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Evidence and lessons from Latin America

How are Latin American countries mainstreaming decentralised, democratic and participatory strategies to disaster risk management across public policy? Through a systems approach, the region is making important advances.

INSTITUTIONALISING DISASTER RISK MANAGEMENT: LATIN AMERICA'S SYSTEMS APPROACH

SUMMARY

Against a backdrop of inadequate disaster preparedness and repeated humanitarian aid interventions, Latin American countries have driven forward the institutionalisation and mainstreaming of Disaster Risk Management (DRM) in public policy. Based on a systems approach, Latin American governments are establishing coherent policy and regulatory frameworks for DRM focused on improving coordination between public institutions, harnessing and building expertise, modernising investment systems and securing commitment and participation from multiple stakeholders. This Brief begins by describing how approaches to DRM in Latin America have evolved from purely responsive actions to broad institutional reforms aimed at mainstreaming disaster prevention and mitigating risk. It then provides an analysis of the main characteristics of this systems approach, describing how it has facilitated the institutionalisation of DRM into public policy in Latin America and providing key examples from across the region. Finally, the Brief describes the major contextual factors that have facilitated these processes, identifies on-going challenges and offers lessons learned that may be useful for other countries and regions.

EFFECTIVELY ADDRESSING THE DISASTER CYCLE

Over recent decades, the frequency and intensity of natural disasters across Latin America, Africa and Asia has been increasing.[1] Before the 1990s, disaster management strategies were biased toward providing emergency aid and proved to be highly inadequate at dealing with the social, economic and environmental impacts of natural disasters. These response-based systems were typically characterised as being managed single-handedly by civil defence institutions often linked with the military. Across Latin America, recurrent humanitarian emergencies such as those caused by intense cold waves in southern Peru, droughts in the

KEY LESSONS LEARNED

DRM can be successfully integrated into the daily operations of existing public institutions and can build on the comparative strengths and capacities of different public, private and social actors.

Institutional reforms for DRM should be based on a comprehensive understanding of the relationship between risk management and development objectives.

[1] International Disaster Database: www.emdat.be.

Paraguayan Chaco, and flooding and landslides in Bolivia and Brazil,[2] showed that although the response-based approach saved lives and limited some of the longer-term impacts of catastrophes, it was inadequate for mitigating or preventing future crises.[3] The fact that emergency response interventions were frequently repeated in the same places to assist the same populations revealed an urgent need to develop policies aimed at disaster prevention and risk reduction.

Photo 1: Caracas, the capital of Venezuela, where residents are vulnerable to repeated natural disasters such as extreme weather events and landslides
Source: Procsilas Moscas, published on Wikimedia commons

Following the United Nations International Decade for Disaster Reduction (1990-2000) and the UN World Conference on Natural Disaster Reduction which resulted in the Hyogo Framework for Action (2005-2015) (HFA), an increasing number of developing country governments across Latin America, Africa and Asia now consider DRM as a prerequisite for sustainable development, and are implementing prevention and mitigation initiatives that address the causes, and not just the consequences, of natural disasters.[4] At the same time, a new consensus has emerged that the best way to addresses both the causes and consequences of disasters is through a more systems-based approach, one that treats DRM as a transversal issue, cutting through public policies from a variety of sectors, and integrated under a comprehensive strategy. In particular, it incorporates research on the threat of disaster, vulnerability assessment, and strengthening of governance systems, while more closely linking DRM with development processes overall.

The theoretical proposal for this more systems-based approach emerged in the 1990s.Though the new approach did not come from Latin America, the region's researchers did play a strong role in developing it; often recognised is the Network for Social Studies on Disaster Prevention in Latin America (LA RED) for its role in this paradigm shift, especially regarding the concept of risk management.

It was in the 2000s when the theory began to be applied. In many regions, the shift from the more response-based approach to a more systems-based approach has been quite gradual. What is different about the Latin American experience is that the jump from the traditional to the new approach happened quite quickly, likely because the incredibly high cost of the region's many natural disasters gave public officials the political will to rapidly push through significant changes.[5]

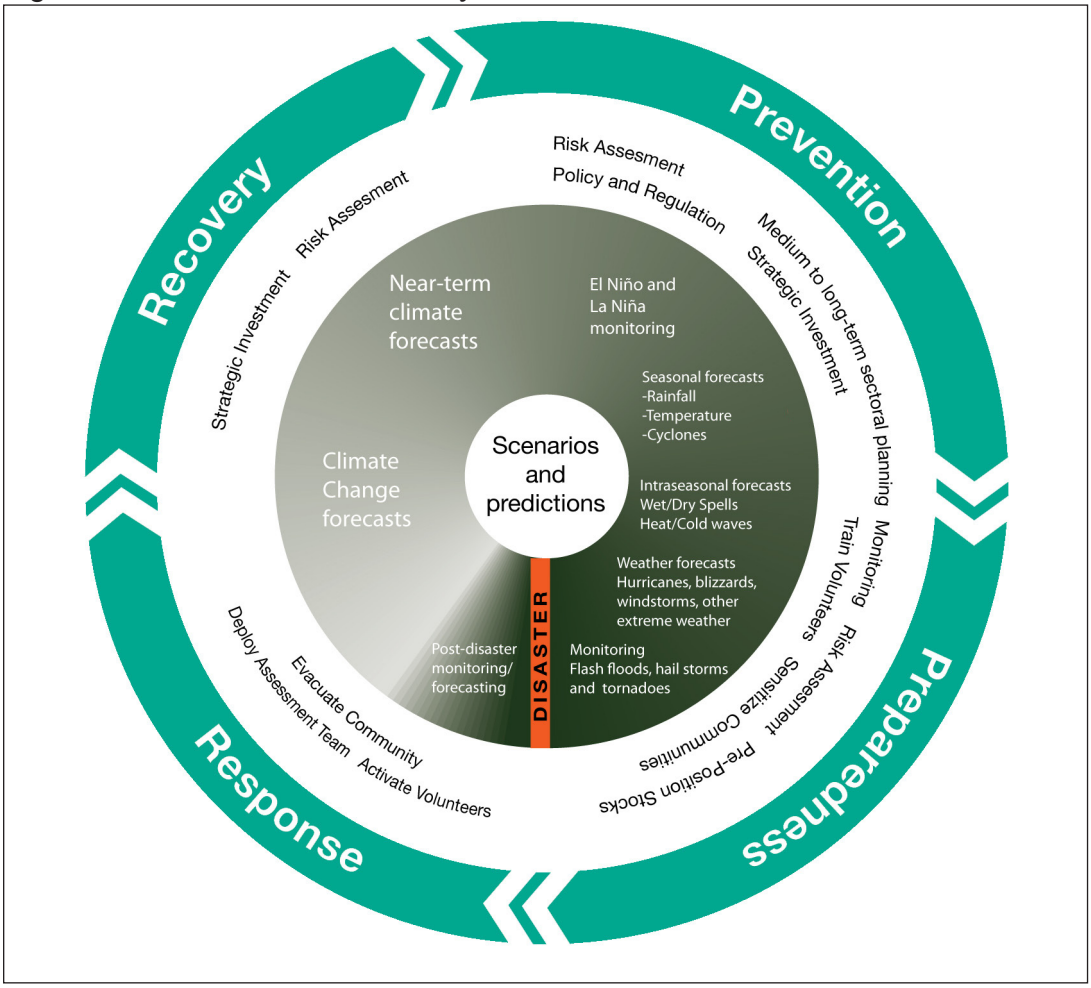
INSTITUTIONALISING DRM IN LATIN AMERICA: A SYSTEMS APPROACH

The reforms implemented in Latin America's DRM systems aim to provide an institutional basis for implementing the Hyogo commitments. Countries opted for implementing a systems approach in order to structure and engage the complex and multiple ensembles of actors, processes and actions that are required for mainstreaming DRM. The systems approach places an emphasis on processes and instruments that facilitate interdisciplinary cooperation between distinct actors in order to embed DRM within existing development spheres.[6] It entails strategies that address each of the phases within the cycle of disasters: prevention, preparedness, response and recovery (see Figure 1).

In Latin America, the systems approach has facilitated the institutionalisation of DRM in a number of ways. This section

[2] For an overview of the most recurrent natural disaster emergencies in Latin America, see the *Action Plan for South America 2013/14* by the European Commission's Humanitarian Aid and Civil Protection Directorate General (ECHO)
[3] International Federation of Red Cross and Red Crescent Societies (IFRC). 2012. *The Road to Resilience: Bridging Relief and Development for a More Sustainable Future*. IFRC, Geneva.
[4] An important precedent for the comparative analysis of DRM reforms in Asia, Africa and Latin America is presented here: Pelling, M., Holloway, A. 2005. *Legislation for Mainstreaming Disaster Risk Reduction*.Tearfund. Teddington.
[5] For a more extensive discussion of the evolution of DRM theories and approaches in Latin America, see the ELLA Guide to Disaster Risk Management in Cities.
[6] O'Donnell, I., 2010. *Addressing the Grand Challenges of Disaster Risk: A Systems Approach to Disaster Risk Management*. UNISDR, Geneva.

Figure 1: Phases Within the DRM Cycle



Source: Hellmuth, M.E. *et al.* (eds). 2011. *A Better Climate for Disaster Risk Management*. Climate and Society Series, No. 3. International Research Institute for Climate and Society, New York.

describes some of the key characteristics of the approach countries in the region have designed and implemented.[7]

1. Strong Coordination for Coherent DRM Mainstreaming Processes

Reforms to national systems for Disaster Risk Management have not lead to the creation of new public bureaucracies or institutional systems. Instead, the problem and goals of DRM have been integrated into existing institutions at distinct government levels and including the full range of sectors and themes that fall within DRM.

That being said, though Latin American countries have not created a new set of institutions for DRM, what they have done is create one new agency in charge of coordinating amongst the new range of actors now involved in DRM.[8] Typically the new national coordinating body is housed within an already existing institution, and is composed of members from existing government agencies involved in the new DRM system. In some countries, these authorities form part of the Home Office or Ministry of the Interior, as is the case in Chile, Venezuela and Uruguay. In others, the coordinating institution reports directly to the President or cabinet, as is the case in Peru and Colombia. DRM approaches and objectives are then mainstreamed into the strategic plans and operations of the other public institutions responsible for promoting development across different sectors and within different territorial boundaries.

[7] These facilitating factors have been identified based on a broad literature review of existing evidence of the design and functioning of DRM in Latin American countries. Most of the available literature in English comes from international and regional development agencies, and has been cited throughout.

[8] Some examples of these institutions include: National Systems for Disaster Risk Management in Peru (SINAGERD), Panama (SINAPROC) and Mexico (SINAPROC); the National Unit for Disaster Risk Management in Colombia (UNGRD); the National Coordinating Body for Disaster Reduction in Guatemala (CONRED) and the National Commission for Risk Prevention and Emergency Response in Costa Rica (CEPREDENAC).

In most Latin American countries, the national DRM coordinating body builds a shared global understanding of risk management - clearly defining the mission, vision, principles and values of the National DRM System - and coordinates coherent DRM planning and management through close collaboration with other government ministries and agencies. The national coordinating body usually also provides technical assessment and support services, such as vulnerability and risk assessments, and leads monitoring, evaluation and oversight processes.

By adopting the systems approach, national DRM coordinating bodies in Latin America have been better able to identify how distinct government agencies are connected via processes and actions, and where joint working can best be promoted to operationalise DRM. To this end, national coordinating bodies have also facilitated the design and implementation of planning instruments such as the incorporation of risk analysis into public investments.[9] Specifying the roles and responsibilities of different public institutions within an integrated national DRM strategy has also enabled Latin American countries to make good progress towards the mainstreaming of DRM across the public sector and, ultimately, towards their future vision of disaster preparedness and relief.

2. Mobilising Technical Expertise Across Sectors

The national coordinating bodies mentioned work to bring together different sectors, effectively linking them upwards into the national system. But at the same time, each sector also works to integrate DRM downwards into their own activities. In some Latin American countries, sectorial agencies have been given the responsibility for formulating DRM policies and providing technical assessment services. In countries where there is a greater degree of decentralisation in the public sector, these institutions are also directly carrying out DRM actions. One particularly strong example comes from the water and sanitation sector, in which ministries have begun mainstreaming DRM into their work protecting the water supply and strengthening sanitation.[10] This has included incorporating mitigation measures in drinking water and sanitation projects in Honduras; incorporating risk analysis into public utility projects in Colombia; developing methodological guides for emergency planning in the sanitation service in Chile; and probability risk assessment for drinking water infrastructure in Ecuador.[11] Other sectors have also become active in implementing DRM within their regular activities. In the education sector, for example, the Ministries of Education in Cuba, Nicaragua, Chile and Costa Rica have been integrating DRM into school curricula with the aim of "building an ethic of environmental mindfulness and a culture of mitigation".[12]

In other cases, governments have created technical committees within ministries to carry out specific functions related to DRM. This is especially true in the sectors most vulnerable to disasters, such as infrastructure, transport, water, health and education. Some key examples from the region include: the Office for Emergency Prevention, of the National Roads Institute (*Oficina de Prevención y Emergencias del Instituto Nacional de Vías de Colombia* - INVIAS), that is responsible for carrying out policies and projects related to emergency prevention and response associated with the transport infrastructure of the country; the Venezuelan National Commission for Emergency and Disaster Response and Management (*la Comisión Nacional de Atención y Gestión de Riesgos de Emergencias y Desastres del Ministerio para la Salud de Venezuela*) housed within the Ministry of Health and responsible for coordinating the development and implementation of disaster risk plans across the health sector; and the Our Cities Programme (*Programa Nuestras Ciudades*) run by the Ministry for Housing in Peru in order to integrate DRM into land planning processes.

3. Supporting Decentralisation and Improved Public Spending

Another advantage of the systems approach to institutionalising DRM in Latin America is that it has enabled

[9] For more information on how Latin American countries are incorporating DRM into public investment systems, see the ELLA Brief: Latin American Experience in Combining Disaster Risk Management with Poverty Reduction.
[10] The World Bank Water and Sanitation Programme has been supporting various Latin American ministries to mainstream DRM in the water supply and sanitation sector.
[11] World Bank Water and Sanitation Program. 2012. *Resilient Infrastructure for Sustainable Services. Latin America: Mainstreaming of Disaster Risk Management in the Water Supply and Sanitation Sector*. World Bank, Lima.
[12] UNESCO, UNICEF. 2012. *Disaster Risk Reduction in School Curricula: Case Studies from Thirty Countries*. UNICEF, Geneva. The publication includes six case studies from Latin America and the Caribbean: British Virgin Islands, Chile, Costa Rica, Cuba, Nicaragua and Peru.

central governments to decentralise roles and responsibilities to sub-national and local governments, thereby capitalising on existing capacities, while at the same time addressing on-going weaknesses within the public sector. For example, Honduras' 2010 Law on the National Disaster Management System promotes decentralisation as a central pillar of national DRM efforts.[13] Indeed, since decentralisation had already been implemented – albeit to different degrees, countries in the region chose to utilise their decentralised government levels as a structure for their new DRM approach.

Higher financial and technical capacities amongst sub-national governments at the regional or provincial level makes them an ideal vehicle for providing technical support and assessment to local governments by gathering technical and scientific data on vulnerability and risk, as well as carrying out monitoring and evaluation processes. Likewise, these sub-national governments are playing an important role in harmonising land planning processes and ensuring that DRM actions implemented in the region's cities and towns are coherent with national policy. For their part, local governments, in particular those in regions highly exposed to disasters, are particularly well placed for planning and executing specific localised actions and control processes.

Latin American countries' prioritisation of decentralisation goes hand in hand with their increased focus on improving public spending overall. Likewise, a better use of DRM funding also became part of the new systems focus for DRM.

Previously, a striking lack of coordination between different levels of government meant many local governments refrained from investing financial resources into DRM, leaving this responsibility to the national government. At the same time, in many countries, such as Colombia,[14] highly-centralised investment and leadership processes relating to DRM discouraged interventions at the local and regional or departmental levels.

Over recent years, however, new policy and regulatory frameworks for DRM have been creating more effective coordination between different levels of government by setting out clear roles and responsibilities for public investment planning, expenditure and monitoring.[15] In Peru, Costa Rica and Guatemala, these measures have included incorporating disaster risk evaluations into public investment projects and have led to improvements in planning and reporting processes.[16] Finally, the involvement of the ministries of planning, economy and finance in DRM mainstreaming has led to increases in public spending for DRM in countries such as Mexico and Colombia.[17]

4. Encouraging Broader Participation

Along with harnessing existing capacities within the public sector, Latin American governments have been encouraging participation from a broad range of actors in DRM initiatives from outside the government as well. This has included: national research institutions; international and national non-governmental organisations and civil society groups; the private sector; international development agencies and UN agencies.

In Colombia, for instance, academics are actively involved in generating disaster risk information, which the media then disseminates to the public. The private sector also supports DRM activities. For instance, a group of manufacturing companies in Puente Aranda, one of Bogota's industrial neighbourhoods, has included DRM as part of its strategic plan. Bogota's water and sewage company has done the same.

Many countries in the region have established legal frameworks that mandate participation in the comprehensive DRM framework at all of the decentralised levels of government, thereby successfully integrating individual cities and communities into the national strategy and coordinating mechanisms. Ecuador's 2006 Law on Civil Protection and the Prevention and Mitigation of Disasters, for example, requires

[13] International Federation of Red Cross and Red Crescent Societies (IFRC). 2010. *Desk Review on Trends in the Promotion of Community-based Disaster Risk Reduction through Legislation*. Background Paper prepared for the 2011 Global Assessment Report on Disaster Risk Reduction. UNISDR, Geneva. The report examines DRM regulations and laws recently adopted in Latin America – in Bolivia, Costa Rica, Ecuador, El Salvador, Honduras and Nicaragua – as well as in countries from other regions.
[14] Campos, A. *et al.* (eds). 2012. *Analysis of Disaster Risk Management in Colombia: A Contribution to the Creation of Public Policy*. World Bank, GFDRR, Washington, DC.
[15] To learn more about other ways countries have addressed DRM through improvements in public finance, see the ELLA Brief: Latin American Experience in Combining Disaster Risk Management with Poverty Reduction.
[16] UNISDR. 2011. *Global Assessment Report on Disaster Risk Reduction 20011*. UNISDR, Geneva.
[17] For the Mexico case, see: World Bank. 2012. *FONDEN: Mexico's Natural Disaster Fund - A Review*. World Bank, Washington, DC.

committees to be established at the departmental, municipal and community levels, including not only elected officials and governmental disaster response agencies, but also representatives of civil society. In the case of municipalities and communities, community leaders participate as well. Nicaragua's 2000 Law Establishing the National System for Prevention, Mitigation and Response to Disasters calls on mayors to bring together NGO representatives, the private sector and the community in municipal disaster management committees. And the Dominican Republic's 2002 Disaster Management Act requires that regional, provincial and municipal committees on disaster management all include a representative of the National Red Cross Society.[18]

ON-GOING CHALLENGES

Countries of the region have made significant advances in institutionalising DRM, as the distinct country examples presented here demonstrate. That being said, some key challenges remain.

The first is how to reconcile social, economic and environmental objectives with DRM policy in order to guarantee sustainable development. Despite institutional progress, DRM efforts aimed at improving land rights, social well-being and environmental sustainability have not been sufficiently effective in reducing exposure and vulnerability to disasters. Likewise, there is insufficient understanding of the role of DRM and how it interacts with environmental management and climate change adaptation. These areas need to be investigated before DRM can be properly integrated into decision-making at sectorial and territorial levels.

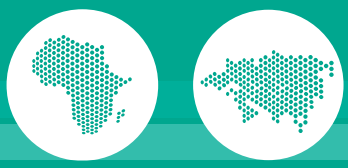
Second, mobilising the private sector and society at large to participate in an ongoing way in DRM has been difficult to achieve. Though organised civil society did play a role in pushing governments to implement the new approach, once it was implemented it proved difficult to ensure sustainable participation over time, for example, from families, schools and communities. In Latin America, the private sector, civil society organisations and the public in general are largely unaware of their responsibilities with regards to understanding risk, how disaster can be caused, reduced and controlled, and the role that they play. This has meant that governments have taken on responsibilities and costs beyond their capabilities, and indeed more could be accomplished with greater engagement of non-government actors. For example, in general, protection and insurance schemes for buildings and cultural heritage sites are not employed, increasing public risk and physical vulnerability.

Finally, though countries have used decentralisation as a platform to enhance the system-wide focus of DRM, at the same time, the decentralisation processes underway are far from complete in most countries of the region. One particular problem is that though regions and cities have clear responsibilities written into the law, they are not actually able to exercise these new responsibilities because of persistent capacity gaps at these local government levels.[19]

[18] Scott, Z., Tarazona, M. 2011. *Study on Disaster Risk Reduction, Descentralization and Political Economy*. UNISDR, Geneva.
[19] Local-level capacity and decentralisation are issues covered throughout the ELLA knowledge materials developed under the theme of Disaster Risk Management in Cities. For example, the ELLA Case Study: Pushing Through Reform: Lima's Disaster Risk Management Strategy demonstrates how the principles related to decentralisation are made operative in one large, capital city.

CONTEXTUAL FACTORS

ENABLING LATIN AMERICA'S SUCCESSFUL DRM APPROACH



International disaster risk reduction efforts, and in particular the Hyogo Framework for Action (HFA), have helped to drive forward DRM institutionalisation processes in Latin America by boosting government commitment and resourcing to ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation. Even before adopting HFA, the region was already familiar with or even practicing the key elements of preparedness, prevention, mitigation, response and recovery; the advent of the Framework provided additional support for national disaster risk management programmes and other ongoing efforts.

The quick move to institutionalise DRM in Latin America resulted largely from wide-spread criticism - in particular from more organised civil society groups such as NGOs and thematic networks - of the previous response-based approaches characterised by civil defence systems and their significant failures in responding to large-scale disasters. In addition, the fact that the region is plagued not only by a high number of recurrent disasters, but that these disasters occur at an incredibly high economic cost, gave governments an incentive to quickly implement reforms.

The presence of decentralised systems, and the concurrent focus on improving public management and spending, created a platform onto which the new approach could be built.

The existence of strong regional and sub-regional institutions in Latin America also played a key role in promoting and contributing to the systems approach by implementing large-scale regional projects, promoting knowledge exchange and designing and testing specific tools.

For example, the Organisation of American States, a regional institution, created Working Groups to prepare regional disaster management strategies, and the Economic Commission for Latin America carried out studies to quantify the social, economic and environmental impacts of disasters.[20] In the Andean region of South America, the Committee for Disaster Prevention and Service (Comité de Prevención y Atención de Desastres - CAPRADE) played a key role, such as through its 5-year disaster risk management project PREDECAN implemented in Bolivia, Colombia, Ecuador and Peru. In Central America, these sub-regional groupings are particularly strong, such as the Central American Integration System (Sistema de Integración Centroamericana - SICA), that designed the Central American Integral Disaster Risk Management Policy (PCGIR), which ultimately became the basis on which the National DRM Policies of its member countries were designed.

[20] See, for example, ECLAC. 2003. *Handbook for Estimating the Socio-economic and Environmental Effects of Disasters*. ECLAC, Santiago de Chile.

LESSONS LEARNED

1. Instead of creating institutional entities and systems that address DRM in a unilateral manner, DRM should be integrated into the daily operations of existing public institutions – and Latin America demonstrates that this is possible, as the variety of new norms, regulations, systems and platforms described in this Brief shows. Furthermore, DRM systems should build on the comparative strengths and capacities of different public, private and social actors, thereby avoiding a departmentalised approach and facilitating the allocation of appropriate roles and responsibilities.

2. A change in the nomenclature of institutions responsible for managing disasters does not constitute comprehensive DRM. Institutional reforms should be based on a comprehensive understanding of the relationship between risk management and development, which should in turn form an integral part of public management overall.

3. Mainstreaming regulations, standards and planning tools facilitates the harmonisation of sectorial policy to national DRM objectives, assists in the allocation of public spending and strengthens control and monitoring mechanisms. Furthermore, the mainstreaming of DRM in sectorial policy and plans helps ensure the sustainability of investments in productive sectors by reducing exposure and vulnerability to risk.

4. While decentralisation can provide a strong platform for building system approaches to DRM, the Latin American experience shows that countries cannot take local capacity as a given, and should likely implement parallel capacity building initiatives, especially at the most local levels.

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