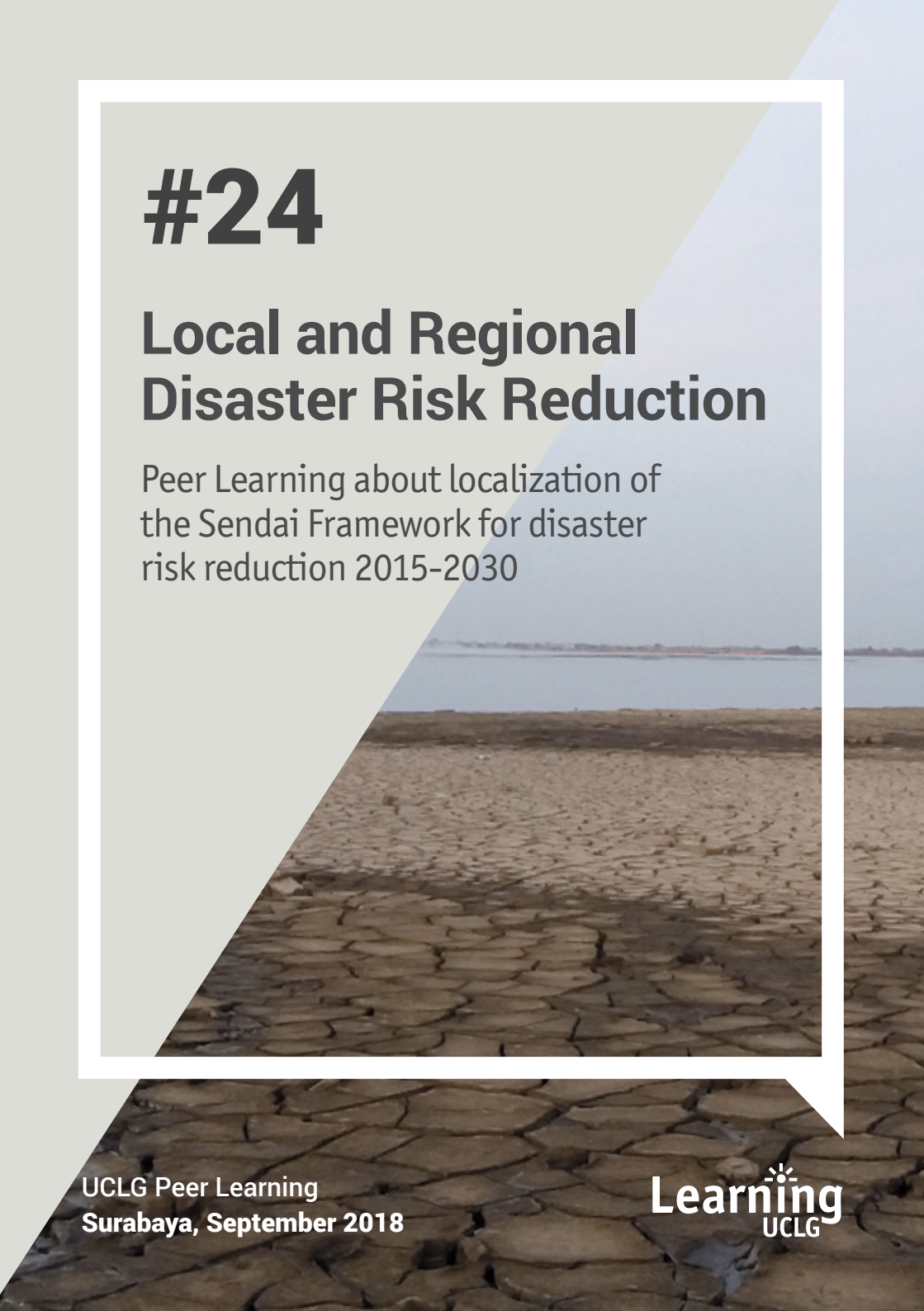
# #24

# Local and Regional Disaster Risk Reduction

Peer Learning about localization of the Sendai Framework for disaster risk reduction 2015-2030



UCLG Peer Learning
**Surabaya, September 2018**

Learning UCLG

## Credits

**Coordination**
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**Write and Edit**
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UNISDR
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**Photos**:
"If no other source is indicated, the images in this publication were taken from the participants' presentations during the learning event"

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# Foreword

**The Asia-Pacific Region (ASPAC) is the world's most natural disaster-prone area, accounting for 71% of deaths caused by disasters (UNISDR 2018). Geologically, the region is characterized by active tectonic plate movements in the Pacific and Indian Oceans which have been the source of major earthquakes and tsunamis.**

At the same time, the region is home to around 60% of the world population. In this context, disaster risk reduction (DRR) is crucial to ensure citizens are protected and their vulnerability reduced. It is also a challenge that is directly taken up by municipalities As the governmental level closest to the people, it is at municipality level that the challenge of DRR is directly taken on. International efforts such as the Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) are important steps towards stronger commitment and subsequent action on this issue. Even though this global agenda is primary addressed to national states, local governments are at the forefront of its implementation. This is recognized in the formulation of the SFDRR.

In the ASPAC Region, local governments have already succeeded in making significant progress in localizing the SFDRR. As my city, Surabaya, is hosting the 7th UCLG ASPAC congress we saw a perfect opportunity to gather and exchange practices and experiences between cities and learn from each other how localization of the SFDRR can be further advanced. For example, in the past we had the opportunity to learn and apply lessons from Phuket city in Thailand which was hit by a tsunami in 2004. As a result, we were able to transfer their experiences with reforestation as a means to increase resilience in Surabaya. We subsequently built more parks, mangrove areas, and green spaces which additionally helped lower the city temperature by 2°C in 5 years.

However, the Sendai Framework is a global agenda and DRR is an important issue for local governments on all continents. In this sense, the Peer Learning Workshop held here in Surabaya included lessons beyond the ASPAC Region and will serve as a source of knowledge and inspiration for all cities that form part of the UCLG network. The practices that have been presented and the expertise which has been developed as part of the learning process can support local and national DRR strategies in every municipality in order to achieve the 2030 SFDRR targets as planned. With this in mind, the purpose of this peer learning note is not merely to be a documentary record of the proceedings of the workshop, but also hopefully to encourage cities within the UCLG network to reinforce their efforts to localize the SFDRR and, by doing so, create more resilient cities and a safer future for their citizens.

**Tri Rismaharini**

Mayoress of the city of Surabaya
and President of UCLG ASPAC

# The Sendai Framework for Disaster Risk Reduction
## An Introduction

**In March 2015, the Member States of the United Nations adopted the Sendai Framework for Disaster Risk Reduction 2015-2030[1] (SFDRR) as a global framework aimed at substantially reducing disaster risk and losses of life, livelihoods and health as well as economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.**

The SFDRR highlights the significant shift from responding to hazards and disasters to managing the "risks" that create them and to reducing disasters and losses. Building upon the Hyogo Framework for Action 2005-2015, the Sendai Framework sets out four specific priorities for action: 1) Understanding disaster risk; 2) Strengthening disaster risk governance to manage disaster risk; 3) Investing in disaster risk reduction for resilience; and 4) Enhancing disaster preparedness for effective response, and emphasizing the need to "build back better" in recovery, rehabilitation and reconstruction.

The SFDRR, although a voluntary and non-binding agreement, explicitly highlights the role of states and governments in reducing disaster risk as well as the need for responsibility to be shared with all other stakeholders. It is evident that disasters generate not only human but also social and economic losses. Sustainable development therefore cannot be achieved without adequate actions to reduce disaster risks.

To support an assessment of global progress in achieving the aims of the Sendai Framework, seven specific targets have been agreed. One of these, Target E, focuses on *'substantially increasing the number of cou*ntries with national and local disaster risk reduction strategies by 2020' and specifically highlights the importance of the local level in Disaster Risk Reduction (DRR).

[1] To the Sendai Framework for Disaster Risk Reduction 2015-2030 will be further referred simply as "Sendai Framework" or by its acronyms "SFDRR".

**Links between the Targets of the Sendai Framework and the SDGs**
Source: UNISDR 2018


## Asian cities and regions at risk

It is undeniable that cities are potential hubs for the economic and social development of a region. However, as more and more people move to cities, the resulting urbanization also brings challenges for local governments to ensure the safety and well-being of its population. The Asia and Pacific Region in particular is highly prone to disaster risks. According to the 2017 World Risk Report,[2] 10 of the top 15 most 'at-risk' countries in the world are in this region. In addition, 9 countries in the region are among the top 15 with the highest "exposure" level worldwide. Of these, 6 are island nations with the remaining 3 located by the sea. Localization of global agendas is critical to achieve resilience at local level and local actors must be committed to accepting shared responsibilities and to strengthening their capacities to increase disaster resilience and achieve the SFDRR targets.

[2] World Economic Forum 2017: The Global Risks Report 2017. 12th Edition. Geneva.

## German cities – multi-level governance approach for risk reduction

As a co-organizer of the Peer-Learning Workshop in Surabaya, Connective Cities -an initiative of the German Development Agency GIZ, the Association of German Cities and Engagement Global-, facilitated the participation of two German cities (Cologne and Bochum). The input of its Director, Manfred Poppe, provided an enriching lesson on the German multi-governance approach to disaster risk reduction and management.

Because of the federal structure of Germany, disaster prevention and responsehave primarily been responsibility of the state (provincial) level. The national state simply provides the general legal framework and runs an office for civil protection and disaster assistance. However, in view of climate change, the threat of terror attacks and the inherent new challenges for civil protection and risk management, the German Federal and State Governments have agreed upon a new conceptual framework for civil protection and disaster management. The improved distribution of responsibilities and closer cooperation between different government levels should allow a better use of the available relief capacities. The experiences shared by Cologne and Bochum at the Surabaya Peer-Learning Workshop provided useful insights into the re-organization process of multi-level governance regarding disaster risk reduction and management.

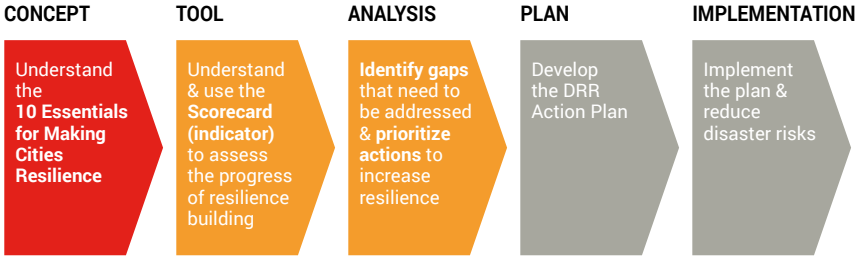
## UNISDR - Making cities resilient

In 2010, the United Nations Office for Disaster Risk Reduction (UNISDR) and its partners launched the **Making Cities Resilient Campaign** with the primary aim of raising awareness on the part of local governments and cities of the need to reduce disaster risks. To date, more than 4,000 cities have signed up to the Campaign to make their cities more resilient.

Paving the way to DRR and the development of disaster resilience at local level, the Campaign divides the concept of disaster resilience into ***'10 essentials for making cities resilient'***. In addition, the ***'Disaster Resilience Scorecard for Cities'*** was launched in 2017 to support local governments and cities in developing a baseline snapshot of the progress and status of the development of disaster resilience. By taking into account any existing gaps, the Scorecard tool helps to identify potential actions to further increase disaster resilience.

**The strategic approach of the Making Cities Resilient Campaign**

Source: UNISDR 2018




If completed in a collaborative manner, cities can 1) enable dialogue between key city stakeholders who may otherwise not work together regularly; 2) enable discussion of priorities for investment and action based on a shared understanding of the current situation; 3) enable development of a city resilience strategy/action plan; and 4) ultimately lead to actions and implementable projects that will deliver increased resilience for the city over time, contributing directly to the attainment of Target E of the Sendai Framework.

## UN-Habitat efforts to make cities sustainable and resilient

In order to support local administrations in the development of resilience strategies and to assist them in the implementation of the SFDRR and other local-focused agendas (New Urban Agenda), UN-Habitat along with UNISDR have launched the *Making Cities Sustainable and Resilient Action*. This 36-month initiative is aimed at cities and provides them with knowledge, tools and resources to better understand the hazards, shocks and stresses that might befall them. As a result, over 200 cities have been supported, increasing the number of cities committed to the Making Cities Resilient Campaign to over 4,000.

## Financing local disaster risk reduction

In April 2018, a study was conducted with the participation of 169 local governments who were asked to complete the Scorecard assessment tool. The study revealed that the financing of resilience is the weakest area for local governments in all regions of the world and the most prominent challenge for DRR at local level. Among the local governments that participated in this study, only 39% had a financial plan that contemplated DRR activities in their budget. The rest had no secured budget for resilience on a regular basis.

Resilience partnerships are needed to accelerate the development of local disaster resilience, not only in terms of financing but also with a view to building institutional and societal capacities for resilience

### Some key recommendations include:

**Creation of incentives** for local authorities to develop DRR strategies and obtain greater support from national governments

**Technical assistance** to local authorities with low capacity.

**Greater collaboration between local authorities and partners** to support each other and pass on any lessons that have been learned (e.g. sister cities).

**Greater financing for DRR at local level** (particularly from national resources, sectoral development agencies, and other funding sources).

**Greater collaboration between UN** and regional partners to assist local authorities in DRR strategy development.

# 1. **The Peer Learning**

The Peer Learning Workshop on DRR and localization of the Sendai Framework, which was organized by UCLG and UCLG-ASPAC and held in Surabaya, brought together more than 15 cities from Asia, Latin America, Oceania and Europe. Additional help in organizing the event was provided by UNISDR, UN-Habitat, the Guangzhou Institute for Urban Innovation, the UCLG Taskforce on Territorial Prevention and Management of Crises, and the Connective Cities Network of the German Development Agency. Peer learning means learning between cities as equals. It provides an opportunity for cities to share their experiences and stories with others. Peer learning is not merely the exchange of practices; it also incorporates a learning experience as knowledge and skills are transferred between municipalities as part of the format.

In this Peer Learning Workshop, which allowed members and partners to work in a conference environment, the program included:

**A roundtable discussion** which showed the political relevance of the topic for local leaders (Chapter 4)

**A field visit to a nearby site** which provided the participants with first-hand impressions of disaster response and long-term management (chapter 2)

The **exchange of practices through poster sessions** in which the participating cities presented their DRR success stories. (chapter 3)

The participation of selected **experts and partners who guided the peer learning** with short inputs at the beginning and enriched the discussions and brainstorming throughout the 3 days

Poster Presentation during the Peer Learning.
Source: UCLG 2018

As a result of the Peer Learning Workshop, an important exchange took place of wide-ranging know-how generated at municipality level about DRR and localizing the Sendai Framework. However, the learning cannot stop with the publication of this note but must continue within the networks that were created or fostered during the peer learning event. The participating partners and members developed numerous ideas to follow up on, based on the network learning principle that UCLG is committed to and on the lively discussions among our members throughout the event.

## The Guangzhou International Award for Urban Innovation

The Guangzhou International Award for Urban Innovation is a joint initiative between UCLG, Metropolis, and the City of Guangzhou. Since its inception in 2012, this award aims to highlight the role of cities and local governments in the global front of innovation-driven development. Every other year, the Guangzhou International Award receives hundreds of innovative initiatives from cities and local governments across the globe. After four cycles, the Guangzhou International Award organizers have considered nearly 1000 innovation stories. These initiatives represent a wide range of thematic areas, including governance, mobility, water, technology, education, and DRR.

The practices of the winning or shortlisted cities are frequently exchanged. Before the award ceremony concludes, 15 shortlisted cities narrate their tales of innovation to each other as well as to an international audience. It is a precious learning opportunity for cities, as their peers explain how they finance their project, how they gain the support of the citizens and how they avoid political difficulties. The practices that are narrated are taken up by many observers. Over the course of 2019, the Guangzhou International Award will again bring cities together for an in-depth exchange of their initiatives, fulfilling its aim of being not merely an award but more importantly a dedicated knowledge platform for peer learning and exchange in urban innovation. This makes the Guangzhou International Award for Urban Innovation an important partner for the UCLG Learning Agenda in identifying innovative practices and fostering local action.

# 2. **Field visit to the Sidoarjo mud flow**

The field visit that took place on the second day of the Peer Learning Workshop was to the Sidoarjo Regency which is located close to the city of Surabaya. The area become infamous as the result of a disastrous event that started on the evening of May 26, 2006. While a gas company was searching for natural gas in the area, a sudden blowout of hot water, gas and steaming mud caused major damage and killed 20 people. However, the blowout also signaled the emergence of a new mud volcano that has been discharging a torrent of hot mud from the ground since that day. At its peak, mud was being discharged at a rate of 180,000 $m^3$/day. According to the National Agency responsible for the Sidoarjo Mudflow, the disaster has caused the displacement of 12 villages and nearly 40,000 people. The mudflow continues today but is contained by levees, a technical solution that ensures the discharged mud will no longer affect new areas and can be collected within a massive basin from where it is led to the ocean and used to create a new island. However, the 2,000 acres (810 hectares) that are already covered with mud, which corresponds to twice the size of Central Park, cannot be rehabilitated and will probably suffer from further eruptions for the next 20-30 years.

Group picture at the field visit site in Sidoarjo.
Source: UCLG 2018

Presentation of the Director of the Sidoarjo Mud Management Body. Source: UCLG 2018

## Local and regional governments at the forefront of disaster management

For the peer learners, this tragic story showed how local and regional governments can respond to disasters and manage the redevelopment of affected settlements. The Sidoarjo Regency -as the regional government level- was the first authority to respond and provide help for the people. Three months before any official action was initiated by the national government, the local and regional authorities had already formed an implementation unit to control the disaster and coordinate local relief efforts.

The response from the national government was slow and at the beginning less intensive. Before taking any action, the national government tried to clarify whether the private drilling companies or the national state were responsible in the event of a disaster of this type. Over time, the national government increased its efforts and established a statutory body to manage the disaster site over a long period. This marked a shift of responsibility for managing the disaster from local and regional level to national level. While this change brought more financial resources and technical know-how to Sidoarjo, the assistance was criticized for arriving far too late and it was suggested that it had merely been triggered by the growing national and international interest in the disaster. Furthermore, questions such as the damage to local economy or social assistance to villagers received little attention.

The visit to the Sidoarja site and the presentations from local experts gave the participants an idea of the enormous consequences of this disaster and the complex challenges faced by the affected local and regional governments. The walk on a stabilized mud-floated area and the crater-filled landscape left a striking impression on all the participants.

*"The visit highlighted very clearly the need for the collaboration and coordination of all governance levels in order to cope with such extraordinary events, which unfortunately hit our country but also mobilized us to engage in prevention"*

**Head of Local Disaster Management Agency**
City of Banda Aceh (Indonesia)

# 3. "Listen 2 Cities": case studies of the participating local and regional governments

**Mayors and experts from Asia, Europe, Latin America and Oceania joined the Peer-Learning Workshop to share their cities' case studies and opinions on the issue of DRR. The stories from Bogor and Tokyo from Asia, Bochum and Cologne from Germany, Sao Paulo from Brazil, and Christchurch from New Zealand enriched the learning experience and demonstrated how local action can make cities more resilient. The following summaries introduce the cities and their DRR experiences that were shared in the interactive discussions of peer groups about their practices:**

## 1. Bochum:

### Municipal administration and management of extraordinary cases of crises

The city of Bochum is located in the Federal State of North Rhine-Westphalia, in Germany. With nearly 375,000 inhabitants, it is part of the Ruhr-Agglomeration, which is one of the main economic centers in Germany. As a German municipality, its administrative structure is embedded within the governmental structure of the Federal State of Germany.

In the event of an emergency, the city of Bochum works in accordance with the principle of subsidiarity. Whereas the Federal Government is responsible for civil defense at national level, the Federal States are

responsible for disaster management and policing. The Federal States also provide local authorities with special task forces for chemical, biological, radiological, nuclear (CBRN) defense, and urban search and rescue (USAR), in cases of extraordinary and/or major events. At county level, the government supervises local emergency management, coordinates fire and rescue services, emergency medical services and explosive ordinance disposal. Finally, the responsibility of the mayor of a municipality is to manage and coordinate local fire and rescue services, emergency medical services as well as to provide for civil protection.

In order to enhance the effectiveness of its emergency management, the city of Bochum follows a three-step procedure:

**Create awareness by informing** about extraordinary situations

**Assess public demands** in extraordinary situations

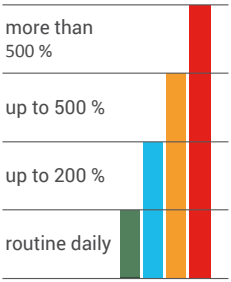
**Develop specific structures** for appropriate reactions by the municipal government

For the standardized management of emergencies and the appropriateness of reactions by the municipal government, the city of Bochum uses a guideline which differentiates between four escalation levels and defines appropriate measures depending on the severity of the emergency.

As the guideline is applicable to various extraordinary situations such as heavy storms, floods, unforeseen staff shortages in the town government, ordinance clearance and others, it allows a standardized response to emergencies at municipal level. Together with the principle of subsidiarity in emergency management, it enhances the preparedness of municipal governments for extraordinary situations and crises and establishes an effective emergency management at municipal level.

**Standard of escalation levels and reactions**

Source: City of Bochum 2018




| escalation level | description | reaction |
|---|---|---|
| 0 | routine daily | none |
| 1 | increasing service demand up to 200 % | relocation of employees within the section |
| 2 | increasing service demand up to 500 % | relocation of employees within the department |
| 3 | increasing service demand more than 500 % | activating office of emergency management, preparations for staff leaded government |

# In summary:

**Challenge:** Subsidiary emergency management

**Strategy:** Clear definition of tasks and responsibilities at different government levels and establishment of standardized emergency management

**Lesson:** All government levels need to know their exact responsibility in case of emergency and establish standardized management plans to facilitate a quick and effective response

**Transfer:** Standardized management plans for emergencies which especially reflect the different roles of the different government levels can be a useful option for other municipalities and can be applied in different administrative settings

# 2. Bogor:
## Municipal disaster management agency

Bogor municipality is located nearly 60 km south of Jakarta, the capital of Indonesia. The focus of Bogor regarding disaster risk reduction and management lies in the development of skills for volunteers and officers. In addition, the municipality has launched projects such as the *Resilient Village Policy and the Safe School Project* to create awareness and develop skills. The emphasis in skill-building for volunteers is on hazard assessment, first aid, survival training, shelter management, logistic management and search and rescue.

Staff members and officers are given special training in vertical and water rescue, shelter management, logistic and apparatus management, the establishment and maintenance of a disaster database and information system and post-disaster needs assessment.

The *Resilient Village Policy* project is aimed directly at villages to enable them to better regulate disaster relief in their territory. The main activities include the development of disaster management, community action and contingency plans. It also focusses on establishing early warning systems and improving the resilience of the local economic and natural environment.

Skill-building of officers and volunteers.
Source: Bogor Municipality 2018


Safe School Project. Source: Bogor Municipality 2018

The *Safe School Project* is organized in collaboration with the national government and aims to increase the resilience of school facilities. Training sessions for staff and students on how to react in emergencies prepare them better for rapid response. Additionally, the improvement of the construction and location of educational facilities makes them less vulnerable to hazards.

# In summary:

**Challenge:** Lack of awareness and capacity of officials and residents regarding disaster risk reduction and response

**Strategy:** Campaigns and training to increase the capacity of officials and volunteers

**Lesson:** An increased capacity regarding disaster risk reduction and response allows the municipality to better manage disasters itself and makes it less dependent on the help of other governance levels

**Transfer:** Professional skill-building for volunteers and officials make municipalities less reliant on the help of other governance levels in case of disasters

# 3. Christchurch:
## Building community leadership capacity for DRR

For the improvement of the city's disaster risk management, the city council of Christchurch, New Zealand, relies on existing potential within the local community. The city puts community facility networks, community boards and community governance teams at the center of the development of new disaster management plans as these actors know best the neighborhood and its residents.

Impressions of the community and council partnership. Source: City of Christchurch 2018

The city council facilitates the integration of existing community groups through the provision of financial, material and human resources which encourage the development of their own plans for community resilience.

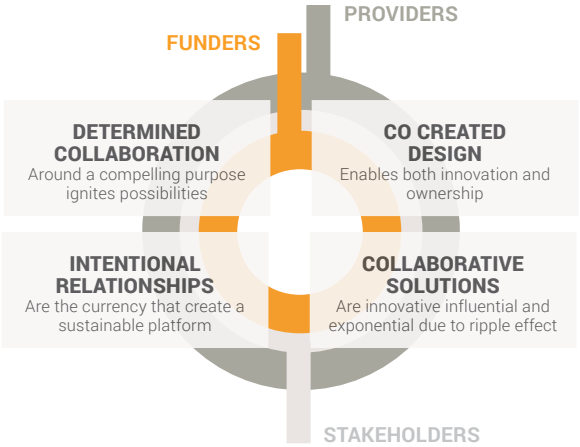
Moreover, community governance teams, in co-operation with national agencies of civil defense, organize and moderate participatory events to support the different community groups. During the participatory events, multiple community resilience plans have already been developed and strong networks between the different social groups established.

This participatory approach, which is called the "*Leaders in Communities*" program, was established in 2014 to help members of the local community to engage in and lead community development. A multi-stakeholder governance group that designs, finances, resources, delivers and evaluates projects and programs supervises this ongoing program.

The inclusive approach of the city council allows a better understanding of the issues, concerns and compelling needs of the residents in emergency situations. Furthermore, it functions as a catalyst or ignition point for different stakeholders to come together and discuss about needs, expectations and actions. Motivated by a shared purpose, the stakeholders are prepared to negotiate, compromise and put aside individual interests, allowing the development of community-based resilience plans with higher levels of ownership and commitments by the community members than commonly seen with regular disaster risk management approaches.

**"Leaders in Communities" program**

Source: City of Christchurch 2018




# In summary:

**Challenge:** Little reflection of community needs and expectations in disaster risk management and strategies

**Strategy:** Bottom-up approach to foster the participation of members of local communities in the creation of disaster management strategies

**Lesson:** Participation of community members in the formulation of plans leads to higher levels of ownership and commitment by the community

**Transfer:** Collaborative approaches that include the local community in the creation of disaster risk management strategies and plans could be integrated in existing practices

# 4. São Paulo State:
## Coordination of protection and civil defense

The state of São Paulo, in the south of Brazil is greatly affected by landslides caused by heavy rainfalls during the wet season from November to March. To reduce the risk of material damage and human loss, the state government implemented the Civil Defense Preventive Plan (CDPP). The main objective was to optimize the available human and material resources and anticipate risk situations better. For this, the CDPP fostered communication between the different actors of the state system for protection and civil defense as well as the police and fire brigade emergency services, municipal civil defense teams and the communities themselves.

Landslides in São Paulo State.
Source: São Paulo State 2018

The CDPP is based on the monitoring of rainfall indices, weather forecasts, field surveys and emergency calls. During the dry season in the months from April to November, preparatory activities such as training courses of staff and community members, publication of reports, registration of events and technical studies take place. A database was also established providing information on disasters with risk area mappings and meteorological data. Based on data from different external sources and the newly established database, the civil defense authorities at state and municipal level are able to differentiate the degree of emergency in four levels (No imminent risk, Attention, Alert and Emergency). Through this, a reliable warning system for affected municipalities could be established. It was consequently possible to take appropriate measures for disaster management, resulting in a reduction of affected municipalities and deaths caused by landslides in the state of São Paulo.

## In summary:

**Challenge:** The state of São Paulo is seasonally affected by heavy rains which cause landslides that are a threat to life and infrastructures

**Strategy:** Establishment of a regional monitoring and early warning system to which several key actors contribute

**Lesson:** The coordination of existing data from several regional actors can be used to establish an early warning system that together with adapted risk strategies allow a better management of natural hazards

**Transfer:** The coordination of existing data and the better cooperation of involved actors can improve the anticipation of risk and can therefore strengthen regional disaster risk management in general

# 5. Tokyo:
## Measures concerning stranded people in emergency situations

Tokyo (~ 9.5 million inhabitants) is the capital of Japan and the national political and economic center. Due to its location along major folds of the earth crust, the city faces a high risk of earthquakes and their side effects, including landslides and tsunamis, affecting millions of people's lives and properties. Therefore, the aim of disaster management measures in Tokyo is primarily to save people's lives and maintain functionality of the capital.

After the Great East Japan Earthquake in 2011, the municipality realized the need to reestablish comprehensive disaster management measures in order to mobilize all the city's resources. It was clear that cooperation between all the stakeholders had to be enhanced to foster self-help, mutual assistance and public help. Another important lesson learned was to undertake multiple measures to ensure the operation of backup services. This was particularly crucial as the measures in force at the time were insufficient during the disaster of 2011, causing traffic congestion, failure of the mobile phone network and leaving 3.5 million people stranded for hours (and in some cases even days).

To improve the effectiveness of disaster management measures, particularly concerning stranded people, boards were set up to establish measures to be taken specifically for stranded people and an ordinance for measures concerning stranded people established. This was undertaken in cooperation with the private sector and representatives of the civil society. Today, the

Traffic Congestion and overcrowded temporary shelter. Source: Tokyo City 2018

ordinance for measures concerning stranded people plays a critical role in disaster management as it provides a guideline for institutions and responsible actors in case of an emergency.

Its aims are:

**To prevent** people from heading home all at once.
**To secure** temporary shelters.
**To provide** communication tools and information services.
**To assist** people returning home.

Due to the enhanced legal guidance on disaster management and financial support for the private sector, more than 50% of all employers enhanced their storage facilities for water and emergency foodstuffs. The number of temporary shelters has also increased, and more than 10,000 support stations have been established in schools, restaurants, convenience stores and other places to assist people on their way home in case of a disaster.

# In summary:

**Challenge:** As the result of a disaster, millions of people can be stranded and unable to return home for hours or even days

**Strategy:** The city established Boards which developed strategies to significantly reduce the number of potentially stranded people through measures such as more public shelters, emergency supplies at work and a better communication infrastructure

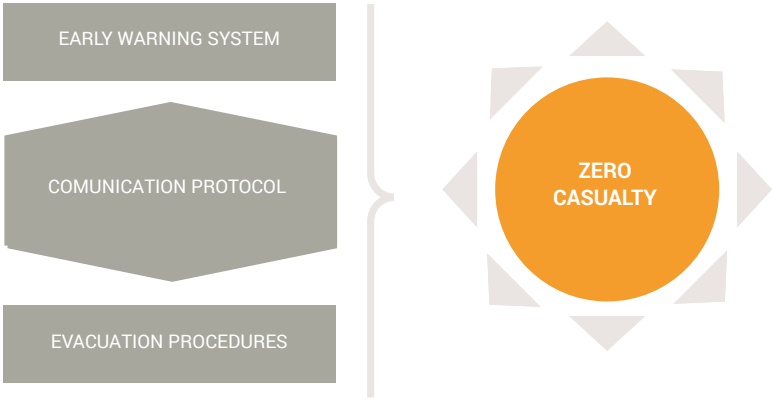
**Lesson:** Cities with a high number of commuters must be prepared for thousands or even millions of stranded people in case of a disaster

**Transfer:** Prepare workplaces and schools for a situation in which people cannot return home and provide sufficient public shelters and communication facilities

# 6. Albay:
## Zero Casualty strategy

The province of Albay forms part of southeastern Luzon Island, Philippines. It has around 1.3 million inhabitants and is famous for the Mayon stratovolcano which is located on the outskirts of the regional capital Legazpi. The Mayon volcano presents also a major natural hazard and its periodic eruptions put several settlements at high risk. The region also suffers from typhoons which hit the territory regularly and have caused major losses of life and property in the past. In addition, the province had no regular disaster management office or staff and disaster risk reduction was not contemplated in the public budgets. To tackle these issues and significantly reduce the vulnerability of the citizens the regional government has launched its *Zero Casualty Strategy*, which aims to significantly reduce the risk of natural hazards. As a first step, a permanent disaster management office was established, and DRR was institutionalized through legal decrees.

**Zero Casualty strategy of Albay**
Source: Province of Albay 2018



The heart of the strategy is an early warning system in combination with effective evacuation procedures. Potential disaster as the result of natural hazards can therefore be anticipated and affected citizens can be evacuated in time. The establishment of the regional early warning system needed significant financial investment as well as a shift in the culture of risk reduction. Societal participation was also crucial in the form of civil society groups and NGOs which facilitated the establishment of efficient evacuation procedures. However, the efforts have paid off and for 19 years not a single casualty caused by a natural hazard has been reported in the province of Albay. The massive renovation of disaster risk management significantly increased the province's resilience to natural hazards.

# In summary:

**Challenge:** The province of Albay is heavily affected by tropical typhoons and volcanic eruptions which present a major threat to its citizens

**Strategy:** The establishment and financing of a real-time early warning system coordinated by a permanent regional disaster management office and well-coordinated evacuation plans

**Lesson:** The early warning system together with the evacuation plans, as well as sufficient public finance dedicated to regional DRR, can significantly reduce the loss of life caused by natural hazards

**Transfer:** A regional real-time early warning system and the establishment of efficient evacuation plans in combination with legal and financial strengthening of disaster risk management is an effective strategy to reduce risk caused by natural hazards

# 4. The Roundtable Discussion

**The roundtable of local leaders and experts on DRR provided insights into the priorities of municipalities and the specific challenges at local level. The panel, which included representatives from local, regional and national level agreed that stronger collaboration between all government levels will be needed to achieve and localize the SFDRR and to make all territories more resilient.**

**UCLG has been advocating on the importance of local and regional governments since the formulation process of the Sendai Framework. In particular the regional section UCLG ASPAC has been tireless in building awareness for the agenda at the local and regional level, as well as continuing to push for more attention on resilience in the ASEAN governance system. Dr Bernadia Tjandradewi, the Secretary General of UCLG ASPAC, reminded the importance of target e) of the Sendai framework as it will be the basis for more precise alignment and cooperation between government tiers.**

However, thanks to global agendas such as the Sendai Framework and the New Urban Agenda, increased efforts of local and national governments and the support of networks such as UCLG, the panel was optimistic that Disaster Risk Reduction is an increasingly tackled issue and that further progress will be achieved to make all territories and their citizens more resilient.

A particular highlight was the message of the mayoress of Iriga City, Madelaine Yorobe Alfelor who could not attend the event due to a devastating storm that hit her city just a few hours before she was due to arrive. Despite this, she participated with her staff via video-stream directly from the Emergency Center.

The mayoress commented that the Sendai Framework helps to mainstream disaster risk policies at local level. Furthermore, she pointed out the importance of disaster preparedness which has made her city one of the most resilient in the Philippines. These efforts together with the strict compliance of building standards have reduced the vulnerability of this city and its citizens significantly.

Councilor Sara Templeton commented that in Christchurch special focus is given to collaborating with communities to improve the resilience of the smallest administrative units. She highlighted the value of bottom-up approaches in resilience strategies.

The representative of Jakarta, Deputy Governor for Environment and Spatial Planning Mr. Oswar Muadzin Mungkasa explained the central role of risk assessment for the establishment of risk reduction strategies. The city uses a resilience indicator as the basis for all policies and activities. Jakarta is very advanced in the mainstreaming of disaster risk aspects in legal frameworks, showing that the role of regional government is crucial to enable DRR policies. Jakarta is additionally working on a grand community-based DRR program.

Also, the representative of the city of Faridpur argued that DRR and resilience strategies are deeply linked to local planning, and both, capacity and also competences are increasing. He explained that legally enshrined development planning is crucial for DRR, especially in the context of challenges triggered by rapid urbanization such as informal settlements, lack of infrastructure, poor livelihoods and living environments.

In addition to insights from local governments, the representative of the Indonesian National Board for Disaster Management explained that the tragic Indian Ocean tsunami in 2004 led to strong national efforts in DRR. A milestone was the approval of the first national disaster management law in Indonesia which was formulated in collaboration with the civil society and international stakeholders and which shifted the focus from response to disaster preparedness and mitigation. However, the request to local governments for the development of local DRR strategies requires further incentives and support to implement the strategy. For this, inter-ministerial coordination will be key and the next step that will be taken.

During the discussion with the other participants, further central issues of local governments were mentioned such as the need of financial support from the regional and national level in order to invest in physical disaster mitigation measures. The city of Cologne shared their example how the local government could ensure the financial support to construct new flood defenses valued 430 million euros. This major investment avoids the estimated damage of 50 million Euro of each disaster that occurs when the river Rhine is flooding the city. They could mobilize central, regional and local budget to stem the cost of a removable hydraulic wall. Moreover, the input of the city of Katmandu pointed out that their experience on recovery was that in case of disasters, most resources come directly from the community and not from other government levels. Their effort must be recognized and taken into account to remain motivated.

## The UCLG working group on the prevention and management of territorial crisis

International relief response often lacks a local governance dimension addressing the specific needs of local level.

The UCLG working group on prevention and management of territorial crisis addresses precisely this issue and provides the following assistance:

**A platform for local government disaster management** to facilitate the exchange of knowledge and expertise

**A political and technical platform** to capitalize on lessons learned and provide increasingly articulated technical support in crisis situations

**Improved and increased availability of local government** expertise to disaster affected municipalities

**Advancement of the role of local government** in the international disaster management agenda

The main "operational" challenges that the working group faces are concerned with how to optimize coordination of the support and how to better focus its help to the affected local authorities in order to assist them to build back better and to increase their resilience. The working group aims therefore to improve cooperation between local governments and local government associations from different countries and to enhance the involvement of other entities such as the United Nations, NGOs, national government and the private sector.

The focus on resilience of the working group is addressed through the promotion of technical assistance within the UCLG network to assist vulnerable local governments, especially in disaster-prone regions, and just after a disaster, to improve preparedness and response. Therefore, the working group provides training, materials and tools for local and regional governments and their staff. It fosters decentralized cooperation between local and regional governments and supports international initiatives on DRR.

# 5. Conclusions and the way ahead

## Conclusions from and for local and regional governments

The Peer Learning Workshop provided the opportunity to present and exchange DRR practices and success stories as well as ideas for localization of the Sendai Framework. Conclusions regarding concrete local actions can be drawn from the mutual learning experience. As the SFDRR outlines 4 priority areas, the lessons learned from the event are structured around these points:

### 1. Understanding disaster risk

The Peer Learning Workshop demonstrated that the integration of disaster risk assessments in local and regional land use planning and policies is crucial to reduce the number of citizens who live, work or study in endangered zones. Moreover, raising awareness of the importance of DRR among citizens and public officers is central to guarantee an efficient response in the event of an emergency. **The integration of children and students** is especially fruitful as these groups can have a multiplier effect for the awareness-raising process. **City-to-city cooperation and capacity building** regarding DRR are viable options to make the local level more resilient against natural and man-made hazards. Peer learning is an excellent example of how **south-south and south-north mutual learning** between local and regional governance can be beneficial for all participants. Finally, the establishment of dedicated DRR departments in technical municipal services has been presented as a successful first step of how local governments can improve their disaster risk management. These lessons show that the organization of local public administrations and their efforts in legislative and educative measures are crucial to make their territory more resilient.

# 2. Strengthening disaster risk governance to manage disaster risk

The second priority of the Sendai Framework can be tackled by local and regional governance through the **establishment of local DRR strategies and plans**. This lesson from the Peer Learning Workshop also corresponds to **target "E"** of the framework. However, experiences at municipality level show that **citizen participation and close collaboration with stakeholders** like civil society organizations (CSOs), non-governmental organizations (NGOs) and the private sector are central for the creation of DRR strategies and management. Moreover, a commonly issued concern was the lack of clarity about the responsibilities of each government level in disaster risk reduction and response. A clear distribution of tasks, especially in emergency situations, can facilitate the efficient response of all relevant authorities. The mayor of Iriga confirmed this strongly during her contribution via video-call directly from an emergency coordination meeting during an ongoing typhoon:

*"Our communication works well, we are all in the same boat, and we have learnt to work in coordination with the communities and other governments. This makes us feel we are not isolated and alone, and despite the urgency we are taking the right decisions."*

**Madelaine Yorobe Alfelor**
Mayoress of Iriga City

# 3. Investing in disaster risk reduction for resilience

Finance is a central issue for good local and regional governance of DRR. Disaster mitigation, especially physical constructions, present massive financial challenges for local and regional governments. However, in some cases these measures are the only way to reduce risk for citizens and their property. The dedication of sufficient national funds for this purpose is important, but activities for DRR must also be permanently reflected in local and regional budgets and not just in the context of concrete events. The lesson of Cologne shows that the creation of physical mitigation measures with financial support at national level can significantly reduce the risk of floods. In addition, the sustainable use and management of ecosystems and the implementation of integrated environmental and natural resource management can also foster the resilience of municipalities. Finally, early warning systems in combination with evacuation plans need to be set up in order to mitigate the effects of what in some cases are inevitable hazards.

*The early warning system for earthquakes saved many lives in the Indonesian city of Padang which had learnt lessons from Aceh after the 2005 tsunami."*

**Edi Hasymi**
Head of Local Disaster Management Agency -
City of Padang, Indonesia

# 4. Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction

The striking of certain hazards is neither predictable nor mitigatable. Therefore, preparedness is essential to enable citizens and authorities to respond effectively to a disaster. To ensure this, practices and drills are common and useful tools. However, as the case of Tokyo has demonstrated, these must be combined with the allocation of sufficient resources for emergencies such as shelters, food, medication and communication technology. The "*safer schools initiative*" in Indonesia shows that critical infrastructure such as schools and hospitals must receive special attention from the municipalities. Once a disaster has happened and the resilience of a municipality has reached its limit, external assistance is needed. Local and regional governments can support affected municipalities through decentralized cooperation and help to build back better, enabling the territory to increase its resilience through the recovery process. In this context, the improvement of building standards must be a central focus, and in particular for the urban and rural poor.

## The Way ahead - Localizing the SFDRR within the UCLG Network

Localizing means implementing local agendas in cities and territories to reach local and global goals, it is a political process based on harnessing local opportunities, priorities and ideas.

Local governments have demonstrated their commitment to disaster risk reduction and resilience through initiatives such as the Making Cities Resilience Campaign, and have a proven track record implementing innovative resilience and DRR actions. The challenge for the coming period will be to

implement the principles and actions identified by the Sendai Framework at the local level. As highlighted by the Secretary General of UCLG, Emilia Saiz: ***"Our World Organization of Local and Regional Governments (UCLG) is committed to support its members to localize the Sendai Framework. We are convinced that its objectives are critical to achieve other global agendas and in particular the Sustainable Development Goals. In UCLG we are convinced that only if we shape agendas at the level of local communities, answering their needs and realities we will be able to achieve development that is sustainable and leaves no one and no place behind."***

UCLG and partners are committed to facilitate awareness raising and **are actively supporting the development of an enabling framework built around local strategies, experiences, and needs which can serve as a reference at the national, regional, and global level**. As part of the next steps, UCLG, in collaboration with UNISDR and UN-Habitat, and with the rest of the partners involved in the "Making Cities Resilient" campaign are exploring possibilities to support signatory cities in the implementation of the different axes of the Sendai Framework.

The localization of the Sendai Framework needs to be based on the development of strong tools that allow the assessment of local contexts and facilitate inputs in a structural, multi-level dialogue including all spheres of government.

The collaboration with the Global Alliance for Urban Crises will be critical to ensure local involvement in the post-crisis situations and in the development of risk preparedness strategies. **A resilient city is capable of anticipating, reacting and recovering from unexpected events, both natural and manmade, and is further empowered to address new or unexpected challenges.** Existing tools, such as the UN-Habitat resilience profiling tool developed under the leadership of the City of Barcelona, will be important references for a full-fleshed strategy towards the localization of the Sendai Framework.

Involving all parts of the UCLG Network will be essential for maintaining the spirit of solidarity gathered through the UCLG Taskforce for Territorial Prevention and Management of Crises.

Partners







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