

Compendium of good practice on post disaster recovery in the Latin America and Caribbean Region



12 Good practices
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INTRODUCTION AND ACKNOWLEDGEMENTS

This systemization prepared by the United Nations Development Programme (UNDP) compiles Good Practices on Post Disaster Recovery in Latin America and the Caribbean, to disseminate and highlight the work and recovery processes that are being carried out in different countries of the region.

It compiles a selection of good practices on disaster recovery processes in different territories led by multiple actors including local, sub-regional and national governments, civil society organizations, foundations, private sector organizations and academia, as well as in some cases with the support of the United Nations System and UNDP.

In recent years, several countries in the region have worked towards the implementation of innovative regulations and policies that have had a significant impact on post-disaster recovery. Others have developed and designed practical tools and methodologies that have made it possible to advance and improve disaster response and recovery preparedness, which, in turn, encourages and invites other countries to adapt, use and implement these tools.

The identification and selection of good practices was carried out through consultations with different UNDP country offices in the region, taking into account those offices that carried out recovery interventions during the 2014 to 2019 period. The selection process was carried out by regional teams of recovery process specialists who analysed 10 key criteria including **universality, transferability, applicability, expandability, orientation, focus, assimilation, integrability, impact** and **effectiveness**. Following the process, 12 successful experiences were selected and systematized by independent consultant Mónica Trujillo under the guidance of Jeannette Fernandez, Disaster Risk Reduction and Recovery Team Leader, UNDP- Panama Regional Hub.

This document brings together 12 initiatives developed in 10 countries (Barbados, Bolivia, Haiti, Cuba, Colombia, Costa Rica, Ecuador, Guatemala, Mexico and Peru), and we thank all of the UNDP offices that participated, shared and contributed to the compilation of this document.

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ACRONYMS

Acronym	Full Term
CENEPRED	National Institute of Civil Defense
CFIA	Ministry of Housing and Human Settlement
CIPCA	National Center for the Prevention and Reduction of Disaster Risk
CNE	National Emergency Commission
CONIDA	National Commission for Aerospace Research and Development
COSUDE	Swiss Agency for Development and Cooperation
CSOs	Civil Society Organizations
CST-RST	The Scientific and Technical Coordination on Seismic and Tsunami Risks
ERL	Environmental Research Laboratory
EU	European Union
GlZ	The Deutsche Gesellschaft für Internationale Zusammenarbeit
GPS	Global Positioning System
HBDA	Household and Building Damage Assessment
HDI	Human Development Index
INDECI	National Institute of Civil Defense
MIVAH	National Plan for Risk Management
NFR	The Federal School of Engineers and Architects
NGOs	Non-Governmental Organizations
NPRM	National Emergency Commission
NSDRM	National System for Disaster Risk Management
ODK	Open Data Kit
OECS	Organization of Eastern Caribbean States
PDNA	National Coordinator for Disaster Reduction
SDGs	Sustainable Development Goals
SECONRED	National Framework for Recovery
SNGRE	National Risk Management and Emergency Service
U.S.	United States
UAGRM	Autonomous University Gabriel Rene Moreno
UN	United Nations
UNDP	United Nations Development Programme
UNGRD	National Unit for Disaster Risk Management
UNICEF	United Nations International Children's Emergency Fund
UNISDR	United Nation International Strategy for Disaster Reduction
USAID	United States Agency for International Development
UTS	Technical Seismology Unit
W.I.	West Indies
WFP	World Food Program



BARBADOS

GOOD PRACTICE 1: Household and Building Damage Assessment (HBDA) Toolkit

PRACTICE AREA: Technical (needs assessment)

TITLE: Harnessing Digital Solutions to Support Crisis-affected Countries

SUMMARY

Assessing the impact of hazards is a complex, time-consuming process that involves the participation of large teams of experts to collect and analyze large volumes of data on damage to infrastructure and other facilities and its effect on communities. The Household and Building Damage Assessment (HBDA) Toolkit was introduced by UNDP in Dominica and Barbuda in 2017 following the landfall of Hurricanes Irma and Maria, as an innovative digital technology that facilitates the collection, analysis and visualization of data on disaster damage, which governments can use to plan, implement and monitor recovery and reconstruction programmes.

In December 2018, the HBDA Toolkit was piloted to improve its functionality. Most recently, the methodology was successfully implemented in the Bahamas to assess the damage caused by Hurricane Dorian in September 2019 and in Albania to assess the vulnerability of people affected by the earthquake that struck Tirana on November 2019. In partnership with IMPACT (a think tank specialized on data collection during crisis situations), plans are underway to further upgrade and refine the HBDA Toolkit in 2020, including capacity-building training and promoting its use as a UNDP corporate tool in other disaster-affected countries.

DESCRIPTION

PIONEERING THE HOUSEHOLD AND BUILDING DAMAGE ASSESSMENT TOOLKIT

It was in Dominica and Barbuda when UNDP first introduced the HBDA Toolkit to support the Government to assess the damage caused by Hurricanes Irma and Maria in 2017. The HBDA toolkit allowed government teams to use smartphones to gather the necessary data on damage to houses and critical public and commercial infrastructure such as schools, hospitals, and hotels, using a pre-designed online questionnaire. In Dominica alone, almost 29,500 buildings were assessed by over 150 surveyors in three months.

Building on the successful experience in Dominica and Barbuda, UNDP has been working to improve the HBDA toolkit, by integrating a more comprehensive questionnaire in order to register the damage to other infrastructure such as on public education and health facilities, and to gather key data on demographics and household vulnerability. In this sense the HBDA toolkit has been developing into a multidimensional data gathering platform, in collaboration with other UN agencies such as UNICEF, WHO and WFP.



Photo: HBDA data collection in Dominica

In order to test the improved HBDA toolkit, UNDP implemented a pilot exercise in Roseau, the capital of Dominica, with a team that included members of the Ministry of Planning and the Ministry of Housing from the Government of Dominica, students from the Dominica State College, the Climate Resilient Execution Agency for Dominica, Engineers Without Borders, UNDP and other UN agencies.

The exercise proved to be a useful test of the different components of the HBDA toolkit, such as the list of questions in the questionnaire, the digital survey, the training program, the evaluation protocol, the interaction with occupants, etc. Some bottlenecks were identified for further improvement and fine-tuning, such as GPS accuracy.

Since its initial development and application in Dominica and Barbuda in 2017, the HBDA Toolkit has been used to support assessment and recovery in the Bahamas following the landfall of Hurricane Dorian in September 2019. In addition, the methodology is currently being used by the Government of Albania to assess the damage caused by the earthquake that struck Tirana in November 2019.

THE CAPACITY OF THE HBDA TOOLKIT

The digital technology behind the HBDA Toolkit enables the collection of damage data on smartphones and tablets. The HBDA Toolkit uses Microsoft PowerBI to facilitate the analysis of geo-referenced data generated by the assessment, as well as the visualization of data in a user-friendly dashboard with graphics and maps. With the HBDA Toolkit the assessment process is more efficient, in real-time and in formats that facilitate decision-making by governments and helps them to plan and implement recovery and reconstruction processes.

The HBDA Toolkit presents a library of questions divided into different modular sections, which can be used separately or collectively depending on the needs of governments. Some of these sections include:

Damage: this module is designed to assess the physical structural damage to all types of buildings, from private residential and commercial buildings to public structures including schools, hospitals or community centres. It is tailored to capture the measurement of the building, the type of materials used to build it, and the particular damage caused to its structure, foundation, roof, walls and floor. The HBDA provides a damage color-coding that classifies the level of damage from green to red.

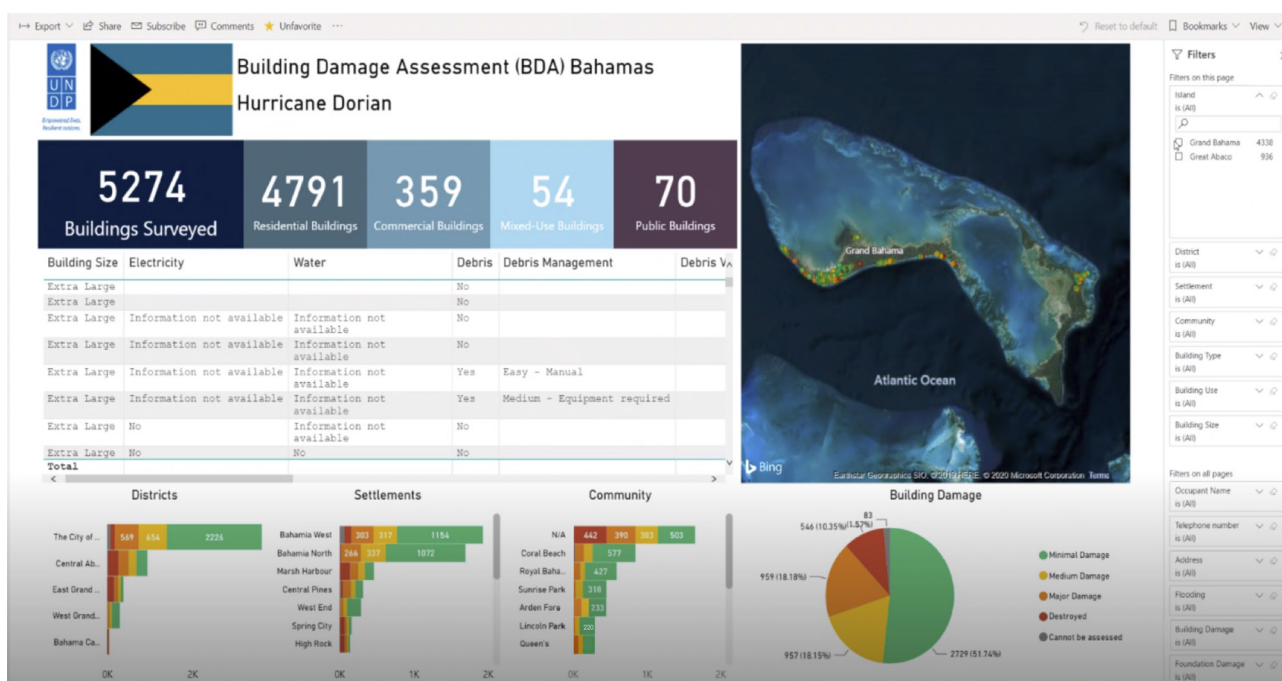


Fig 1: Example of the HBDA Dashboard

Vulnerability: this module captures information about the population affected, particularly on vulnerable population groups such as the elderly, children with special needs, pregnant and lactating women.

Services: this module records access to basic services by the affected population, such as access to drinking water, sanitation and electricity.

Debris: this module enables the rapid estimation of the debris left by the disaster, especially the volume and type of debris to determine the most appropriate mechanism for collection and disposal, and even the recycling opportunities.

Preparedness: this module collects information that helps to determine the extent to which a given structure is exposed to future disasters, for example its proximity to areas at risk of disasters, or if it has been built in line with local building codes or with building techniques that safeguard it from disasters.

DEVELOPING A CORPORATE HBDA TOOLKIT

At present, with the HBDA Toolkit UNDP can support countries facing a disaster with the following unique features:

- The deployment of a team of UNDP experts within 48 hours to a disaster-affected area to train local inspectors to conduct an effective HBDA.
- The ability to process the data collected on a real-time basis, producing immediate visual, dynamic and interactive tables, graphs, maps and reports.
- The HBDA Tool can be made available in different languages.

In 2020, in partnership with IMPACT, UNDP plans to further develop the HBDA technology into a robust corporate tool that is more comprehensive to better support assessments and recovery processes, and to promote its use in other countries around the world.

Plans are underway to develop a more flexible design for the toolkit so that it can be adapted to different disaster scenarios. In order to facilitate the adoption and use of the HBDA toolkit in other countries, among other things, UNDP is developing a practical HBDA Handbook with

step-by-step instructions on its use and requirements, and will roll-out a training programme to establish a team of experts in every region who can be deployed to undertake post-disaster assessments using the HBDA toolkit.

RELEVANCE TO THE PRACTICE OF RECOVERY

When hazards strike, it is critically important to immediately assess its impact on people, housing, infrastructure, health and education facilities and other vital services. The assessment results inform decisions by government authorities and the international community, including on what recovery efforts are needed, where and by whom. It therefore contributes to the planning and implementation of national recovery strategies.

Yet, it is a challenging and time-consuming process to assess the impact in every community, district and province affected in the country and across all sectors. Collecting and analyzing data involves large teams of government and international experts working in a time-constrained post-disaster environment.

In this context, time is of the essence and reliable data is critical to governments to respond effectively. Technologies such as the HBDA Toolkit enable a more rapid and effective collection, analysis and visualization of geo-referenced disaster information. The ability to access real-time data empowers governments to make time-sensitive decisions. In a digital format, data can be analyzed in ways that are most useful to governments, for example to understand the disaster impact in a particular geographic area or for a given sector nationwide. Visual formats such as graphs, tables and maps also make data more user-friendly for decision-makers. The HBDA Toolkit is a platform that can assist disaster-affected countries to plan, implement and even monitor recovery and reconstruction.

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BOLIVIA

GOOD PRACTICE 2: An Innovative Early Recovery Laboratory to Support the Recovery of Bolivia's Chiquitano Dry Forest

PRACTICE AREA: Organizational, Technical and Managerial

SUMMARY

Bolivia's Chiquitano Dry Forest burned under fire for much of the winter and spring of 2019. Classified as a megafire, it burned approximately 4 million hectares of one of the most biologically diverse dry forests in the world. In response and recognizing the complexity and challenges these fires posed, UNDP introduced the Early Recovery Laboratory (ERL) initiative to request proposals from affected communities as well as from academia, NGOs and other institutions, inviting innovative solutions to address the most urgent needs and help to restore key environmental functions. The ERL initiative therefore adopted an approach that is community driven, participatory and open to novel solutions to a complex challenge. The ERL is a fund to finance the best proposals, aiming to later up-scale these and integrate them into the National Recovery Plan that the Government of Bolivia planned to prepare with the technical support of UNDP. This initiative is supported by the Korean Government and through a private partnership with Mercantil Santa Cruz Bank Foundation.

DESCRIPTION

THE CHALLENGE OF MEGAFIRES IN BOLIVIA'S CHIQUITANO DRY FOREST

Bolivia's Chiquitano Dry Forest burned under fire for much of winter and spring in 2019. The Chiquitano is one of the most biologically diverse dry forests in the world, and an eco-region that sits as a transition zone towards the Amazon forests. It is home to indigenous communities, as well as to deer, jaguars, pumas and ocelots, and hosts a number of threatened and endangered species like the giant otter, the giant armadillo, and the maned wolf. The forest fires, which followed on the heels of a drought, were severe and classified as a sixth-generation wildfire or mega fire. Its impact was far-reaching. To date the following consequences have been recorded:

- A total of 16 municipalities were affected, mainly in Santa Cruz;
- About 4 million hectares were burnt, equivalent to 18% of the Chiquitano Dry Forest;
- Almost 1.7 million hectares of protected areas were burned;
- Over 2.8 million hectares of jaguar habitat was affected;

- Ten river basins were affected, particularly 1.2 million hectares of the Rio Curichi Grande basin.

Although not quantified, the fires killed local fauna, destroyed its flora, eroded the forest's biodiversity, contaminated water sources, degraded the quality of soils, affected the livelihoods of local forest communities, and left vulnerable the forest ecosystem. In addition, scientists predict that the fires will alter precipitation cycles and decrease rainfall, which will provoke more severe and prolonged droughts, not only in the forest itself but also surrounding regions.

Forest fires of this magnitude are becoming more frequent but are still new and not well understood by science. Their full impact on ecosystems and forest communities is largely unknown. In this context, finding appropriate and sustainable recovery solutions is a challenge, though many experts highlight the importance of recovering the lost flora and fauna.

THE EARLY RECOVERY LABORATORY

In response to the fires in the Chiquitano Dry Forest, including nearby National and Municipal Protected Areas, and recognizing the complexity and challenges they posed, UNDP introduced the Early Recovery Laboratory (ERL) initiative to invite proposals from affected communities, academia, NGOs and other institutions that addressed the most urgent needs and helped to restore important environmental functions.

The ERL initiative therefore adopted an approach that is community driven, participatory and open to innovative solutions to a complex challenge. For this purpose, it created the ERL Fund to finance the best proposals, with the expectation that these will be scaled-up and integrated into the National Recovery Plan that the Government of Bolivia planned to prepare with the technical support of UNDP.

The ERL was initiated by UNDP in September 2019 and is still in the early phase of implementation. The following are the main features integrated into the design of the ERL initiative:

- Communities could represent themselves and submit proposals, as well as local governments, NGOs, universities, foundations, producer associations, women's groups and other organizations;

- Criteria was established to guide the selection and approval of proposals, such as innovation, resilience and ability to scale-up and replicate;
- Proposals are expected to have the gender and human rights approach mainstreamed into the project;
- A committee was set up to evaluate and approve the proposals, represented by the municipality, the departmental and national government authorities, donor(s) and UNDP;
- A maximum of USD 15,000 in funding would be allocated to each approved proposal, to be implemented within six months in line with the early recovery objective;
- The bidding process for the submission of proposals was advertised through various media and social networks with the participation of local actors;
- Two information sessions were organized during the bidding process to allow interested participants to receive advice and support.

A website was set up with information on the ERL and the application was placed online along with guidelines and approval criteria. Proposals were guided as well by the following set of thematic priorities to stimulate ideas for project proposals:

- 1) The natural or assisted regeneration of forests;
- 2) Reforestation in strategic locations such as water recharge areas / main water sources;
- 3) Water harvesting for human consumption or productive purposes;
- 4) Sustainable production practices that support the recovery of the forest;
- 5) Community regulatory norms for forest protection and conservation;
- 6) Productive enterprises that support soil conservation and the regeneration of the forest;
- 7) Early warning systems for fires;
- 8) Training in the use of alternatives to the slash-and-burn practice;
- 9) Promoting ecotourism in protected areas and biological corridors.

The bidding process received a total of 96 proposals, testimony of the high interest in the protection and

recovery of the Chiquitano Dry Forest. In its first phase, the following five proposals have been approved by the ERL:

- 1) The collection, management, storage and protection of seeds from native forest trees;
- 2) Water harvesting and conservation for human consumption and irrigation;
- 3) Introduction of agro-silvo-pastoral practices to support sustainable livestock production;
- 4) The establishment of a garden to regenerate native forest pollinators;
- 5) Early warning system for forest fires.

Approved projects will receive advice and support in three phases to ensure their success and sustainability. The first phase will consider the theory of change, the project's objectives, indicators, monitoring and evaluation mechanism, and budget. The second phase will support the implementation process, including a mentoring program with UNDP staff. The third phase will systematize the lessons learned and good practices and includes a final evaluation.

THE COLLECTION, MANAGEMENT AND STORAGE OF GENETIC FOREST RESOURCES

The five approved proposals reflect innovative ideas and solutions to the challenges now facing the Chiquitano Dry Forest as a result of the fires. One example is the approved proposal to develop good practices in the collection, management and storage of the native genetic resources of the Chiquitano forest.

The project will collect good quality seeds from native forest tree species, store them in a seed bank under refrigerated storage facilities, and later distribute them to restore forest plantations in areas affected by fires. The project will introduce a revolving fund that will facilitate the purchase, commercialization, distribution and future collection of forest seeds, ensuring a longer-term sustainable approach to seed conservation.

Local forest communities will be active partners in the project, participating in the collection, selection and propagation of seeds, and to this end will receive training to build their knowledge and capacity. The project will be implemented in seven communities in the municipalities of San Antonio de Lomerio and Concepcion, under the coordination of the Autonomous University Gabriel Rene

Moreno (UAGRM). The university's Institute of Forest Research has extensive expertise in seed management and manages a seed bank and seed storage facilities.

The project will also be implemented in partnership with several institutions, including the GIZ German Cooperation, the Seed Bank in Cochabamba, the community-based Association Sembrando Vidas, municipal authorities and other partners.

The destruction of forest ecosystems including native tree species makes this project an important initiative. The seed conservation and propagation measures will help to protect the native genetic resources of the Chiquitano forest and prevent their loss.

RELEVANCE TO THE PRACTICE OF RECOVERY

Mega fires such as the one that scorched the Chiquitano Dry Forest in Bolivia in 2019 are becoming more common worldwide, yet their full implications and consequences are not well understood by science. Like other extreme weather events precipitated by climate change, they pose new challenges and require innovative solutions. In this context, the Early Recovery Laboratory is an innovative approach adopted by UNDP in Bolivia to invite forest communities to propose ideas based on their own needs and priorities as well as on the native knowledge they have of their forest environment. At the same time, the ERL promoted proposals from academic institutions, NGOs, municipal authorities, associations

and other organizations to harness the ideas of experts and promote multi-disciplinary partnerships that are more likely to be effective.

This initiative also generates evidence for UNDP to develop strategies for the recovery of livelihoods in post-fire scenarios, an area still largely unexplored. It is also a methodologically important experience since the generation of response alternatives from affected communities was a key element to establish a strategic alliance with the Korean Government and with the private sector.

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RESOURCES

ERL Website
<https://www.bo.undp.org/content/bolivia/es/home/presscenter/articles/2019/laboratorio-de-recuperacion-temprana--lrt-.html>
ERL Video
https://drive.google.com/file/d/1kofztDlx9_3qANFbFAi4xaBVmfH-mq4L/view



COLOMBIA

GOOD PRACTICE 3: Colombia's new governance framework on disaster risk management strengthens post-disaster recovery

Practice area: Legal and Organizational

SUMMARY

The Government of Colombia embarked on an ambitious reform process in 2011-2012 to establish a robust governance framework on disaster risk management. This included new legislation introduced in 2012, a National Policy on Disaster Risk Management, and a corresponding National System for Disaster Risk Management. The new framework was overdue, as the former normative and planning instruments were outdated and had important gaps that needed to be addressed. Colombia's new legal and governance framework is an example of a comprehensive and forward-looking approach that reflects international standards and good practices. It encompasses all phases of risk management, including preparedness, response and long-term recovery, and follows fifteen core principles including sustainable development, risk reduction, decentralization and participation.

DESCRIPTION

THE NEED FOR A RENEWED RISK MANAGEMENT POLICY

In 2012, the Colombian Government approved a new legislation, known as Ley 1523, which adopted a comprehensive National Policy on Disaster Risk Management and established a corresponding National System for Disaster Risk Management (NSDRM) in the country.

This new legislation and policy on risk management was overdue and much needed in the country. The former National System for Disaster Prevention and Response, created in 1988 as the main regulatory body and system, which had not been significantly modified since. Although Colombia had developed some normative and planning instruments on risk management, there were important gaps that needed to be addressed:

- There was no consolidated and comprehensive risk management policy that was clearly articulated within the public administration;
- The 1988 Law focused on disasters and on phases: prevention, management, rehabilitation, reconstruction, and development;
- The existing national system was not in line with the 1991 Constitution, which established decentralization and the principles of autonomy, coordination, concurrence, subsidiarity, and participation;

- Existing instruments and programs did not have the political mandate necessary for effective risk management, and did not define the scope of public and private responsibility at the territorial and sectoral level;
- Risk management was not incorporated in planning instruments by all responsible public administration actors;
- The National Calamity Fund focused mainly on financing disaster management activities.

COLOMBIA'S NEW LEGAL AND POLICY FRAMEWORK ON DISASTER RISK MANAGEMENT

The new legislation introduced in 2012 (Ley 1523) set the basis for the country's National Policy on Disaster Risk Management and its corresponding National System for Disaster Risk Management (NSDRM).

With the adoption of the law Colombia established a comprehensive and forward-looking legal and policy framework for disaster risk management in the country that reflects the latest international standards and good practices. On the one hand, the legislation and policy is enshrined in fifteen core principles necessary for effective risk management, while on the other, the NSDRM embodies the institutional arrangements, mechanisms and processes needed to implement them.

This section will highlight some of the principles and key features of Colombia's 2012 legislation and policy on risk management.

Risk management as a social process linked to development

The national policy defines disaster risk management as a 'social process' linked to development and makes all government authorities and the population both co-responsible for implementing the policy.

Declaration of a state of emergency

The legislation establishes the criteria for declaring a state of emergency at all levels (national, provincial, district and municipal), and empowers governors and mayors to make such a declaration within their respective jurisdiction, thereby decentralizing decision-making and governance.

Making 'action plans for recovery' mandatory

The legislation calls for the development of Action Plans for Recovery and Reconstruction once a state of emergency has been declared, which is made mandatory at national, provincial, district and municipal levels for all public and private entities that contribute to the recovery process.

High-level oversight

The policy defines the oversight and coordination bodies and mechanisms for the National System for Disaster Risk Management, as well as their role and responsibilities, such as those of the National Council and the National Unit on Disaster Risk Management, and the National Committee for Disaster Management.

The National Council on Risk Management is represented by the highest levels of government including the President, line Ministers, the Director of the National Planning Department and the Chief of the National Unit for Disaster Risk Management.

Decentralized coordination

At sub-national level the policy creates provincial, district and municipal Councils on Disaster Risk Management and bestows them with a mandate and responsibilities over disaster risk management within their territorial jurisdiction, including those of Governors, Mayors and sector ministries.

Planning instruments

The legislation and policy call for risk management plans and the integration of risk management in key planning instruments, namely the development of the following:

- A National strategy for disaster response.
- Plans for risk management at all levels of government to prioritize, program and implement actions on behalf of the National System for Disaster Risk Management.
- The mainstreaming of risk management in provincial, district and municipal development plans.
- Risk assessments for all large public works or other industrial activities that may create disaster risks, to identify the potential impact of disasters on its infrastructure and operations and makes mandatory

the adoption of measures to reduce risk including contingency plans.

The principle of participation

The principle of participation establishes that it is the duty of authorities and the entities of the National Disaster Risk Management System to recognize, facilitate and promote the organization and participation of communities, civil society, ethnic groups, and neighborhood, charitable, voluntary and common-use associations. Likewise, it establishes the duty of all people to be part of the risk management process in their community.

The principle of environmental sustainability

The principle of environmental sustainability establishes that development is sustainable when it meets present needs without compromising the capacity of ecosystems to meet future needs. It further clarifies that the rational use of natural resources and the protection of the environment are an integral part of environmental sustainability and contribute to disaster risk management.

Financing risk management

The legislation calls for the creation of a Fund for risk management in all provinces, districts and municipalities, to invest and finance risk reduction measures as well as preparedness, response and recovery. The sub-national funds created follow the framework of the National Fund for Disaster Risk Management, which was created in 1984 and subsequently updated in 1989.

THE GOVERNANCE FRAMEWORK FOR DISASTER RISK MANAGEMENT

The Government of Colombia embarked on an ambitious reform process to establish a robust governance framework on risk management. Below are examples of this governance framework.

- The establishment of the National Unit for Disaster Risk Management (UNGRD) in 2011 under the Administrative Department of the Presidency. As the holder of the highest leadership role in the central government on risk management, the UNGRD formulates the strategic vision, steers the national agenda, designs national policies, coordinates, provides oversight, strategic guidance and technical assistance.

- The formulation of a National Plan on Disaster Risk Management (2015-2025) which identifies the objectives and priorities to be achieved over the 10-year timeframe in Colombia.
- The creation of the National Committee for Risk Knowledge, which is responsible for improving the country's understanding of risk. Numerous technical studies have generated a broad body of knowledge on the hazards and risks facing the country. It is led by the UNGRD and includes the National Planning Department, National Department of Statistics, Geographic Institute Agustín Codazzi, Colombian Institute of Geology and Mining, the National Federation of Departments, the Colombian Federation of Municipalities, among other bodies.
- Provincial and municipal councils for Risk Management established to plan, coordinate and monitor risk management processes within their jurisdiction.
- The National Fund for Disaster Risk Management adopts a broad purpose in line with the new legislation (Ley 1523) to support the implementation of the country's wider disaster risk management agenda. The Fund is divided into five accounts: risk knowledge, risk reduction, disaster management, recovery and financial protection.
- Supports a multilevel decentralized coordination and planning process;
- Shifts from focusing on disaster and its phases to the more holistic risk management approach;
- Advocates for the mainstreaming of risk management into planning instruments, across sectors and geographic territories;
- Supports the participation of civil society, community associations and private sector;
- Expands the scope of financing to support the country's new risk management agenda.

RELEVANCE TO THE PRACTICE OF RECOVERY

The institutionalization of disaster risk management is a challenge in many countries, and examples such as Colombia on how it has been achieved effectively provide valuable lessons for informing future processes. To be effective institutionalization requires more than programmes and initiatives, it needs a legal and policy framework as well as the functional organization of government to execute these. Risk management can succeed when the mission and functions are clear (what should be done) as well as the organizational mechanisms (who is responsible) and the instruments (how it will be achieved). Lessons learned and good practices in risk management also highlight the critical importance of core principles such as participation, environmental sustainability, decentralization, and mainstreaming into planning instruments.

KEY HIGHLIGHTS OF SUCCESS

The following are some of the key elements supporting Colombia's robust governance framework on risk management:

- Mandated by law through the introduction of legislation on risk management;
- Makes a direct link with and is supported by the constitution;
- Establishes a comprehensive national system on risk management;
- Defines the institutional mechanisms and coordination arrangements at all levels of government;

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COSTA RICA

GOOD PRACTICE 4: New Cinchona: Rebuilding Development

Practice area: Organizational, Technical, Managerial

SUMMARY

Following the 2009 earthquake in Costa Rica, the government led a process of rebuilding the rural community of Cinchona which was completely destroyed by tremors and mudslides. In partnership with civil society, local communities, academia and the private sector, “New Cinchona” was relocated to a safe geographic location and rebuilt in line with the appropriate building codes. An integrated and multi-sectoral plan was adopted that included infrastructure, housing, public services and economic re-activation, while also taking into consideration the environment and the socio-cultural identity of the community. The plan was designed with wide consultation and the direct participation of the affected population, including in decision-making and the resolution of problems.

DESCRIPTION

The 6.1 magnitude earthquake that struck Costa Rica in January of 2009 had its epicentre 30 km north of the capital city of San Jose, producing tremors and triggering landslides and mud flows that destroyed homes and infrastructure. The rural community of Cinchona was completely destroyed, and the conditions of high risk left behind made impossible reconstruction in the same location. Relocation of the community was necessary but required a careful and strategic planning process without precedent.

The government activated a coordination mechanism to support the National Emergency Commission (CNE) and developed a plan for relocating and rebuilding “New Cinchona” that was participatory, multi-sectoral and sustainable. New Cinchona was rebuilt within 24 months on a 600-hectare plot of land roughly six kilometres from the original town, for a total of 93 families who lost their homes to the earthquake.

KEY ELEMENTS OF SUCCESS

The approach followed in Costa Rica for relocating and rebuilding New Cinchona was integrative and sustainable, based on the adoption of the following main elements of success.

- 1) The existence in Costa Rica of Law No. 8488 was critical in that it called for a National Plan for Risk Management (NPRM), which was updated in October 2009 through a wide consultative process led by the National Forum for Risk Management. The plan reinforced the strategic and leadership role of the CNE and outlined the roles and responsibilities of all relevant institutions, both public and private, and civil society in relation to emergency response and risk management.
- 2) An integrated and multi-sectoral approach was adopted in the design and implementation of the recovery plan, focusing on three main pillars: infrastructure, economic reactivation and recovery of the social fabric. Environmental considerations were mainstreamed across all three pillars.
- 3) The adoption of agreed principles at the start of the process helped to guide the recovery process. These included the following principles:
 - To avoid rebuilding risk
 - Focus on the most vulnerable
 - Support and empower the affected population
 - Inter-institutional collaboration
 - Restore capacities and strengthen institutions
 - Support the role of local actors
 - Monitor, evaluate and learn
 - Financial transparency
- 4) The government’s commitment to risk reduction ensured that a safe geographic area was identified for the relocation and rebuilding of the New Cinchona community.
- 5) Technical studies were conducted to select a safe location for New Cinchona, led by the Costa Rican Electricity Institute. Subsequently, several field studies undertaken by specialists in urban planning, public services and risk analysis served to identify the land that was technically sound for rebuilding.
- 6) Social and economic considerations were also taken into account. The land selected for relocation was six kilometres from the previous location of the community, which helped to preserve social cohesion, the cultural and community identity of the affected population, and their local employment and livelihoods.
- 7) Community participation, through workshops led by the Ministry of Housing and Human Settlement (MIVAH), served to understand the history and socio-cultural dynamics of the community prior to the earthquake, and to use the results to inform the design and final validation of the relocation plan, reflecting

as much as possible the model of community they previously had.

- 8) Building back better was a strategic priority that was integrated also in the architectural design of the houses in New Cinchona. Engineers and architects designed the blueprints for the new relocated community in compliance with Costa Rica's seismic code.
- 9) The participation of civil society, academia, the public and private sectors ensured inter-institutional collaboration throughout the process and benefited from broad support and expertise. The Federal School of Engineers and Architects (CFIA), for instance, donated the urban design of New Cinchona, building on the feedback from the community that was collected by the MIVAH. Public-private collaboration was effective in supporting the economic reactivation of New Cinchona.
- 10) The integration of environmental considerations ensured that the recovery process contributed to the conservation and protection of local natural resources, promoted the sustainable use of local ecosystem services and sustainable economic activities such as ecotourism.
- 11) The mobilization of financial resources for rebuilding New Cinchona came from a combination of public funds and the private sector, based on the successful national funding campaign "I was Born in this Country".

THE RECOVERY PLANNING PROCESS

Planning the relocation and recovery of New Cinchona followed four key stages as outlined below.



- 1) Needs analysis
 - Identifying the main needs of the affected population
 - Identifying the institutional offer
 - Prioritization
 - Mapping other actors and sectors
- 2) Organization
 - Formation of working groups by component (infrastructure, economic, the environment)
 - Identifying focal points by institution
 - Establishing Ad hoc Commission under the Ministry of Public Health and defining its responsibilities
 - Identifying lead institutions for each main area of intervention
 - Defining the work plan
- 3) Design of proposals by area of intervention
 - Design of specific projects
 - Establishing alliances
 - Identifying financial resources needed
- 4) Financing
 - Resource mobilization

LESSONS LEARNED

In addition to the key elements of success, the recovery of New Cinchona left the following important lessons that can serve future relocation processes:





- 1) A pre-defined and agreed recovery framework that clearly establishes a vision, principles, responsible institutions and their roles and responsibilities, coordination mechanisms, approaches to ensure community participation, and resource mobilization strategy including public-private alliances.
- 2) Post disaster recovery should be a horizontal process that includes consultations with the affected population, ensuring that the decisions and solutions adopted respond effectively to their real needs and expectations, and that communities are empowered by the recovery process and the results.
- 3) The focus on the relocation and recovery of Cinchona made invisible the needs of other communities affected and provoked some conflict with nearby communities. To avoid such conflicts, it is necessary to establish equity and proportionality as core principles of recovery.
- 4) The framework for recovery and the tools for implementing recovery need to be planned or developed in normal times to avoid improvisation during times of disasters.
- 5) Public-private alliances are fundamental in supporting economic recovery, to identify innovative and creative options and to ensure sustainability

RELEVANCE TO THE PRACTICE OF RECOVERY

Post-disaster recovery processes are challenging yet international experience and practice has produced lessons and examples of excellence, which, when applied to new recovery interventions can yield successful and sustainable results. The relocation and reconstruction of New Cinchona is an example of a recovery process that integrated a number of best practice principles

into its design and implementation, including the well-documented importance of community participation, inter-institutional collaboration including with the private sector and civil society, of multi-sectoral approaches that combine hard and soft sectors such as infrastructure and culture, the protection of natural resources and building-back-better.

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ADDITIONAL RESOURCES

UNDP Video on the recovery of Cinchona <https://www.youtube.com/watch?v=Q3cJB36H5OI>

Government Video on the Inauguration of New Cinchona <https://www.youtube.com/watch?v=Gna4lQ-xlRo>

Building design of New Cinchona <https://www.cne.go.cr/cinchona/presentaciones/nuevacinchona.pdf>

Campaign Yo Nací en este país
<https://www.youtube.com/watch?v=yIeOhxhZl74>

Economic reactivation in New Cinchona <https://www.tec.ac.cr/hoyeneltec/2017/08/23/invernaderos-comunales-nueva-cinchona-impulsan-desarrollo-economico-video>



SUMMARY

Since 2008 UNDP in Cuba has been supporting local mini industries to produce construction materials needed to repair or rebuild houses destroyed by hurricanes. This post-disaster recovery initiative has been implemented, in partnership with the government, in response to Hurricane Sandy in 2012, Hurricane Matthew in 2016, and Hurricane Irma in 2017. To date, a total of 60 mini industries have been created or strengthened in eight provinces across the country.

By supporting local industries, this initiative promotes enterprise development and generates employment and income opportunities. Disasters such as hurricanes cause heavy damage and destruction to housing and other infrastructure, and reconstruction demands a high volume of construction materials. In this context, the mini industries in Cuba help to meet this high demand, while also supporting local enterprises, often with a positive ripple effect on the value chain and local economy. UNDP in Cuba has developed a programme package, based on lessons learned and good practices in the country, that can be used to facilitate the implementation of similar initiatives in other countries affected by disasters.

DESCRIPTION

MINI INDUSTRIES IN GUANTANAMO IN RESPONSE TO HURRICANES SANDY, MATTHEW, IRMA

Following Hurricanes Sandy (2012), Matthew (2016) and Irma (2017), UNDP implemented a recovery program to support housing reconstruction and local economic development in partnership with the Government, the Russian Federation, COSUDE, the European Union, and the Government of Rumania. The housing sector was the most affected by all three hurricanes, damaging or destroying a total of **262,703 homes in Santiago de Cuba**; 42,338 homes in Guantanamo and 145,974 homes in the central provinces. UNDP led the recovery of the housing sector, providing technical assistance, capacity-building training and supporting local mini-industries to produce the much needed construction materials while also supporting the local economy. The main achievements are summarized in the table below.



Mini-industry Cabacú 2, in Baracoa municipality



Mini-industry Lindero, in Maisí municipality

Summary of Achievements in Housing Reconstruction Following Hurricanes Sandy, Matthew and Irma

Context	No of Mini-industries (created / strengthened)	No of People Trained (professionals, technicians, construction workers)	Employment Generated	No of Beneficiary Houses / Households (with at least 1 element)	Production Capacity Established (annually)
Hurricane Sandy in 2012: Recovery Plan for Santiago de Cuba, the second largest city in the country	13	1,234	300	3,785	Capacity to produce: 9,680 m ³ sand and gravel; 1,742,400 blocks; 798,600 mosaics
Hurricane Matthew in 2016: Recovery Plan for 4 municipalities in Guantánamo, the province with the lowest HDI in the country	29	200	200	3,200	Capacity to produce: 12,760 m ³ sand and gravel ; 492,800 blocks; 88,000 mosaics
Hurricane Irma in 2017: Recovery Plan for 14 municipalities in the provinces of Villa Clara, Sancti Spíritus, Ciego de Ávila y Camagüey	20	305	220	10,000	Capacity to produce: 121,000 m ³ sand and gravel; 4,356,000 blocks; 1,306,800 mosaics; 15,488,000 ceramic pieces (bricks y roof tiles)
Total	62	1,739	720	16,985	Capacity to produce: 143,440 m ³ sand and gravel ; 6,591,200 blocks; 2,193,400 mosaics; 15,448,000 ceramic pieces (bricks y roof tiles)

THE CASE OF MINI INDUSTRIES IN GUANTANAMO IN RESPONSE TO HURRICANE MATTHEW

Following the 2016 landfall of Hurricane Matthew in Cuba's Guantánamo province, which damaged or destroyed a total of 42,338 homes, UNDP in partnership with the Government and the Russian Federation, supported housing reconstruction and local economic development. The programme supported mini industries with production facilities that were closest to the hurricane-affected communities, using the local

labor force and community resources, and reducing transportation costs, in line with the national policy to foster the local production of construction materials. The conditions of existing mini-industries were improved, and new industries were created where there was demand, to introduce new production lines and increase production volumes.

Some of the project's main achievements include:

- 1) Strengthened the production capacity of 29 mini-industries:

- Transferred 64 machines and equipment for the production of cement blocks, floor tiles and roof slabs; also transferred other equipment for transport and carpentry, and tools to support quality control;
- Organized four technical training sessions, and trained 144 operators on the use and maintenance of new equipment;
- Trained 37 partners in business management and production processes;
- Generated 200 new local jobs (operators, assistants, drivers, mechanics, and supporting staff) contributing to a 30% increase in their personal income;
- Benefited 3,200 households;
- Achieved the following production capacities:
- The production of 448,000 cement blocks per month, 28 times higher than at the start;
 - The production of 8,000 floor tiles per month, 16 times higher; and
 - The production of 520 roof slabs per month.

2) Strengthened local governments

- Improved business management capacities, such as through the computerized preparation and control of production plans;
- Increased their capacity to advice, control and monitoring mini-industries;

- Enhanced their capacity to transport raw materials, by transferring 9 tractors to ensure an adequate and sustainable supply;
- Trained 9 operators, 1 mechanic and 2 specialists from the Various Local Industries Company such as on loading operations for raw materials;
- Supported with in situ quality control measures for the production of cement.

THE KEY ELEMENTS TO STRENGTHEN MINI INDUSTRIES FOR HOUSING RECOVERY

Several manuals and guidelines have been developed by UNDP in Cuba on strengthening mini industries in post-disaster recovery processes. Based on lessons learned, below are some of the main elements that ensure a successful programme.

Needs assessment: conduct an assessment including field visits, surveys, meetings and discussions with local actors and authorities, to identify the needs in each disaster-affected municipality, to identify the small industries or enterprises that need to be created or strengthened, the business owners and community leaders, to select the most appropriate technologies than can be transferred, and identify the financial and material investments needed to create or re-activate the identified industries; and develop fact sheets on each production center/facility to record its production flows,



Final equipment arriving for mini industries, to support the recovery programme following Hurricane Matthew in 2016: ball mills (left) and conveyor belts (right).



Production of blocks, Carbonera mini-industry, Imías municipality

installed equipment and new equipment needed under the project, the needs to condition or expand operations, investment requirements such as construction, electricity, water supply and transfer of new technologies.

Investment plan: develop a plan to strengthen local mini industries based on the assessment results and tailored to the particular local context.

Technical assistance: provide in situ technical support and follow up, for quality assurance, such as on the refurbishment process, the utilization of space, and on ongoing improvements in the production flow. Monitoring support as well to ensure performance, for example to assess the impact of new equipment on production levels or the demand for local materials.

Partnerships: collaboration with government authorities, the private sector and local producers makes a significant contribution to success. For the recovery of Guantanamo after Hurricane Matthew, for example, the government guaranteed the transport of equipment and supplies from national stocks, such as cement and steel; the provincial delegation of the Ministry of Construction supported implementation in one municipality; the OBE electricity company made the investment needed to provide a power supply to mini industries; the connections to ensure the water supply was made by the **Water Supply and Sewerage Company; and the Mechanical Industry (VALBO) manufactured 28 block-making machines, block molds and jaw crushers, which significantly reduced project costs.**



Production of tiles, Mabujabo mini-industry, Baracoa municipality

UNDP Procurement and Logistics: establish an effective procurement and logistics process to support the recovery of mini industries, based on the capacity and expertise of the UNDP Country Office. In Cuba, UNDP was able to ensure that import shipments of equipment were on time, that merchandise imported to Cuba was nationalized, and to secure transport from the arrival port to the affected municipalities.

Knowledge Exchange and Training: support the exchange of experiences, such as visits to successful production centers to transfer know-how on production processes, and provide training to business owners and employees, for example on the use and maintenance of new technology transferred, on operational procedures, raw material processing, production flows, quality controls, among other.

KET ACHIEVEMENTS AND REPLICATION POTENTIAL

The mini industry programme introduced in 2008 by UNDP in Cuba has developed since into a robust methodology that has been successfully replicated in Cuba following Hurricanes Sandy, Matthew and Irma across eight provinces. Some of the key achievements and features of the mini industry programme include:

- A production capacity that can respond to the high demand for construction materials in post disaster situations, reaching one to two houses daily;

- The capacity to generate employment, on average 5 to 10 jobs per mini industry;
- A lower production cost, about 50% less, and lower prices for construction materials to consumers;
- An established capacity to provide technical support at the national and international levels;
- Trained technical experts who have participated in the implementation of these programmes and that can be mobilized in the future when required;
- The production of some equipment in the country, thereby contributing to technological innovation and to the development of a national industry;
- Manuals and guidelines that are available and can be used to replicate the practice, for example guidance on the steps in the production process of mini industries, on the production of each construction material, and on the use of machinery;
- An established knowledge network, with professionals in business management, technical experts on specific aspects of production, and machine operators who can provide technical assistance and participate in knowledge exchange, thereby facilitating the transfer and replication of good practices;
- A capacity-building programme established in technical vocational schools in Cuba to train young students.

RELEVANCE TO THE PRACTICE OF RECOVERY

The housing sector is among the most affected by hurricanes as well as by earthquakes and other frequent weather-related disasters. They damage or fully destroy the most important asset owned by urban and rural populations in developing countries. The recovery and

reconstruction of housing and other vital infrastructure such as schools and health clinics, demands high volumes of construction materials, but these are often not available immediately, take time to produce and some materials may need to be imported. These conditions can seriously limit or delay the recovery process, increasing significantly the amount of time, often years, that affected households remain living in vulnerable makeshift homes.

In this context, the mini industry programme developed by UNDP in Cuba presents a proven and effective model that can be used in post-disaster situations to create or revitalize the production of construction materials at the local level in affected areas, providing a rapid solution to meet the demand for housing reconstruction while also seizing the economic opportunity. The co-benefits are many, including the direct benefits to local businesses, the faster recovery of livelihoods, the generation of employment and income, and the cascading effect along the value chain and local economy.

With this local capacity well established today in Cuba, these mini industries represent a preparedness measure that can be mobilized to immediately support early housing and economic recovery in the face of future disasters. Moreover, the programme package developed by UNDP in Cuba is available to be used in other countries when required.

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ECUADOR

GOOD PRACTICE 6: In Motion – An Economic Reactivation Programme for Businesses Affected by Natural Disasters

Practice area: Organizational, Technical, Managerial

SUMMARY

The *In Motion Programme* was developed by UNDP in Ecuador to promote the economic re-activation of businesses affected by natural disasters. It was first introduced during the recovery process that followed the 2016 earthquake in Ecuador. Since then, UNDP has developed a ready-to-use methodology and toolkit that can be deployed and implemented in post-disaster situations, with practical guidelines, communication materials, administrative and management tools that support design, planning and implementation. As such all the necessary tools are available for implementing a successful *In Motion Programme*, to quickly re-establish the livelihoods of disaster-affected business owners in the shortest possible time. Since its development, the *In Motion* programme has been used to fast-track local economic recovery in Haiti and Mexico.

DESCRIPTION

THE DEVELOPMENT OF THE *IN MOTION* PROGRAMME IN ECUADOR

The *In Motion Programme* was first introduced by UNDP during the recovery process that followed the 2016 earthquake in Ecuador, which affected the provinces of Manabi, Esmeraldas, Santa Elena, Guayas, Santo Domingo, and Los Rios. An estimated 35,000 houses were destroyed or damaged, leaving more than 100,000 people in need of shelter. There were USD\$ 92 million in economic losses, including USD\$ 4.7 million in the informal sector. Small and micro-enterprises were among the most affected.

UNDP implemented the *In Motion Programme* to support the recovery of the productive sector in the cities of Manta and Portoviejo in Manabi, supporting small and micro enterprises such as small shops, restaurants, shoe repair shops among other. The programme design included as a first step a survey to understand the socio-economic conditions of affected businesses, and an in-depth study of each business such as its operations, market, finances and legal arrangements.

The programme involved the participation of municipal authorities in cities, public businesses, the private sector and academic institutions, as well as the affected communities and small enterprises.

One example of collaboration with the private sector was the partnership with Alianza para el Emprendimiento e Innovacion (Alliance for Entrepreneurship and Innovation), which created a USD\$ 10 million Fund to provide credit to small and micro-enterprises affected by the earthquake. Forty percent of the funds were given in the form of grants while the remaining 60% was credit. Beneficiaries received support to replenish the equipment they lost during the earthquake, enabling them to recover their businesses, and while much of the support was in the form of grants, beneficiaries also contributed 30% of the investment. In addition, they received on-site technical assistance and capacity-building training in accounting, marketing, and business management.

The programme benefitted 252 businesses and 551 owners and employees. A total of 2,686 hours of training was provided, as well as 3,106 hours of technical assistance. The results showed that beneficiary enterprises adopted new practices that improved their business performance. For example, average monthly sales increased on average by over USD \$212. Also, 60% of businesses adopted accounting practices for the first time.

MAIN CRITERIA FOR SUCCESS

Some of the key lessons learned from the *In Motion* programme in Ecuador include the following:

- The training workshops on good business practices and the personalized technical assistance given to improve competitiveness were particularly effective in increasing productivity and sales, especially among women and vulnerable groups.
- Partnerships with academia, and the public and private sectors increased the impact of the programme, including stronger resilience to future shocks among beneficiaries.
- Few beneficiaries qualified for credit under the programme, which gave a valuable lesson in terms of ensuring that future *In Motion* programmes design a scheme for loan guarantees that is tailored to the needs of vulnerable micro enterprises to promote greater access to loans.
- The community approach is an important strategy to motivate people facing a traumatic event such as an earthquake or other crises. The opportunity to

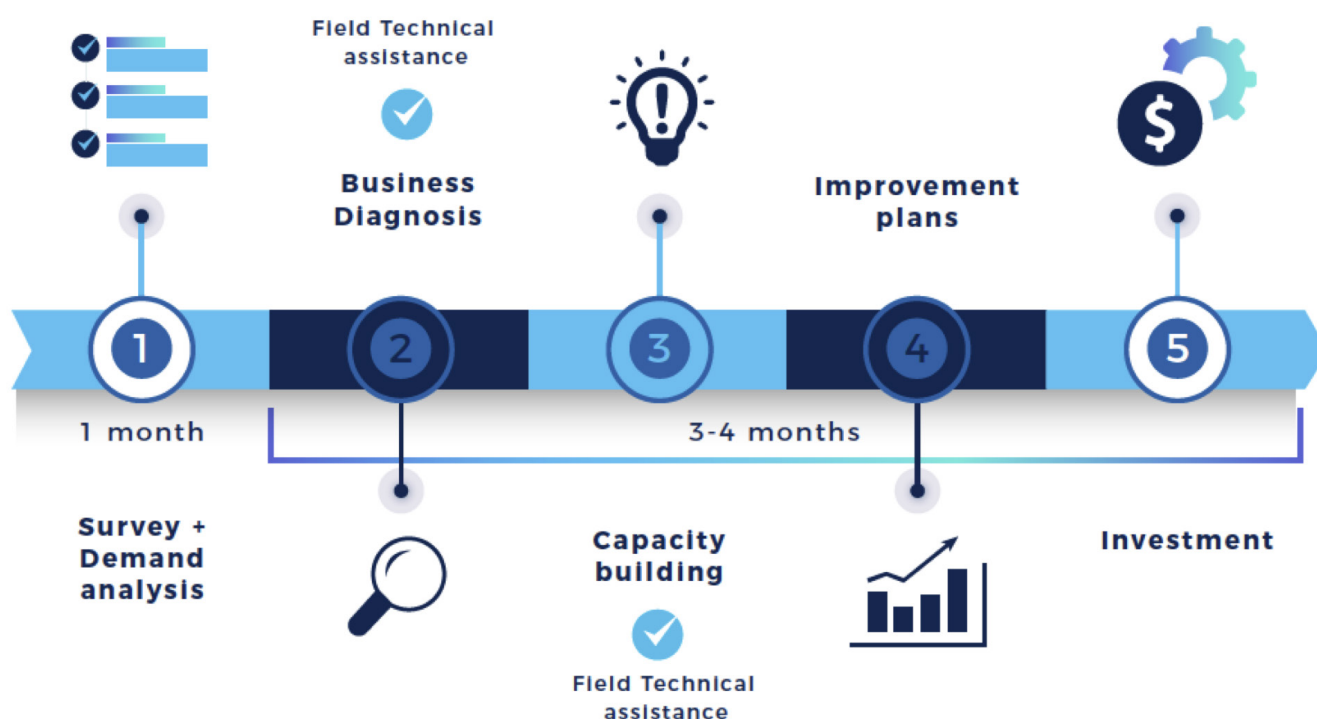
work collectively stimulated beneficiaries, helping them overcome hardship and to work towards the common goal of recovering their livelihoods.

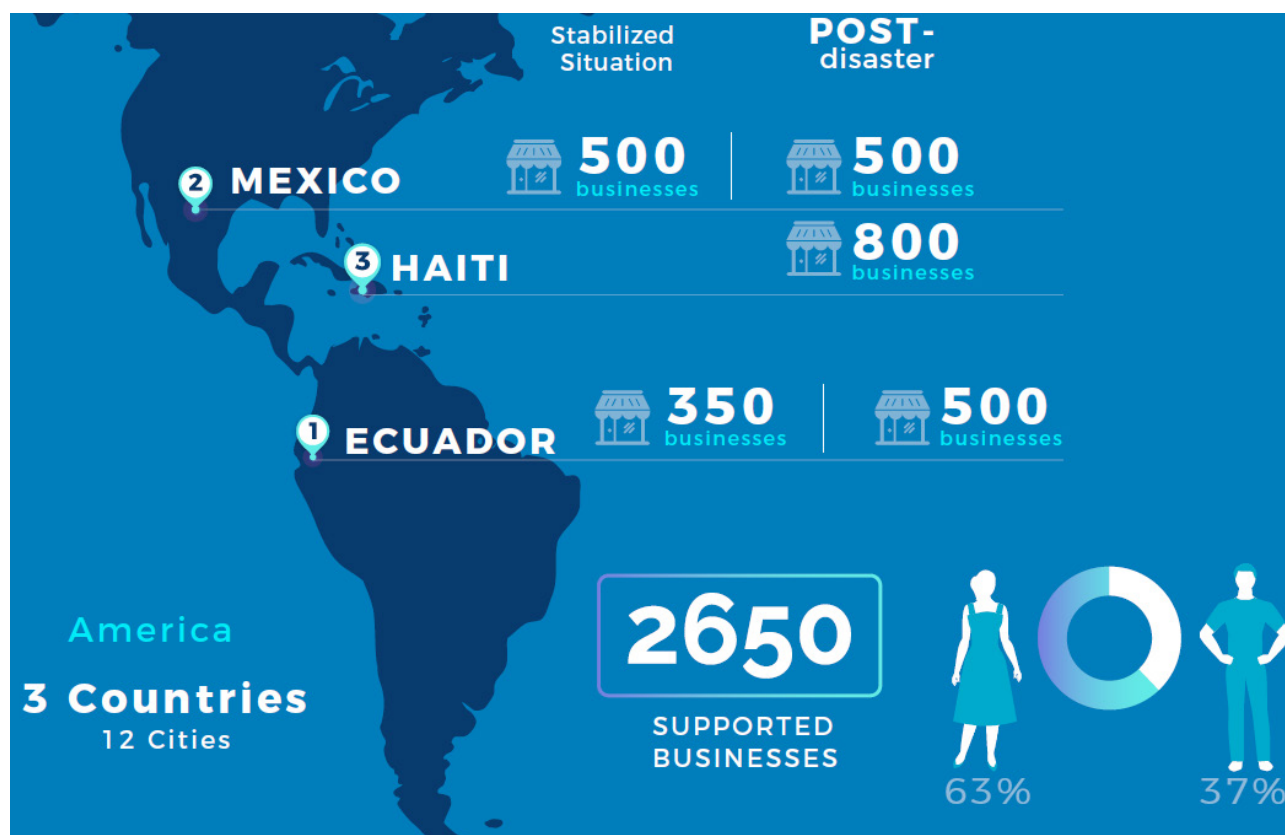
THE IN MOTION METHODOLOGY

Since its introduction in Ecuador, UNDP has developed a methodology to plan and implement an effective *In Motion* Programme in post-disaster situations. The methodology involves the following four steps:

1. Conducting a Survey and Market Analysis

- a) Survey: undertake a survey of the socio-economic conditions in disaster-affected areas, to identify the number of businesses that were damaged or destroyed and the potential number of beneficiaries. The survey can be undertaken with support from local universities, for example to recruit organize and train students or interns. Survey questionnaires and datasheets are available for conducting the survey in a digital format, and the information can be collected on tablets. Using the application ODK COLLECT, which is an open-source data management software,
- b) Market analysis: undertaken to understand supply and demand in local markets arising from the post-disaster situation, and that can become a business opportunity. It includes identifying the types of businesses operating in the area, the needs or gaps as well as the potential business opportunities. In addition, businesses that can meet the local demand for production and sales are identified, including the resources available locally to promote or support enterprises and services along the value chain (capital investment/equipment). This activity is done in parallel to the survey.
- c) Business baseline: to understand the post-disaster situation of local business affected, in relation to their operations, market, finances, legal arrangements, family and gender concerns. The business baseline helps to identify the obstacles and challenges faced, and to determine the most urgent actions needed to stabilize and recovery operations in the shortest time possible.





The results help to inform the design of an action plan, typically for the first three months intended for implementing low-cost, high-impact actions.

2. Capacity-building:

To train business owners and provide them with the skills necessary to meet market demands. The *In Motion* Programme has developed a business training package based on the 'learn by doing' approach, with sessions that cover the following practical skills sets:

- Renewal of the business model
- Quality workplace organization
- Sales and marketing
- Customer service
- Finance and basic administration
- Subject matters that are specific to each business

3. Improvement plans:

Personalized technical assistance is provided in the workplace to business owners, to assist them to implement a customized improvement plan that addresses the main obstacles and challenges, reinforces the skills acquired during trainings, and includes branding and advertising. The programme's technical assistance empowers business owners because improvements are visible within a short timeframe and turn into quick wins such as increased sales.

4. Investments:

Providing basic infrastructure, equipment and other assets damaged by the disaster in order to re-start operations or supporting business owners to develop a financing plan to help purchase the necessary resources.

REPLICATING THE *IN MOTION* PROGRAMME

Since its development, the *In Motion* programme has been used to support recovery in Haiti and Mexico. UNDP has developed a ready-to-use Toolkit with practical guides and tools that can be deployed and implemented in other post-disaster recovery programmes. As such it can be used to re-establish the livelihoods of disaster-affected micro-enterprises in the shortest possible time.

1. The Management Requirements

The program is designed to be implemented in partnership with a local partner, usually a municipality or prefecture concerned with the economic reactivation of businesses within their jurisdiction. The following is recommended to implement the *In Motion* programme:

UNDP Officer: A UNDP technical expert responsible for coordinating and implementing the programme along with the selected local partner (the implementing organization).

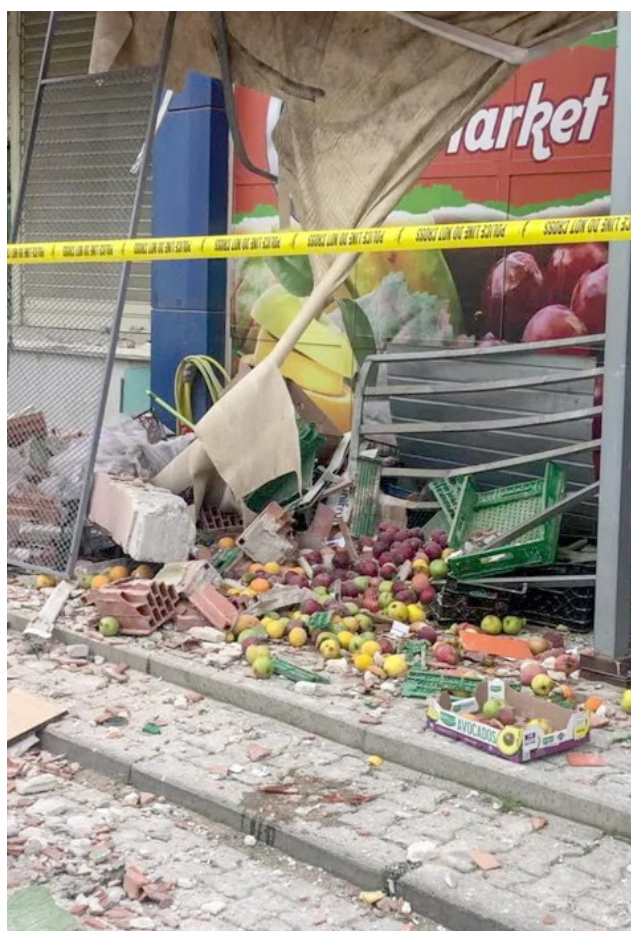
Partner Coordinator: A professional appointed by the implementing partner responsible for direct coordination. This is usually a government agency at the central or local level working directly on socioeconomic development projects in the disaster-affected area.

Business Consultants and Designers: professionals who will be responsible for executing the program in the target area, who has successfully completed the UNDP training and accreditation process.

2. The *In Motion* Toolkit

The *In Motion* Toolkit consists of guides, templates, videos and other useful resources that are already available and can be used in future post-disaster scenarios to promote livelihood recovery. These are divided into the following three sets of tools:

Administrative and Programme Management Documents: includes documents that support program administration and management, such as terms of reference for specific



jobs, sample of contracts, and templates for end of project reports, among other.

Methodology Tools: includes the In Motion methodology and guidelines, capacity-building training modules,

Communication Tools: contains tools relating to program identity, such as program brand handbook, videos on the In Motion experience in Ecuador, a brochure with infographics and success stories.

RELEVANCE TO THE PRACTICE OF RECOVERY

People's livelihoods are often directly affected by disasters, including the large number of micro and small enterprises that work in the informal sector. Disasters destroy their infrastructure, equipment and other productive assets. They also disrupt local economic activity, including supply and demand, markets, and the value chain.

One of the first critical recovery measures needed is to restore people's own income-generating capacity and

enable them once again to support their families. Yet, designing a livelihoods recovery strategy takes time in a context where urgent measures are needed. Like all projects, they have to follow burdensome administrative and management procedures. The In Motion Programme offers a ready-to-use methodology and toolkit that is available to fast-track local economic recovery. In addition, UNDP can help mobilize the technical expertise needed to design, plan and implement an In Motion Programme, with consultants that have been trained and accredited.

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ECUADOR

GOOD PRACTICE 7: Strengthening Recovery and Adapting the PDNA Methodology

Practice area: Organizational, Technical, Managerial

SUMMARY

Ecuador embarked in 2018-19 on a process of strengthening the country's national capacity in post-disaster recovery, including the adaptation of the PDNA methodology, under the leadership of the National Risk Management and Emergency Service (SNGRE)¹ with UNDP support. Its priorities focused on 1) establishing a Directorate for Recovery within the SNGRE with the necessary strategic plan and provisions to carry out its new mandate, 2) officially adopting the PDNA methodology through a government resolution, and 3) adapting the methodology to the particular context and needs of the country. The steps taken and the products achieved were strategic in ensuring a successful institutionalization process.

DESCRIPTION

THE NATIONAL CONTEXT

Ecuador is a country exposed to a wide range of natural hazards, with the most recurrent being floods, landslides, earthquakes, and volcanic activity. It is therefore essential to have procedures and clear institutional structures to assess the impact and define strategies that promote resilient post-disaster recovery. It is equally important to government officials trained to conduct post-disaster assessments and plan recovery. This good practice focuses on the institutionalization of the methodology for post-disaster needs assessments (PDNA) into Ecuador's national context.

In Ecuador, 2018 marked the 10-year anniversary of the heavy flooding that was triggered by the El Niño event in 2008, which caused nearly USD \$2.9 billion in damage and losses. In addition, the country's northern coast was struck by a 7.8 magnitude earthquake in 2016. For these and other disaster events, the country conducted assessments and developed reconstruction plans, but largely in a responsive manner, with varying standards, and without clear procedures or an agreed methodology. The recent earthquake revealed limitations in some of its recovery policies and processes and called for a review of lessons learned.

The result was a set of initiatives that were identified as priorities to strengthen Ecuador's national capacity in post-disaster recovery, including the adaptation of

the PDNA, to be implemented under the leadership of the National Risk Management and Emergency Service (SNGRE)² with support from UNDP. The SNGRE's National Committee is chaired by the Vice President, and the Ministers of Finance, Planning, Housing and National Defense. This Committee is in charge of approving all policies related to disaster risk management and recovery. They will be in charge of adopting the PDNA methodology.

THE PROCESS FOR STRENGTHENING RECOVERY AND ADAPTING THE PDNA METHODOLOGY

The SNGRE led three important initiatives that helped to set the stage for improving recovery processes and institutionalizing the PDNA in the country:

- 1) Created a Directorate for Recovery within its structure in 2018, the first of its kind in the country and an important step in adopting a longer-term vision that goes beyond the humanitarian phase;
- 2) Designed the institutional structure of the Directorate for Recovery including its vision, mission, strategic objectives, attributes and main products. Also developed its first national strategy 2019-2030 to strengthen national capacities in post-disaster recovery;
- 3) Officially adopted the PDNA methodology through resolution, making obligatory its use by sector ministries, the private sector and all institutions that participate in the assessment process. The resolution is now undergoing a final revision and is expected to be approved in the coming months.

With the foundation set by these three strategic decisions, the SNGRE proceeded to adapt the PDNA methodology that was originally developed in 2013 by the United Nations, the World Bank and the European Union, to establish a standard method for conducting needs assessments worldwide. After applying the methodology successfully in numerous countries to support governments in the aftermath of disasters, UNDP turned to supporting countries to adapt the PDNA methodology to the national context of countries interested in institutionalizing it for future use.

In Ecuador the adaptation of the PDNA methodology focused on four objectives:

¹ Created in 2018 to replace the former Secretaría Nacional de Gestión de Riesgos.

² Created in 2018 to replace the former Secretaría Nacional de Gestión de Riesgos.

- 1) Adaptation of the Volume A of the PDNA Guide developed at the international level, which in Ecuador outlined the common minimum standards and approach to be followed, including the guiding principles, the process and method to be followed;
- 2) The protocol for activating a PDNA in the country, under the leadership of the inter-institutional National Committee of the SNGRE. The protocol outlines, for example, the formation and responsibilities of a PDNA Technical Committee that is represented by the head of the SNGRE, the Minister of Economy and Finance, and the Technical Secretary of the Ministry of Planning;
- 3) The procedures to be followed by sector ministries once the PDNA is activated by the National Committee;
- 4) Adaptation of five sector guidelines: agriculture, health, housing, education and transport.

Having these four products will help to ensure that a standard and agreed set of protocols and procedures are followed in the aftermath of disasters, with clear roles and responsibilities for all participating institutions. It also ensures the use of a standard methodology for sector assessments which are comprehensive and follow international best practices, for example by including the calculation of both damage and losses and by guiding the use of assessment results to inform sector recovery plans.

MAIN CRITERIA FOR SUCCESS

The following were identified as the key decisions, processes and steps taken in Ecuador to ensure a successful institutionalization process:

- A government-led process that empowered the SNGRE to exercise its leadership;
- The adaptation of the PDNA was not an isolated or separate initiative, but rather it was part of a wider process in Ecuador to strengthen the SNGRE and particularly post-disaster recovery in the country;
- The commitment and participation of high level government officials, who had been involved in previous disaster responses and recovery processes and therefore understood the importance of having stronger national capacities and minimum standards;
- The adaptation of the PDNA was done in the context of an actual emergency that took place in 2018-19, as

a result of heavy rains and flooding in the country. As such it was a real case scenario that made the exercise a realistic one, revealing the challenges that are typically faced in the activation and implementation of a PDNA, rather than based on a separate simulation exercise;

- The protocol for activating the PDNA was defined through a consultative process involving two workshops with the participation of a technical team from the SNGRE. In addition, the final protocol was drafted as a resolution, as needed for its approval by the SNGRE's National Committee;
- The participation of the relevant sector ministries in adapting the sector guidelines, including all the internal players that typically have to participate in a PDNA, for example technical government officials involved in sector planning, risk reduction and post-disaster recovery. The specific participants varied according to the structure and procedures of each ministry;
- The technical support of a senior consultant to support the SNGRE, guiding and coordinating the overall process, as well as technical sector experts supporting line ministries to adapt the sector assessment guidelines.

RELEVANCE TO THE PRACTICE OF RECOVERY

While disasters can be unexpected events that challenge governments to respond effectively, it is possible and necessary to establish protocols, minimum standards, procedures and methodologies to ensure that assessments and recovery processes are efficient and effective to meet the needs of the affected population and the country as a whole. International best practices can serve as a platform and provide examples of mechanisms and tools that can be applied. Yet these can be particularly useful when they are adapted to the specific context and needs of a country, when they are led by government authorities, and when they follow an approach that ensures participation and ownership.

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GUATEMALA

GOOD PRACTICE 8: The Activation of the National Recovery Framework in Guatemala's Response to the Eruption of the Volcano of Fire

PRACTICE AREA: Managerial and Technical

SUMMARY

The eruption of Guatemala's Volcano of Fire in June 2018 brought explosions, smoke and ashes, and hot lava to surrounding communities near the country's capital. The Government of Guatemala declared a state of emergency and activated its National Framework for Recovery, developed three years earlier in 2015. The framework was instrumental in guiding a coordinated recovery process under a common set of principles and arrangements. The existence of the framework prior to the eruption proved to be critical in addressing the disorder, tension and frustration that emerged initially, and to arrest the social and institutional crisis that began in the immediate aftermath of the volcanic eruption.

DESCRIPTION

THE CONTEXT AND NEED FOR A RECOVERY FRAMEWORK

Guatemala's Volcano of Fire (Volcan de Fuego) erupted on June 3rd, 2018 generating strong explosions, clouds of smoke and ashes, and a stream of hot lava. Located 40 kilometers from the country's capital, Guatemala City, the volcano's eruption affected several municipalities in the surrounding Departments of Escuintla, Chimaltenango (Yepocapa) and Sacatepéquez (Alotenango). The communities of San Miguel Los Lotes and El Rodeo in the municipality of Escuintla were covered by deep hot ash and pyroclastic flows. A total of 1.7 million people were affected as well as agricultural land, businesses and tourism, which are the mainstay of the local economy. On the same day the Government of Guatemala declared a state of emergency.

The volcano's sudden eruption and impact caused disorder, tension and frustration among the communities affected, and the capacity of national and international institutions was overwhelmed, causing a social and institutional crisis in the immediate aftermath.

Given the difficult context, the country's National Framework for Recovery (NFR) was activated by the recovery cluster led by the National Coordinator for Disaster Reduction (SECONRED) and UNDP, to re-establish confidence, foster synergies and coordination among government institutions, non-governmental organizations, civil society and the international community, and to guide the recovery process. In

particular, the NFR provided much needed guidance in the following areas:

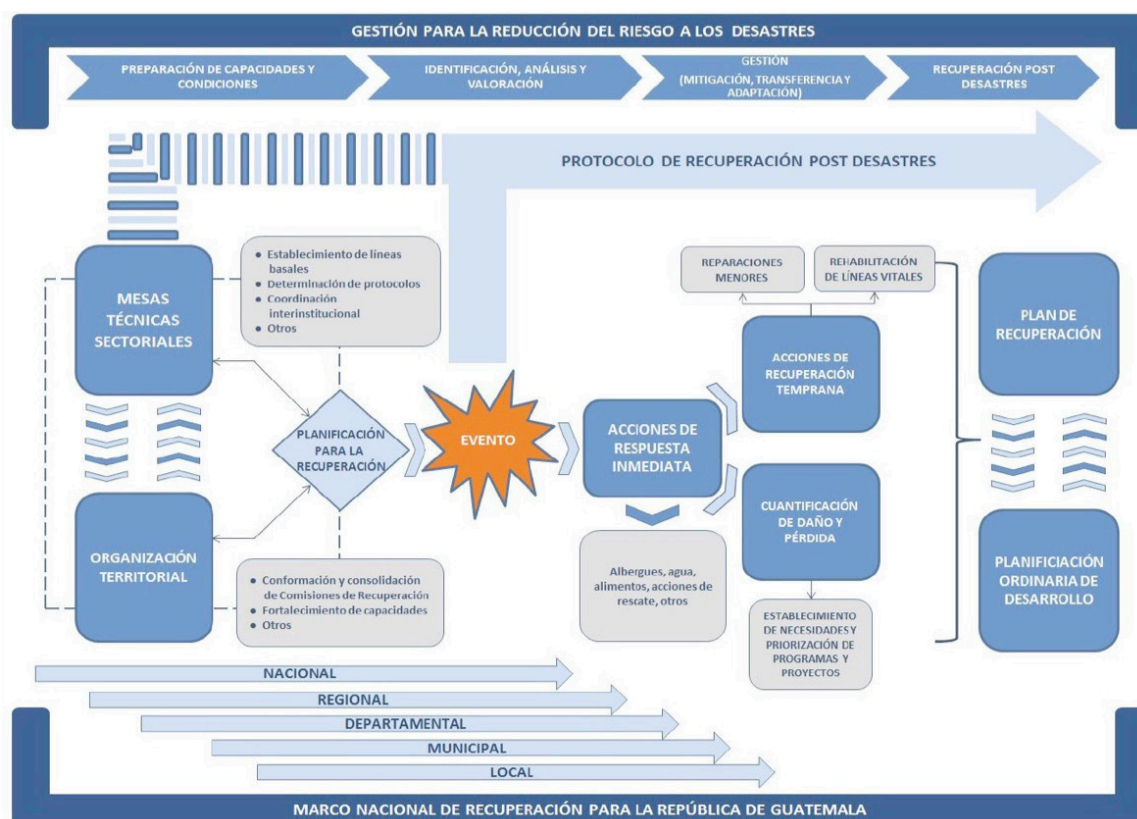
- The ownership of the recovery process by the central and local government
- Improvement in the mechanisms for information exchange
- Participatory planning
- An increase in the efficiency of operations
- The strengthening of local capacities
- The design of risk reduction measures and conflict prevention

GUATEMALA'S NATIONAL FRAMEWORK FOR RECOVERY

In 2015, the SECONRED developed a National Framework for Recovery in line with Guatemala's legal and policy framework on disaster risk reduction. The NFR provides the general guidelines for planning, implementing and monitoring post-disaster recovery processes in the country. More specifically, it lays out the principles and standards on the following core elements:

- 1) The principles that should be adopted to guide recovery, including equality, equity, freedom, the right to development, decentralization, and priority to special population groups.
- 2) The legal and policy framework that sustains the NRF and that should guide all recovery processes, including national, regional and global legislation, policies and agreements.
- 3) The main government actors that have a role to play in recovery processes at local, municipal, departmental and national levels, as well as the role and responsibilities of all main government actors.
- 4) The inter-institutional mechanisms and platforms that should be activated or established at all levels to ensure that recovery processes are coordinated and benefit from existing agreements and partnerships.
- 5) The sectors of intervention and the institutional and coordination mechanisms that should be followed for each sector, including the responsibilities of each sector lead in relation to recovery.
- 6) The cross-cutting themes that should be mainstreamed into recovery plans, such as disaster

Summary of the National Recovery Framework



risk reduction, culture, gender, children and youth, people with disabilities, the environment and climate variability.

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RELEVANCE TO THE PRACTICE OF RECOVERY

Given that the eruption of the Volcano of Fire produced disorder, tension and frustration, the activation and use of the National Framework for Recovery proved to be critical to re-align efforts under a common coordination platform, clarify the roles and responsibilities of all actors, and guide the planning process based on common principles and operational standards. The existence of the National Framework for Recovery prior to the volcanic eruption was an added advantage, without which the recovery process may not have had the same effectiveness.

RESOURCES

Guatemala's National Recovery Framework

<https://conred.gob.gt/site/documentos/proyectonacion/herr/MARCONACIONALDERECUPERACION.pdf>

A photograph of a destroyed building in Haiti, likely after an earthquake. The building is a multi-story concrete structure that has been severely damaged, with its upper floors partially collapsed and its facade crumbling. Debris, including bricks, concrete chunks, and twisted metal, is scattered across the ground in the foreground. Two men are walking away from the camera on a dirt path that cuts through the wreckage. The man on the left is wearing a striped shirt and dark pants, while the man on the right is wearing a patterned shirt and shorts. In the background, other damaged buildings and more debris are visible under a clear sky. A blue diamond-shaped graphic is overlaid on the left side of the image.

HAITI

GOOD PRACTICE 9: Reducing Disaster Risks in Haiti

PRACTICE AREA: Organizational, Technical and Managerial

SUMMARY

The earthquake that in 2010 destroyed large sections of Port au Prince, was subsequently followed by several other large-scale disasters over the following years. They served as a stark reminder of the country's high exposure to natural hazards and the significant need to invest in measures that help reduce risk and vulnerability in the country to reduce the human and material impact of future events. Since the earthquake UNDP has doubled its efforts to strengthen Haiti's capacity in disaster risk reduction, efforts that would later fall in line with the 2015 Sendai Framework for Disaster Risk Reduction and with the Sustainable Development Goals (SDGs), specifically Objective 11 which aims to ensure that cities and human settlements are safer and more resilient.

DESCRIPTION

Haiti is a country prone to multiple natural hazards. Since 1909 to the present day, the country was struck by 40 hurricanes and storms, 47 floods, 7 droughts and 2 earthquakes. More recently, Haiti has endured three large-scale disasters: Tropical Storm Jeanne in 2004 unleashed torrential rains on north-eastern Haiti, triggering devastating floods and mudslides in Gonaïves, the 7-magnitude earthquake nearly demolished its capital city in 2010, and category 4 Hurricane Matthew

in 2016 struck the western department of Grand'Anse. Other disasters affected Haiti during the same period, and though their impact was not as large-scale they still left destruction behind, such as Hurricane Sandy and Tropical Storm Isaac in 2012.

These events highlight the country's exposure to risk, but vulnerability is part of the problem. Almost 96% of the population is vulnerable to at least two major hazards, regardless of their social background and geographic location. The Human Development Index in Haiti is the lowest in the western hemisphere, nearly 78% of the population lives below the absolute poverty line and 58% live in extreme poverty.

The particular challenges facing Haiti calls for concerted and strategic investments in reducing underlying risks and vulnerabilities. Over the past 10 years, the UNDP - with support from its partners - has worked with the Haitian government to develop strategic and operational tools based on improved scientific and technical knowledge.

A NATIONAL SEISMIC RISK ROADMAP

Following the Haitian earthquake, which took the lives of over 220,000 people and caused \$ 7.8 billion in damage and losses, UNDP supported the Government of Haiti to develop a Roadmap for Earthquake Risk Reduction

Examples of some of the major disasters in Haiti



which outlines a national strategy to reduce the human and material impact of future earthquakes, based on four main lines of action: monitoring and threat assessment, training/education/awareness-raising, reducing risk factors, and preparation.

Renowned scientific and technical advisers in the field of seismic risk were brought to Haiti to support the development of this roadmap and specific tools, such as seismic micro-zoning in Port au Prince and the 4 main cities of Greater North.

The seismic roadmap developed served as a backdrop for strengthening coordination in the country. A new institutional platform was established –The Scientific and Technical Coordination on Seismic and Tsunami Risks (CST-RST) to oversee and coordinate the implementation of the seismic roadmap including the technical studies, and to ensure quality control. It brought together the necessary institutions and specialists with technical and scientific expertise under a harmonized and multi-sectoral coordination body, responsible also for coordinating with foreign scientific and academic institutions.

In 2016, the UNDP in collaboration with other partners (EU, UNISDR and USAID) accompanied the Haitian government in the organization of a Caribbean forum on seismic risks in urban areas. Experts and technicians discussed seismic risks in the region and agreed to develop a regional roadmap for the Caribbean on seismic risk management.

SEISMIC MICRO-ZONING

To reduce risks in Haiti, reconstruction and urban planning must be based on a quantitative assessment of the risks present in a given location, especially for seismic risk, which varies greatly depending on the type of soil and local topography. UNDP helped Haiti to develop its first seismic micro-zonation map, produced for the metropolitan region of Port au Prince. Seismic micro-zoning identifies zones that are exposed to tremors and assesses the response of the ground to these, based on a study of land movements and soil liquefaction to produce a risk classification by sector according to their risk level.

The zoning was done by a group of international scientists in collaboration with the Mines and Energy Office and the National Laboratory of Building and Public Works. Local geologists and geo-technicians were also trained to transfer skills and strengthen local technical capacities in the process. The results of the micro-zoning mapping exercise helped to determine the most appropriate

methods for construction according to the conditions of the soil or terrain and their responses to seismic events.

A similar micro-zoning exercise was subsequently conducted in five other cities in the Grand North (Cap-Haïtien, Fort-Liberté, Port-de-Paix, Ouanaminthe and Saint-Louis-du-Nord) in an effort to reduce seismic risk in other regions of Haiti that are also prone to earthquakes. The findings indicated that the soils in these locations were likely to amplify damage if a major earthquake occurred, and that many buildings could not withstand a major earthquake in Cap-Haïtien and Fort-Liberté. In its concluding report, the UNDP recommended that buildings be reinforced to meet the needed construction standards to minimize the impact of a potential future event.

IMPROVING HAITI'S CAPACITY IN SEISMIC MONITORING

Before 2010, Haiti did not have the infrastructure to process seismic data. Although seismic stations were installed with support from the U.S. Geological Survey, the Geological Survey of Canada and other partners, the country needed a seismic monitoring network. To this end, UNDP supported the Bureau of Mines and Energy and the State University of Haiti to establish the Technical Seismology Unit (UTS), a seismic monitoring laboratory in charge of operating the seismological network, acquiring data and carrying out research on seismology. The UTS also received support with training and technical assistance, to develop plans for its operation and maintenance, and to disseminate information bulletins for relevant authorities and the population.

THE METHODOLOGICAL GUIDE FOR REDUCING RISKS IN URBAN AREAS

Following the earthquake in 2010, UNDP supported the development of Risk Prevention Plans which identified the risks affecting 8 priority neighborhoods of Port au Prince and the recommended zoning in these, to be used in urban planning to prevent or reduce the human and economic consequences of future disasters, or avoid rebuilding vulnerability.

Subsequently UNDP helped the Haitian government to formulate a "Methodological Guide for Reducing Risks in Haiti's Urban Zones", establishing the national standards for risk reduction in urban planning. This Methodological Guide introduced the tools and methods used to characterize and manage natural risks. It contains

guidance on Prevention, Protection, Preparedness, Information and Awareness and Training to guide each step in the implementation of this process.

The Guide identifies the natural hazards that have the most significant economic and social consequences in the country, namely earthquakes, floods and storm water runoff, landslides, tsunami and coastal submersion, hurricanes and storms.

Next the Guide assessed the vulnerabilities potentially subject to these hazards, such as residential and commercial buildings and infrastructure such as roads. These vulnerabilities were mapped and cross-referenced with the hazard maps defined previously. The results would serve to inform zoning and land-use regulations, and town planning in urban areas, including new construction projects, adapted to each urban area studied.

MULTI-RISK MAPPING

UNDP collaborated with the Haitian government to develop multi-risk maps, which provide a detailed scientific and technical analysis of the natural hazards to which a given territory is exposed (hurricanes, storms, earthquakes, floods, tsunami and coastal submersion, among other). A total of 30 risk maps were produced: 5 departmental seismic maps, 5 local seismic maps, 5 tsunami hazard maps, and 5 maps of random ground movements in the departments of Grand'Anse, North-West, South, Nippes and Gros Morne arrondissement in Artibonite. In these same departments, and in relation to hydro meteorological risks, 5 maps were developed on flood hazards and 5 additional maps on marine flood hazards due to cyclones.

VOLUNTEER BRIGADES

Recognizing the importance of volunteers as first responders in an emergency, UNDP supported the Directorate of Civil Protection in Haiti to strengthen its national network as well as civil society at community level in prevention, risk management and disaster response, in collaboration with the Haitian and French Red Cross.

Since 2011, volunteer brigades for Civil Protection were established, 3,000 volunteers were trained in emergency rescue and first aid, and 300 first aid kits were distributed to all communes in Haiti. In addition, a total of 1,499 crossing guards obtained their first aid



certificate from the Haitian Red Cross and 267 brigade leaders were trained to increase their leadership and management capacity. These volunteer brigades have become the decentralized and operational arm of Haiti's civil protection and community committees for risk and disaster management.

RELEVANCE TO THE PRACTICE OF RECOVERY

In a country such as Haiti that is prone to multiple natural hazards and frequently confronts disasters, it is necessary to strengthen its capacity to reduce risks and vulnerabilities. There are numerous strategies, methodologies and technical tools that can be adopted for this purpose. In Haiti, the improvement of seismic micro-zoning, seismic risk monitoring, and the development of a guide to reduce urban risk and of multi-risk maps are practical examples of methods that can be developed to reduce a country's vulnerability to disasters. In addition, they are relatively low-cost investments that help to reduce the human and material impact of future hazards, particularly when compared to the high cost of humanitarian and recovery programmes. These efforts also support commitments to the 2015 Sendai Framework for Disaster Risk Reduction and with the Sustainable Development Goals (SDGs), specifically Objective 11, which aims to ensure that cities and human settlements are safer and more resilient.

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MEXICO

GOOD PRACTICE 10: Post-election Earthquake Recovery in Mexico City

PRACTICE AREA: Legal, Organizational and Managerial

SUMMARY

Mexico was struck by two earthquakes in September 2017, coinciding with an electoral year. The recovery and reconstruction process therefore began with an outgoing administration and transitioned through to the incoming government. In Mexico City, the most affected area, the recovery process took on a new direction under the leadership of the newly elected government, with renewed legal, policy and programme objectives that strengthened the recovery and reconstruction of Mexico City.

DESCRIPTION

THE EARTHQUAKE AND CONTEXT

Two earthquakes struck Mexico on the 7th and 19th of September 2017, causing destruction across 8 states and particularly affecting Mexico City. Nearly 183,000 homes were affected, 10,470 schools, 265 health facilities, and 12,508 businesses.³

When the earthquakes occurred, Mexico was in the midst of an electoral campaign, and just over one year later the newly elected president took office on December 2018. In Mexico City, the new administration adopted a re-newed approach to reconstruction, taking several important steps to strengthen the recovery response.

KEY STEPS IN PLANNING THE RECONSTRUCTION PROCESS

The new measures adopted by the government have proven to be particularly effective in improving the recovery process in Mexico City and supporting the affected population. Three key legal, policy and programmatic measures taken are presented below.

The Legal and Governance Framework

The new government administration in Mexico City set the stage for recovery and reconstruction by introducing a legal and governance framework with the following key elements:

- 1) Updated the Reconstruction Law to facilitate recovery and to better serve the population affected. The law

provided the legal and policy framework needed to ensure an effective recovery response. It called for a new census or survey of the population affected, the development of a plan for reconstruction, an inter-institutional coordination mechanism to lead and implement reconstruction, the establishment of a one-stop government office to serve the population affected, among other measures.

- 2) Laid out the core principles to guide the recovery and reconstruction process in the new legislation, which included: respect for human dignity, efficiency and effectiveness, transparency, accountability, the participation of civil society, inclusion, impartiality, accessibility and gender equity.
- 3) Developed an Integrated Plan for the Reconstruction of Mexico City. The Plan approaches reconstruction as an integrated process that includes, in addition to the physical reconstruction of infrastructure, respect for the human rights of those affected, including their right to safe housing, addressing their psycho-social needs, and prioritizing vulnerable neighborhoods.
- 4) Established the governance framework and inter-institutional coordination mechanism to support the reconstruction process with clear roles and responsibilities. This included the establishment of the following governing bodies among other:
 - A Reconstruction Commission to have oversight, coordinate, implement and monitor the city's plan for reconstruction;
 - A Consultative Council represented by the government offices in Mexico City involved in the reconstruction process as well as by members of affected communities;
 - A Technical Committee represented by chambers and schools to monitor reconstruction, participate in government decision-making and resolve problems and challenges that arise;
 - A Legal Committee to manage and resolve issues relating to property ownership, and represented by the Justice Tribunal, the Center for Justice, the School of Notaries, the Council for Legal Services, and the Public Registry of Property;
 - A Committee on Transparency to ensure accountability;
 - Sub-commissioners responsible for coordinating each of the five sectors of intervention, providing technical, legal and fiscal assistance and ensuring transparency;

- Collegiate of Support, linking with academic institutions such as the School of Architects to provide technical support.
- 9) Called for annual monitoring surveys of satisfaction to assess the level of satisfaction with the recovery process among the affected population.

Participation, Communication and Outreach

The following policies and measures were adopted to ensure the participation of earthquake-affected communities and civil society, as well as to establish communication channels and outreach throughout the recovery process.

- 1) Conducted a survey to identify the real number of housing units and families affected by the earthquake. The survey found that 17,770 people were affected, compared to the previous estimate of 7,000 reported by the former administration.
- 2) Organized the reconstruction of Mexico City into six zones and 195 blocks, with 30 government centers to facilitate the process, provide access points in the vicinity of neighborhoods affected, and ensure close monitoring.
- 3) Setup neighborhood offices in the main affected areas, designed as a one-stop government help center to serve the population affected and facilitate their access to all government services needed in relation to the reconstruction process. The offices brought together the services of the Ministries of Public Works and Services, Urban Development and Housing, Risk Management and Civil Protection, among other.
- 4) Established a one-stop digital platform to facilitate all transactions online related to reconstruction.
- 5) Setup a telephone line to provide information and orientation to the population affected.
- 6) Setup Citizen observatories represented by civil society organizations and the affected population to monitor and supervise the reconstruction process.
- 7) Organized public assemblies and weekly meetings to consult with and inform the affected population, and to follow up on local recovery activities.
- 8) Organized cultural and artistic events, 900 in total, to promote dialogue and community organization and development.

Financial Management, Transparency and Accountability

In order to facilitate fund-raising, financial management, transparency and accountability the government introduced the following measures:

- 1) Mexico City's Legislative Assembly created the Fund for Reconstruction, assigning its management to the Reconstruction Commission.
- 2) Setup a Trust Fund for Reconstruction to manage funding received from the federal government, the City of Mexico and the private sector.
- 3) Established a Committee on Transparency represented by academic institutions and civil society to ensure accountability.
- 4) Introduced an online platform to facilitate the public's access to information on project implementation, financial resources available and spending, as well as social media accounts on twitter and Facebook.
- 5) Published all new legislation, procedures, recovery programs or projects, and changes in the reconstruction plan in the Official Gazette of Mexico City to inform the public and ensure transparency.

RELEVANCE TO THE PRACTICE OF RECOVERY

Post-disaster recovery efforts often face challenges when they occur in parallel to electoral processes and changes in government administration. They can cause confusion, misinformation, disruptions or delays in the delivery of recovery programmes. In Mexico city, the newly elected government quickly introduced new legislation, policies and measures that serve as an example of how government transitions can maintain continuity in the recovery process while also improving the mechanisms for service delivery to the affected population, including the adoption of principles and measures that reflect good practice such as strong coordination mechanisms, citizen participation and transparent financial management systems.

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RESOURCES

Website on the reconstruction of Mexico City
<https://reconstruccion.cdmx.gob.mx/>

Website on transparency
https://nosotrxs.org/reconstruccion_transparente/

Facebook: <https://www.facebook.com/ReconstruccionCDMX/>
Twitter: https://twitter.com/Comision_CDMX

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Secretaria de Desarrollo Agrario, Territorial Y Urbano. 26 de marzo 2019. "Acuerdo por el que se emiten los Lineamientos Generales del Programa Nacional de Reconstrucción para el ejercicio fiscal 2019".



PERU

GOOD PRACTICE 11: Local Economic Recovery for Women Artisans in Piura

PRACTICE AREA: Managerial and Technical

SUMMARY

In the aftermath of the 2017 floods in Peru, UNDP supported the reactivation of micro businesses owned by women artisans in Peru's northeastern Piura region. This pilot initiative "Tejiendo Futuro" (Sowing Future) was an early recovery effort that helped bridge immediate humanitarian support with longer-term recovery and sustainable development. In addition to reactivating livelihoods, the project built the capacity of these micro businesses, helped to find new markets for their handmade hats, to promote the branding of their crafts, and to reduce their exposure to future risk. This pilot initiative was subsequently replicated in other flood-affected communities to support local economic recovery based on lessons learned.

DESCRIPTION

The 2017 floods caused by the El Niño event in Peru affected over 427,000 people in Piura, a region in northeastern Peru. About 70% of local artisans who produce handmade hats in the District of Catacaos lost their income as a result of a 90% reduction in sales. Aiming to support local economic recovery, UNDP mobilized public and private support for these local artisans, to recover and strengthen their micro businesses.

Under the leadership of the government and in collaboration with UN Volunteers, the Energy Network of Peru and other private sector partners, UNDP supported 250 micro-businesses operated by women in five villages in Catacaos who were affected by the floods.

This pilot initiative "Tejiendo Futuro" (Sowing Future) was an early recovery effort that helped bridge immediate humanitarian support with longer-term recovery and sustainable development.

KEY STRATEGIES TO SUPPORT LOCAL ECONOMIC RECOVERY

Among the several interventions implemented, this practice focuses in particular on four key strategic measures: 1) Early recovery measures of micro businesses, 2) capacity building, marketing and branding artisans from Catacaos, 3) disaster preparedness and risk reduction, and 4) Replication and Up-scaling of the Project.

1. Early Recovery Measures of micro businesses

The following early and practical measures were introduced to support the early recovery of micro businesses.



Foto: Mónica Suárez Galindo/ PNUD Perú

- a) Undertook a needs assessment, following the methodology of the Post Disaster Needs Assessment Guidelines, to assess the impact of the floods on local artisans and businesses and identify their recovery needs;
- b) With the support from the corporate volunteers of the Energy Network of Peru, a training was developed with the participation of artisans affected by the damage caused by the floods. This workshop was prepared following the build-back-better approach to ensure it is resilient to future floods;
- c) Provided initial seed funding to promote the rapid recovery of their businesses and reactivate the production of handmade hats among artisans.

2) Capacity building, Marketing and Branding Artisans from Catacaos

A broad value chain approach was adopted to strengthen the capacity of local artisans, forging partnerships with the private sector, providing training, identifying new markets and branding their handmade hats.

- a) Organized capacity building training to develop the business skills of local artisans through the Ministry of Employment;
- b) Promoted the participation of artisans in the Great Women initiative of Belcorp, which aims to strengthen the leadership role and capacities of vulnerable women through education and training;
- c) Launched a communication campaign with the support of seven key public figures in Peru who participated as project ambassadors. The initiative promoted the artisans through social media and videos with human interest stories;
- d) Launched a marketing campaign to promote the sale of handmade hats, in collaboration with the corporate volunteers of the Energy Network of Peru;
- e) Forged links between the associations of artisans and six national markets including Peruvian shops such as Soil & Co and Qatakuy;
- f) Organized three regional fairs to promote the artisans of Piura, in collaboration with the Regional Directorate of Foreign Trade and Tourism.

3) Disaster Preparedness and Risk Reduction

A Business Continuity Plan was developed to better prepare local artisans for future disasters and to reduce their exposure to risks. This was achieved through the following three main interventions:

- a) Disaster preparedness: introduced a revolving fund to ensure that funds are available in the future if needed to recover from another disaster;
- b) Mitigation: established arrangements with local authorities to ensure that the machinery and equipment of artisans are safeguarded from future disasters;
- c) Risk reduction: linked local artisans with markets outside of Piura to avoid business interruption in the future.

4) Replication and Up-scaling of the Project

Based on the lessons and success of the pilot project in Catacaos, the initiative was introduced and implemented to support other local producers and artisans, namely 1) in the District of La Arena to support local artisans here who also produce handmade hats, and 2) in the Districts of Morropon and Buenos Aires to support local producers of organic bananas.

As with the pilot project, a needs assessment was conducted to assess the recovery needs of banana producers and artisans, to identify the most appropriate recovery interventions, and to forge alliances with local partners. Two business plans were developed and agreed, as well as protocols to support implementation.

The business plan for the recovery of livelihoods among producers of organic bananas was developed with the participation of local producers, banana cooperatives, the local Agrarian Agency and municipal authorities. The business plan is focused on increasing production and marketing while also integrating risk reduction measures.

In addition, an evaluation was undertaken to assess the existing state of production and commercialization of organic bananas in the region, with the participation of eleven producer organizations, municipal authorities, and private sector businesses associated with the banana industry.

The project also supported synergies with the broader Provincial Network of Economic Development, which groups all businesses, organizations and government authorities in an alliance that promotes economic opportunities for all products produced locally.

SOME LESSONS LEARNED

While the initiative was largely successful in its pilot phase and subsequent replication to support the reactivation and recovery of economic activities of artisans and producers in flood-affected communities, the project also yielded important lessons for future consideration.

One of the main strengths of the initiative was its association with a host of partners from the private sector, government entities and communities on a range of recovery activities including capacity-building training and marketing.

Yet a lesson learned is that the project would have benefitted from a broader network of alliances, particularly with the private sector and with academia. Ideally these alliances are forged by UNDP in 'normal' times prior to a disaster to count on established strong partnerships that can be rapidly and effectively mobilized to support recovery.

Harnessing support from other units and areas of expertise within UNDP would also benefit similar recovery projects, such as with UNDP's Innovation Hub to introduce other innovative and non-traditional measures.

RELEVANCE TO THE PRACTICE OF RECOVERY

Post-disaster recovery processes can often focus on the reconstruction of damaged infrastructure such as houses, schools and roads, yet it is equally necessary to support the reactivation of local economic activities to enable affected communities to get back on their feet. This is particularly important for micro-enterprises that operate within the informal economy and whose livelihoods depend on the income these generate. Immediate and direct support to repair damaged business infrastructure and to restore lost equipment and inputs is a key first

step, but projects should have a broad scope to address recovery needs along the value chain, including marketing and branding, as well as to include measures that strengthen the resilience of micro-enterprises and reduce the risk of business interruptions and losses in the face of future disasters.

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RESOURCES

Communication material on the recovery project:
Website: www.tejiendofuturoperu.com

Videos on Facebook:

- Luciano Mazzeti: <https://www.facebook.com/PNUDPe/videos/1424787880960631/>
- Sofia Mulanovich: <https://www.facebook.com/PNUDPe/videos/1388000867972666/>
- Katia Condos: <https://www.facebook.com/PNUDPe/videos/1401323183307101/>
- Melania Urbina: <https://www.facebook.com/PNUDPe/videos/1462870393819046/>
- Magdyel Ugaz: <https://www.facebook.com/UNVPERU/videos/1904019402942045/>
- Emilia Drago: <https://www.facebook.com/PNUDPe/videos/1481603465279072/>
- Ramón García: <https://www.facebook.com/PNUDPe/videos/1342509369188483/>

Other

- <https://www.youtube.com/watch?v=DPIr2yj8ygA>
- <https://stories.undp.org/tejiendo-futuro>
- <https://pnudperu.exposure.co/manos-de-la-reconstruccion>

An aerial photograph of a city, likely Lima, Peru, showing a wide river with two large arch bridges. The city is densely built up with many small houses and some larger buildings. The image has a blue tint.A decorative graphic element consisting of a blue diamond shape with a white outline, partially overlapping a green shape.

PERU

GOOD PRACTICE 12: Strengthening Peru's Preparedness to Recover from Disasters

PRACTICE AREA: Managerial and Technical

SUMMARY

To build and strengthen the capacity of the Government of Peru, civil society and communities, UNDP implemented several preparedness initiatives in collaboration with partners: 1) developed national guidelines for post disaster needs assessment adapted to the national context and needs, 2) developed a pre-disaster baseline database for the Piura region, 3) organized an earthquake simulation exercise, and 4) delivered capacity building training on risk reduction for civil society organizations. These measures will enable government authorities to conduct a rapid, well-coordinated and efficient assessment and recovery process when the next disaster strikes.

DESCRIPTION

Developing Guidelines for Post-disaster Needs Assessments

In response to the intense floods produced by the El Niño event in Peru's northeastern region in 2017, UNDP supported the Government to conduct a PDNA based on the guidelines and methodology developed jointly by the United Nations, the European Union and the World Bank in 2013. The PDNA methodology is today the gold standard for assessments, applied by governments and the international community in dozens of countries since the guidelines were developed.

The use of the PDNA methodology in Peru allowed for a more comprehensive assessment of the flood's impact and effects. Previously in Peru, two methodologies were typically used in post disaster situations, the first focusing on identifying reconstruction needs and led by the National Center for the Prevention and Reduction of Disaster Risk (CENEPRED), and the second on rehabilitation needs led by the National Institute of Civil Defense (INDECI).

In order to align these two approaches into one single comprehensive methodology, UNDP worked with CENEPRED and INDECI in 2018 to develop one national guide based on the PDNA methodology but adapted to the country's national context and particular needs. The guidelines integrate the methods for identifying both reconstruction and rehabilitation needs. The new guide encompasses the following main components:

- The collection and processing of both quantitative and qualitative data;
- The effects on livelihoods;
- Assessment of the damage to infrastructure and basic services;
- Assessment of the losses or financial flows;
- Existing mechanisms of participation in decision-making;
- The needs to repair or rebuild the physical damage to infrastructure, to re-establish public services, as well as to recover the economic, social and environmental conditions.

Developing a Baseline Database to Support Disaster Response and Recovery

To complement the assessment methodology developed, UNDP supported the Government of Peru to develop a pre-disaster baseline database for the Region of Piura, the most affected by the heavy flooding in 2017. The baseline focused on the collection of information on three sectors. In particular the database collected baseline information for the following sub-sectors:

- Social sector: population, health, education, culture, housing, and social assistance.
- Economic sector: agriculture, fisheries, mining, commerce, industry, tourism, public administration, banking and finance, water and sanitation, electricity, transport and telecommunications.
- Cross-cutting issues: gender and inclusion, governance, the environment and risk reduction

In collaboration with the National Institute of Statistics and the Centro de Promoción e Investigación del Campesinado (CIPCA) the following three key steps were taken to develop the baseline:

- 1) Planning and organization: a working group of professionals was created, including specialists in information collection and data analysis, and a training workshop was organized on the key concepts and criteria for geo-referencing the baseline information that would be collected. The training also introduced the minimum requirements, procedures and responsibilities for the collection of baseline data, as well as the design of the database.

- 2) Information collection: the collection of baseline information was organized into three phases with each one focusing on the collection of data on specific sectors and sub-sectors. The data was collected from public and private institutions at regional and national level, primarily from the databases available online and from CIPCA's projects.
- 3) Finalizing the baseline database: the data collected was reviewed and validated, and subsequently introduced and organized into the pre-established structure of the database which was georeferenced to facilitate geographic visualization. The final baseline database has been placed online for public access and future use.

As a complement to the baseline database, the initiative also involved the collection of satellite images of the Pira region, developed in partnership with the CONIDA, Peru's Spatial Agency. Various technical tests were made during the process to correct for topographic and atmospheric details to improve the resolution of images. The satellite images include the upper and lower basins of the rivers Chira and Piura. Further precisions were made by the National University of San Marcos to enable a detailed detection of geographic areas affected by future disasters.

Strengthening Civil Society Organizations in Risk Management

UNDP's efforts to strengthen preparedness for response and recovery in Peru also gave priority to building the capacity of civil society organisations (CSOs). In collaboration with the Government of Peru and several agencies of the United Nations, a training strategy was designed on disaster risk reduction for CSOs. Six training workshops were organized for 42 community and district-level organizations and 78 community leaders, including women, youth and people with disabilities.

A mapping exercise was undertaken to identify volunteer organizations that can support in post disaster situations. A total of 84 organizations were identified in Lima and Callao with a membership of 7,000 volunteers. In addition, 33 volunteers received leadership training and participated in subsequent training workshops.

A Toolbox with practical tools on disaster risk reduction was also developed for civil society organizations in Lima. The toolbox consists of a guide and 10 good

practices involving the participation of civil society in risk management, including the methodologies used and the lessons learned. The toolbox was distributed during capacity-building trainings organized for CSOs and is made available on the websites of the Municipality of Lima, Civil Defence and UNDP.

An Earthquake Simulation Exercise

Given the high exposure of Peru to earthquake risk, UNDP supported the Government of Peru to undertake a simulation exercise for an earthquake scenario in central Peru. The exercise involved the participation of regional and district government authorities, sector ministries and the United Nations under the leadership of the National Institute of Civil Defence (INDECI). The simulation helped to clarify the role and responsibilities of all government authorities and organizations and protocols were developed for earthquake response.

Although unexpectedly, the agreed protocols were activated in response to the El Nino floods which devastated north-eastern Peru in 2017. This included the



mobilization of the United Nations Disaster Assessment Teams, the activation of five sectoral working groups, a rapid assessment of humanitarian needs and launching of a flash appeal to mobilize financial resources. The coordinated response involved 38 organizations in 10 regions and reached 900,000 people affected by the floods.

RELEVANCE TO THE PRACTICE OF RECOVERY

Efforts to strengthen the capacity of governments, civil society and communities to prepare for future disasters is an essential strategy to reduce risks and vulnerabilities and to ensure that the recovery process is more effective and sustainable. In Peru, the development of one single assessment methodology, a pre-disaster baseline database, and the simulation exercise will enable government authorities to conduct a rapid, well coordinated and efficient assessment and recovery process when the next disaster strikes.

CONTACT INFORMATION

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RESOURCES

Pre-disaster baseline database for Piura
https://drive.google.com/drive/folders/1Lo8bj-P_yZfCvDYqET75K7xhfD2juA-C



ANNEX

Compendium of Case Studies on Post-disaster Recovery

Concept Note

1. Background

Based on the mandate given by the UNGA (A/RES/52/12B of December 97), UNDP has been providing leadership in the post disaster recovery field, contributing to social and economic recovery of affected communities while developing government capacities for recovery implementation. Based on this experience and drawing upon the lessons of implementing the recent projects on “building capacity for resilient recovery” and “PDNA roll out”, UNDP has identified following key issues in post disaster recovery:

- **Disaster recovery is efficient if institutions, policies and financial mechanism for recovery are set up prior to the disaster:** Established institutions with dedicated personnel and resources clearly defined roles and policies for implementing recovery are critical for delivering recovery benefits to people in an effective and timely manner.
- **Disaster recovery is better planned if informed by strong data.** For more effective and efficient post-disaster needs assessment and consequently of well-informed recovery strategies, the existence of baseline data, the collection and analysis of data on the sectors that get most affected in the country and risk analysis to develop damage scenarios that could help anticipate the impact of a given disaster is key.
- **Disaster recovery must balance social needs with demands for reconstruction of infrastructure:** In a recovery program, there are competing priorities related to the reconstruction of infrastructure, housing, as well as restoration of livelihoods, social services, and markets.
- **Disaster recovery is a collective effort:** Given the complex and multi-sectoral nature of the recovery, it is not possible for one agency or institution to deliver recovery. While the government leads the recovery and reconstruction efforts, international agencies, civil society, the private sector and the affected community play a crucial role in supporting recovery efforts.
- **Disaster recovery must be participatory and inclusive:** Recovery programs must be based on the needs and priorities of people affected by the disaster; therefore, it is critical to engage the affected population in determining their needs, priorities and

also in the implementation phase. The role of women, elderly, people with disabilities and the youth, should be particularly highlighted.

- **Recovery needs should be undertaken based on the analysis of the impacts and include DRR and BBB:** Recovery planning is based on comprehensive assessment of damage, loss and recovery needs. It requires careful planning, it is driven by data, and peoples’ needs and promotes DRR and Build Back Better to bounce back to an improved situation.
- **Disaster recovery an opportunity for DRR and BBB:** The post-disaster recovery context presents a short window of opportunity for making the right development decisions through better reconstruction and recovery programs and build resilience against future disasters.
- **Financing for recovery must be sustained:** Aid for disaster is typically provided for humanitarian needs with few resources for longer-term recovery needs. It is essential that governments identify the funding sources (national and external) for supporting recovery.
- **Monitoring and maintaining transparency and accountability are important elements for management of recovery:** Setting up monitoring mechanisms for recovery interventions is critical to ensure that progress towards the intended objective is made and that a process to address gaps and take corrective action is established.
- **The private sector is important and can bring innovation:** The private sector can invest capital in new technologies, infrastructure and networks, deliver goods and services to affected communities, and apply innovation to solve sustainable development challenges.

The “*Strengthening Capacities for Post Disaster Needs Assessment and Recovery Preparedness*” or PDNA Rollout II Project is currently being implemented by UNDP in alliance with the EU and World Bank. Main objective of this initiative is to contribute to building resilience of countries by enhancing national and regional capabilities to assess plan, implement and monitor post disaster recovery processes. *Result No. 4 of the project envisages that post disaster recovery processes are informed by international best practices and standard tools and guidelines.*

2. Purpose of the Compendium

The Compendium of Good Practice for Post Disaster Recovery expects to help understand the complexities of planning and implementing concrete post disaster recovery interventions while offering a number of solutions that can be replicated in similar environments at the national or local levels.

The Handbook is expected to: 1) outline the procedure to identify, validate, and document successful programs, projects, processes or activities that have proven to be effective for post disaster recovery, 2) promote the use of these practices in similar environments by raising the interest of local stakeholders and officials, and 3) consolidate the selected practices in an accessible data base for the benefit of those interested in recovery implementation through different means including through e-options.

3. Purpose of this Concept Note

The purpose of this Concept Note is to guide regional centers, country offices and consultants in the process of identifying and writing up good recovery practices. For this exercise, **Good Practice** is defined as any proven idea, program, technique, mechanism, method, practice or procedure for undertaking recovery interventions at the regional, national and local levels.

These good practices are intended to address at least one of the concerns identified in the post disaster recovery and reconstruction realm while at the same time being adaptable and replicable in similar environments. In this Compendium, good practices will be classified according to the issues they address and classified in the following typologies:

- a. **Legal.-** those that incorporate rules, regulations, SOPs and other legal interventions.
- b. **Organizational.-** encompass elements such as inter-institutional coordination for recovery, national and local government coordination.
- c. **Educational.-** comprise awareness raising, communication, information management for recovery, training and capacity building initiatives.
- d. **Technical.-** include data management, information technologies, hazard and/or sector specific interventions (Energy, Housing and the Cross-Cutting Issues such as Governance, DRR, Gender, Environment

and Livelihoods), structural and nonstructural tools and methods, innovation, promotion of DRR and BBB in human and physical recovery.

- e. **Managerial.-** looks into inclusive and participatory processes that promote wide stakeholder participation such as the private sector, the engagement of specific groups of the society for example, women, youth, the elderly, IDPs, disabled, among others.
- f. **Financial.-** promotes the development of dedicated financial mechanisms for recovery with legally binding mechanisms, addresses cash transfer options.
- g. **Behavioral.-** promotes changes in the way recovery is undertaking promoting transparency through monitoring and evaluation mechanism

A template for collecting the information will be prepared to help gain insights on the implementation of the practice. It will include a description of each activity, the problem that is addressed, the human and economic resources used any monitoring and evaluation procedures designed. **What** are the highlights of the practice, **Why** these particular sets of actions worked and **How** will they be maintained? **Who** were the actors involved? Can this practice be fully adopted or adapted by other communities? **What** are its cost-benefit parameters? and in fact, **Which** are the determinants for success?

3.1. Suggested Procedure

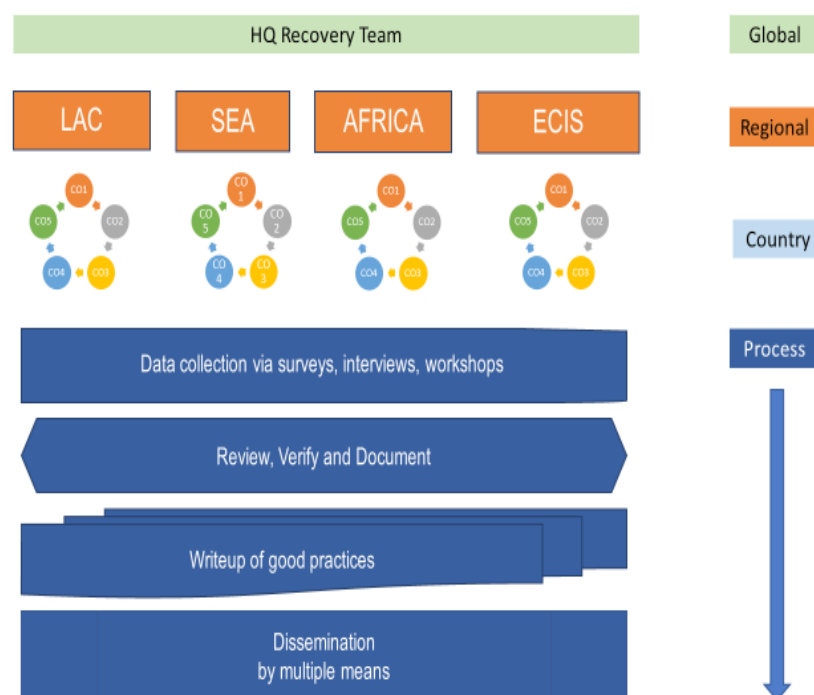
The process of identification, selection and publication of at least 20 good practices in post disaster recovery are expected to be undertaken in close consultation with selected country offices in each one of the regions and with the support of the UNDP regional centers from Latin America and the Caribbean (LAC) in Panama, South East Asia (SEA) in Bangkok, Africa in Addis Ababa and/or Nairobi, and East Europe (ECIS) in Istanbul. The Recovery Team at HQ will provide technical and financial support through the *Strengthening Capacities for Post Disaster Needs Assessment and Recovery Preparedness, PDNA Rollout II*. The identification and selection process could be undertaken through the following proposed interventions:

- Regional teams will identify 5 to 8 countries where recovery interventions, with potential good practices, have taken place in the period 2014 to 2019.
- A preliminary survey comprising no more than 10 key questions related to the proposed practice is filled up at the country level through the DRR/Recovery focal

point. See **Table 1 for the Criteria for Eligibility and Annex 1 for a short survey**. UNDP focal points, in coordination with the regional centers will select the winning proposals.

- When selecting the good practices at the country level, it is important to make sure that there is an appropriate diversification of the categories of practice identified. The Compendium would benefit if we are able to incorporate practices belonging to different categories, for example one under legal, another one under managerial, a third one under financial, etc. Same criteria should be applied at the regional level when selecting those recovery practices from the countries. Emphasis should be put in the selection of a varied portfolio.
- At least 5 practices per region, one per country, are selected for the next step which includes gathering all necessary information, hard data, interviews with end users or beneficiaries of the practice, collect graphic material for example videos or photos, and prepare a first draft based on a write up template. **See Annex 2 for a guide to the write up.**
- Each regional center will hire a consultant, who will work with the UNDP focal points to consolidate the findings and write the case study. A total of 4 regional consultants will be hired, each one will prepare 5 good practices with the overall support and supervision of the regional centers, national focal points will be engaged in the process and HQ will consolidate and publish the Compendium in 3 different languages: English, French and Spanish.

Identification and Dissemination of Good Practices for Post Disaster Recovery – Process



3.2. Criteria for eligibility

The following criteria is provided as a guide to identify good practices that can be replicated, expanded and further incorporated in the regular development or post disaster recovery processes.

Table 1. Criteria for eligibility

Criteria	Key Issue
1. Universality / Transferability	Can the identified practice be applied in another region/country?
2. Applicability	Is the application appropriate for the post disaster context?
3. Expandability	Can the small-scale activity/ies that typify the practice be expanded, or replicated, throughout the same sectors / areas?
4. Orientation / Focus	Is the practice focused on reducing the overall level of risk from the pre-disaster situation? Are the concepts of Building Back Better included in the practice?
5. Assimilation / Integrability	Can the practice identified be incorporated, or assimilated into, other development or risk reduction practices?
6. Impact / Effectiveness	What effect does the practice have on accelerating and/or efficiently implementing recovery activities?

Survey to Identify Good Post Disaster Recovery Practices – Country Level

In order to understand relevance of the practice for recovery and looking for consistency, in the selection and documentation of these good practices. This collection of good practices should offer the opportunity to understand how the problem was formulated, how the interventions were carried out, how long did it take, the use of human and financial resources, its sustainability and transferability. It is thus suggested that prior to engaging in the full formulation of the case, it would be good to consider the following guiding questions that will help in the final selection:

Name of the practice	
Category of the practice	<input type="checkbox"/> Legal <input type="checkbox"/> Organizational <input type="checkbox"/> Educational <input type="checkbox"/> Technical <input type="checkbox"/> Managerial <input type="checkbox"/> Financial <input type="checkbox"/> Behavioral
What area of recovery is this practice addressing?	<input type="checkbox"/> Preparedness <input type="checkbox"/> Assessment <input type="checkbox"/> Planning <input type="checkbox"/> Implementation
Type of Hazard being addressed?	
What is the specific problem being treated?	
Short description of the practice.	
Who are the actors involved?	
How is the practice being implemented and sustained?	
Can this practice be replicated/adapted elsewhere?	
What are the human and financial resources needed?	
What are the determinants for success?	
Any lessons learned from this practice.	
Who to contact?	Name Email WhatsApp

Good Practice is defined as any proven idea, program, technique, mechanism, method, practice or procedure for undertaking recovery interventions at the regional, national or local levels.

Writeup Template

Once the practices have been identified and selected through the initial survey, the regional consultant and the national focal point will work together to agree on the specific elements of the good practice that will be highlighted and presented in the Global Compendium.

The teams are encouraged to find visual material to illustrate as much as possible how the practice was developed and maintained. The use of short video, pictures, brochures and other graphic material is encouraged.

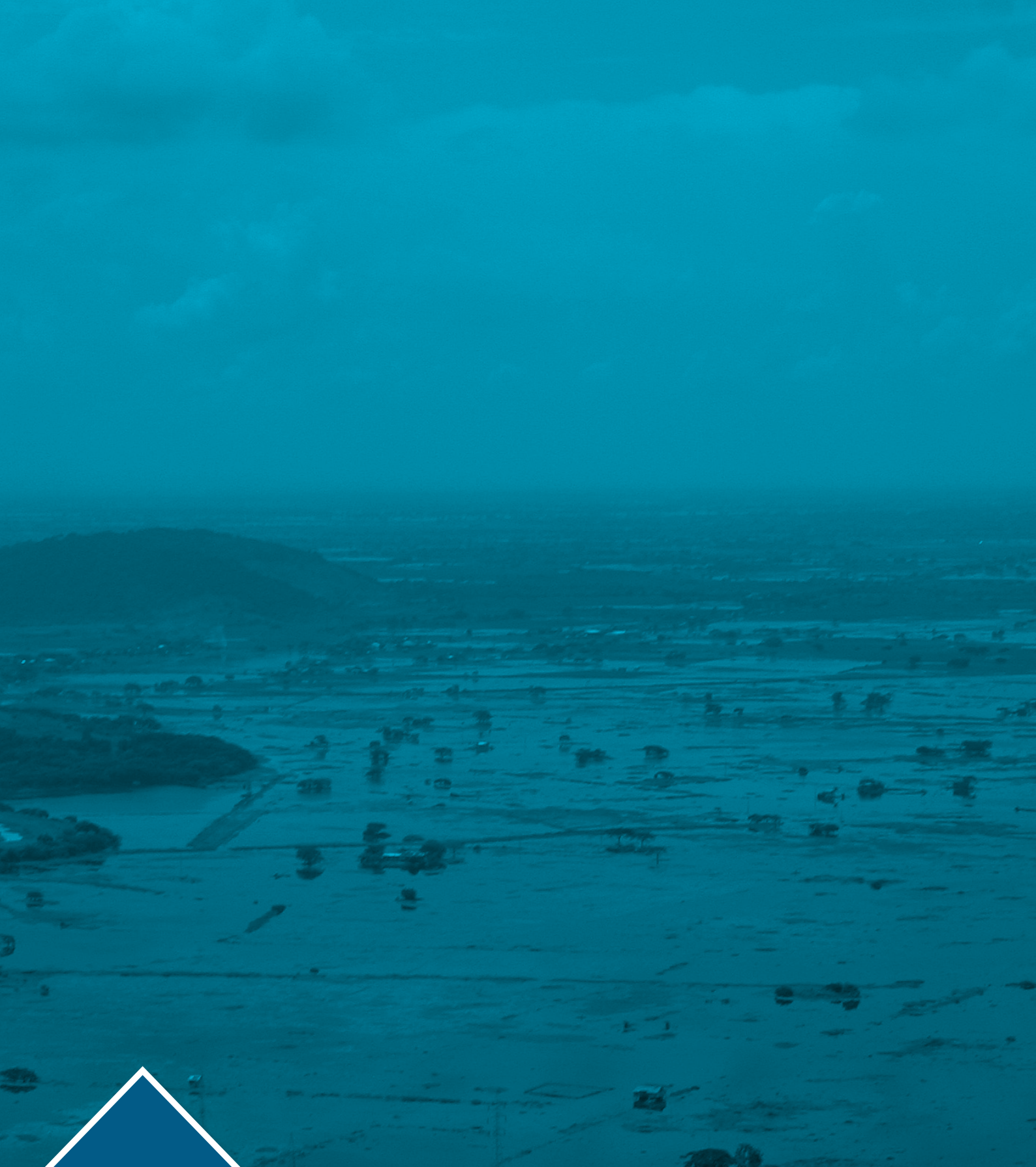
Each practice is expected to be summarized in no more than 4 full pages. Using word normal margins, Calibri 11 font with single line spacing. The proposed outline for the summary is as follows:

1. **Headings:** Name of the Practice, Category of the practice and area of recovery that the practice is addressing
2. **Summary:** Explain briefly what the problem was how the practice addressed it and the results that were accomplished. Focus on what was done. 300 words or one fourth of a page.
3. **Description:** How the practice was undertaken, who participated, what was the cost, would it be able to be replicated, is it sustainable. Add tables and graphs as needed. Use the remainder of page 1 and use up 2 additional pages to complete the description.
4. **Relevance to the practice of recovery:** Discuss why this practice is relevant to strengthen recovery preparedness, assessments, planning and/or implementation in the country. How this practice could be linked to a broader recovery program/intervention. 1 page including contact information
5. **Contact Information:** 5 lines

List of PDNAs conducted in the period 2014-2019

Date	Disaster Event	Country	Region
2014	Flood	Serbia	ECIS
2014	Flood	St. Vincent and the Grenadines	LAC
2014	Flood	Bosnia and Herzegovina	ECIS
2014	Typhoon	Philippines	SEA
2014	Cyclone	Burundi (in French)	SEA
2015	Flood and Landslides	Myanmar	SEA
2015	Flood	Georgia	ECIS
2015	Earthquake	Nepal	SEA
2015	Cyclone Pam	Vanuatu	PACIFIC
2015	Flood	Malawi	Africa
2016	Flood	Saint Vincent and the Grenadines	LAC
2016	Cyclone Matthew	Haiti	LAC

2016	Flood	Vietnam	SEA
2016	Floods and Landslides	Sri Lanka	SEA
2016	Cyclone	Seychelles	PACIFIC
2016	Cyclone Winston	Fiji	PACIFIC
May-17	Floods and Landslides	Sri Lanka	SEA
Aug-17	Floods	Nepal	SEA
Sep-17	Hurricane Maria	Dominica	LAC
Sep-17	Hurricane Irma	Antigua and Barbuda	LAC
Sep-17	DRF for the 2016 Floods	Sri Lanka	SEA
Oct-17	DRF Angola for the 2012-2016 Droughts	Angola	Africa
Nov-17	Droughts	Somalia	Arab States
Jun-18	Fuego Volcanic Eruption	Guatemala	LAC
Jul-18	Floods	Laos	SEA
Aug-18	Floods	Kerala-India	SEA
Oct-18	Floods	Tunisia	Arab States
Mar-18	Floods	Rwanda	Africa
Oct-18	Earthquake	Indonesia	SEA
May-19	Cyclones IDA & KENNETH	Mozambique	Africa
Jun-19	Cyclone Fani	Odisha-India	SEA
Jul-19	Floods	Iran	SEA
Dec-14	Floods	Djibouti	Africa



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