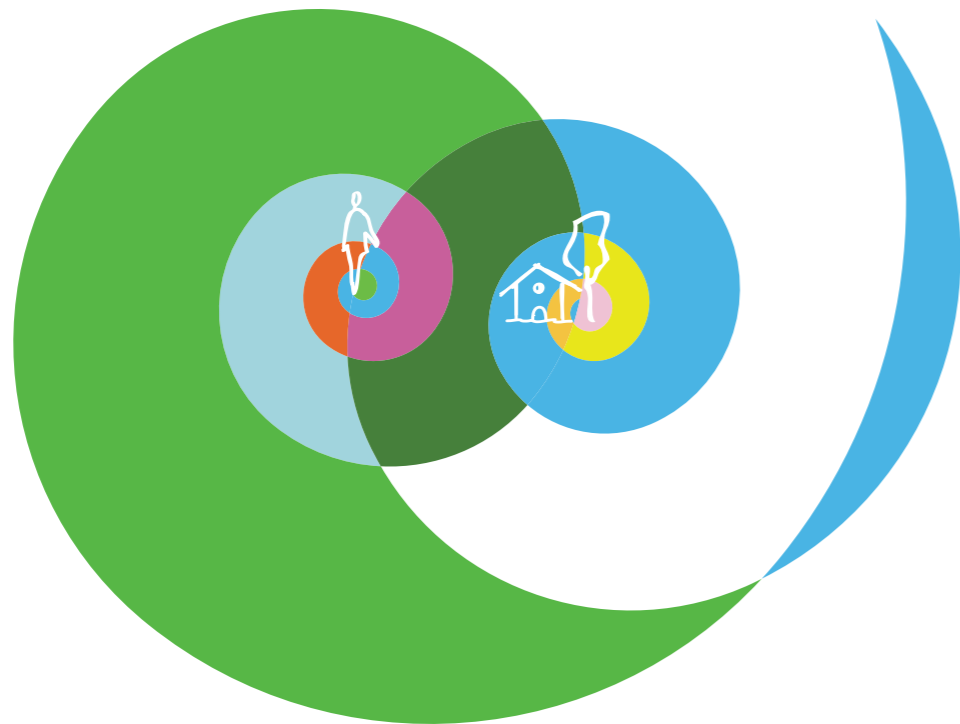
The continuum after a disaster: from humanitarian aid to recovery



production; these interventions can also include community and institutional development components.

- In this sense, each disaster offers opportunities for creating employment both in the affected and surrounding areas, as well as on a national level: to restore the deteriorated infrastructure, to accommodate and attend to the displaced persons and provide for their food, housing, water, psychological support, etc. In addition, during and after the emergency there are usually supplementary funds of humanitarian aid nature, both government and international cooperation funds, to attend to the needs presented above.

- The association between disasters and poverty is increasingly evident; disasters paralyze production and affect the incomes of families. These effects are differentiated, and depend on if those affected are rural or urban workers and if they are part of the formal or informal economy, and if they are men or women. To alleviate the effects, it is necessary to protect employment and wages, and in addition create temporary or permanent jobs. The goal of these measures is to restore peoples' capacity to generate income so that they can cover the costs incurred in the aftermath of the event, of their basic necessities and recover their dignity, thus leaving behind as soon as possible their position of being passive recipients of humanitarian aid.
- Protecting employment refers to ensuring job stability; salary protection, on the other hand relates to maintaining the incomes of those left unemployed, in the wake of a disaster, by the government or private insurance schemes making direct transfers to those affected.^{xlvi} However, the benefits of employment and salary protection only reach those who are formally employed and do not reach those who are informally employed^{xlvii}, living in rural areas and often women.
- In post-disaster situations, the policies for creating employment and generating income must be especially directed at the unprotected and informal sector and should be associated with anti-poverty policies. The temporary employment programs which focus on rebuilding physical assets and making use of intensive labor and local resources have effectively contributed to recovering assets in isolated areas, improving the survival conditions of victims, helped to re-capitalize those affected by recovering the means of production, reduced the demand on humanitarian aid and the psychological pressure felt by those affected. (Salomon 2010).
- In the rural sector, the livelihood recovery strategies seek to replace and repair the assets that have been damaged by the disaster, while ensuring the regular provision of food products over the short term associated with the typical agricultural cycle. Farmers are provided with seeds, livestock, tools, which are often assets that have been lost. Also the strategies involve refinancing debts; in Ecuador, the National Development Bank (BNF) allows clients to re-finance agricultural debts in post-disaster situations. Another strategy is the development of productive projects that seek to ensure food security by diversifying



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