

CHAPTER 1

Why Invest in Disaster Risk Reduction?



Photo: UNISDR

The reconstruction after the 2008 Sichuan Earthquake built on “twinning” cooperation from other provinces and cities in China that provided economic, technical and psycho-social support to their counterparts. Urban and semi-rural settlements, infrastructure, schools and production were rebuilt and inaugurated within two years time, as in this semi urban area in Dujiangyan, Chengdu.

Benefits of Investing in Disaster Risk Reduction and Resilience

There are many reasons for a mayor and the city council to prioritize resilience as part of their political and sustainable development agenda. For local government leaders, reducing disaster risk can be a legacy opportunity—paying attention to protection will improve environmental, social and economic conditions, including combating the future variables of climate change, and leave the community more prosperous and secure than before.

► “There is no such thing as “natural disasters.” Natural hazards—floods, earthquakes, landslides and storms—become disasters as a result of human and societal vulnerability and exposure, which can be addressed by decisive policies, actions and active participation of local stakeholders. Disaster risk reduction is a no-regret investment that protects lives, property, livelihoods, schools, businesses and employment.”

From the Chengdu Declaration of Action, August 2011

The gains include:

A Legacy of Leadership

- Strengthened trust in and legitimacy of local political structures and authority.
- Opportunities for decentralized competencies and optimization of resources.
- Conformity to international standards and practices.

Social and Human Gains

- Lives and property saved in disaster or emergency situations, with a dramatic reduction in fatalities and serious injuries.
- Active citizen participation and a platform for local development.
- Protected community assets and cultural heritage, with less diversion of city resources to disaster response and recovery.

Economic Growth and Job Creation

- Assurance for investors in anticipation of fewer disaster losses, leading to increased private investment in homes, buildings and other properties that comply with safety standards.
- Increased capital investment in infrastructure, including retrofitting, renovation and renewal.
- Increased tax base, business opportunities, economic growth and employment as safer, better-governed cities attract more investment.

► Truly participatory approaches provide an opportunity for scaling up innovative local initiatives to build resilience. One important factor is the relationship between the city government and those within its jurisdiction who are most at risk, with clear and direct response to community priorities.

More Liveable Communities

- Balanced ecosystems that foster services such as fresh water and recreation and that reduce pollution.
- Improved education in safer schools and improved health and well-being.

Inter-connected Cities with National and International Expertise and Resources

- Access to an expanding network of cities and partners committed to disaster resilience through the Campaign, to share good practices, tools and expertise.
- An expanded knowledge base and better-informed citizens.

Examples

Venice: Protecting a City's Cultural Heritage

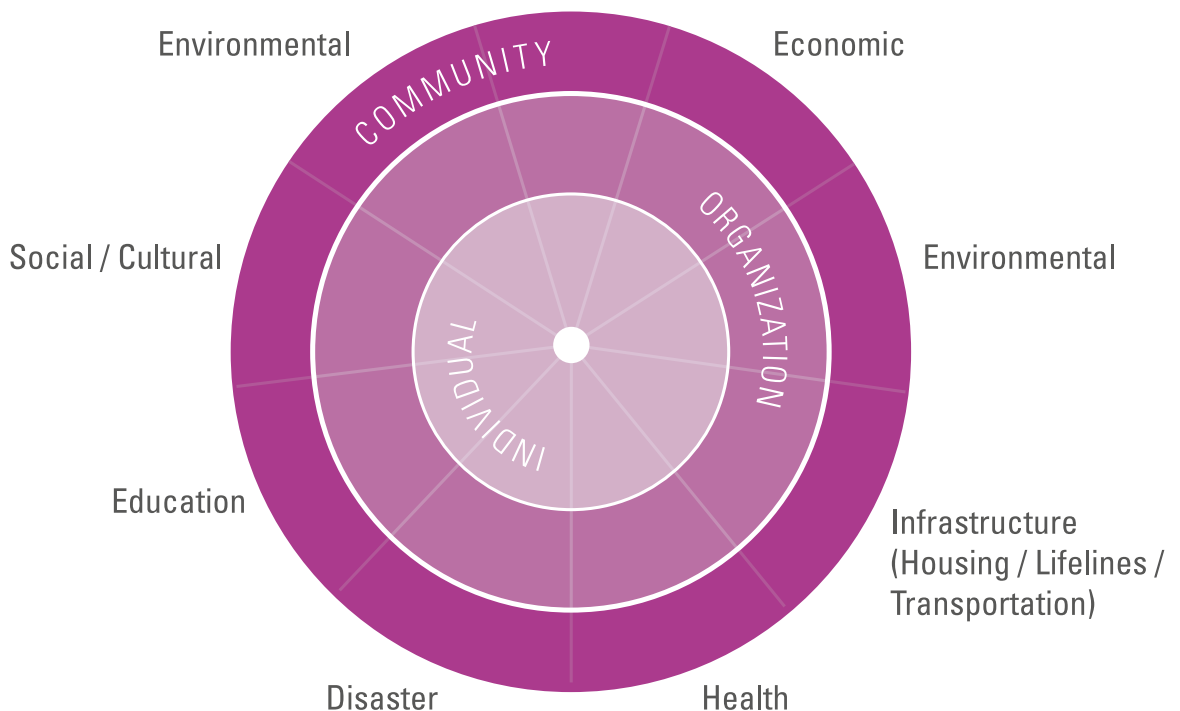
The Mayor of **Venice**, Giorgio Orsoni, takes his role seriously as custodian of one of the world's greatest cultural attractions, and consequently the many jobs and businesses it generates. About 20 million tourists pass through the streets of Venice each year and travel its waterways. The city sits at sea level and any change in the mean sea level leaves the city vulnerable to floods, endangering the artistic and cultural heritage of this 1,000-year old UNESCO world heritage site. While this may appear to be a problem of Venice alone, in many ways it is a problem related to climate change and the increase in sea level rise overall. "We were forced in some sense to develop particular care for cultural heritage protection. For this, we were recognized by UNISDR as a role model for other cities," said Pierpaolo Campostrini, Managing Director of the CORILA research centre in Venice, and the city's focal point for UNISDR's "Making Cities Resilient" Campaign. CORILA coordinates scientific research activities concerning the lagoon of Venice, which has long been a topic of debate between the scientific and public policy communities. Mr. Campostrini says the Campaign has expanded the dialogue between these two communities, providing a framework for transferring research results to other cities. A mobile tidal barrier system will be operational in 2014, the result of a number of organisations working together to achieve a sustainable and "flood-proof" Venice. *Read more at <http://www.corila.it/ENCorila.asp>.*

San Francisco, California: The Resilience Wheel

On the surface, the goal of “resilience” is universally embraced as the ideal at the individual, organisational and community level. Yet, given the diverse network of stakeholders in an organism as complex as a city, it can be difficult to frame the opportunity of resilience in a way that allows all actors to align it to their current mission and goals. **San Francisco** (California) uses the “Resilience Wheel,” with its eight functional areas, to show partners, both inside and out of government, how their organisation’s mission connects with those of other stakeholders who may work in sectors perceived to be quite different from theirs (i.e. agencies who work to advance financial independence in poor communities and emergency managers doing outreach for disaster preparedness). *See more at <http://resilientSF.org>.*

Figure 2:

The Resilience Wheel



Investing in Resilience is an Opportunity

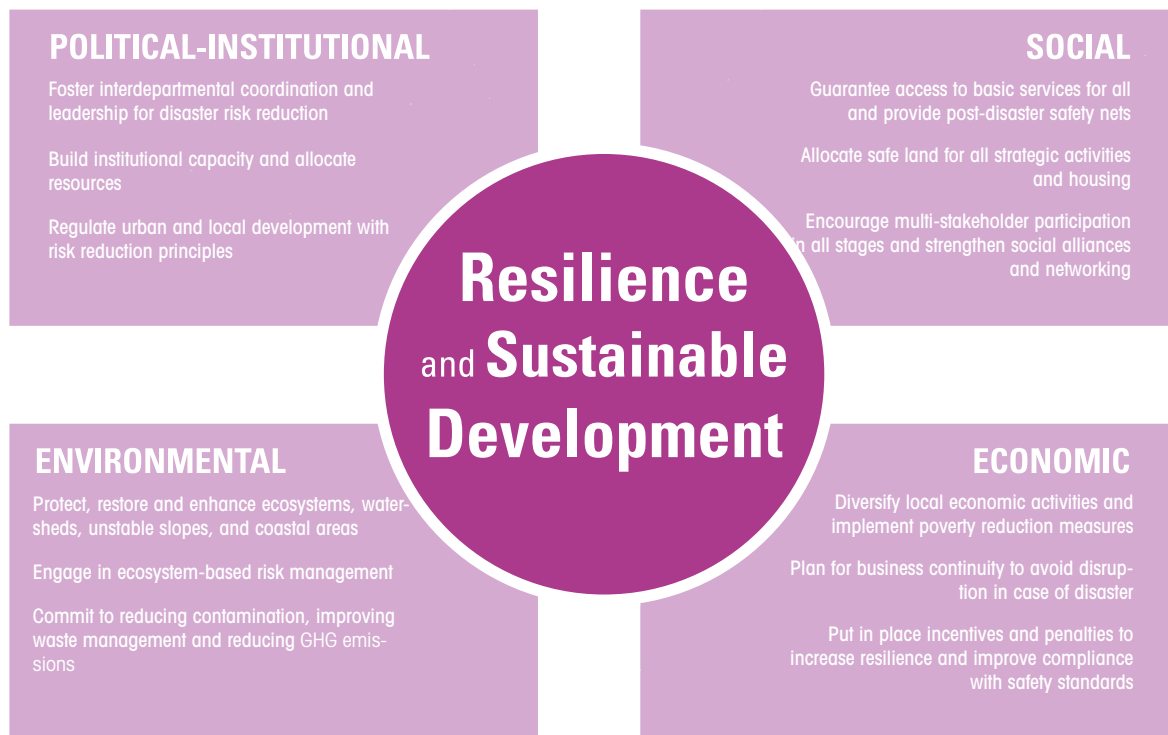
The risk of not paying attention to disaster risk reduction can lead to serious deterioration of the economy and ecosystems and a loss of trust by the population and investors. Frequent small and medium-impact disasters and single intense events can severely disrupt community lifelines—the systems that provide food distribution, water supply, health care, transportation, waste disposal, and communications—locally and with the rest of the world. Business and private investors may shy away from cities with a perceived indifference to acting to reduce disaster risk.

To overcome the perception that the disaster risk management budget competes for scarce resources with other priorities, risk reduction must be an integral part of local development. Holistic disaster risk management is more attractive when it simultaneously addresses the needs of many stakeholders and competing priorities. In general, the incentives are stronger when disaster risk management visibly contributes to improved economic and social well-being.

For example:

- Well-designed and drained roads that do not trigger landslides or floods will permit the smooth transportation of goods and people at all times.
- Safe schools and hospitals will ensure the security of children, patients, educators and health workers.

Figure 3: Disaster risk reduction and resilience is part and parcel of sustainable development in the environmental, economic, social and political spheres. This figure shows some of the relationships laid out in this Handbook.



Policy Directions

Building on the benefits of investing in disaster risk reduction, mayors and city councils may consider an incremental approach to prioritizing disaster risk reduction to support other prevention and safety agendas (such as road safety, citizen safety, water resource management, or climate change adaptation). Prevention and risk reduction are seen as long-term and invisible investments in time-bound political terms, although the choices are not between risk reduction and response but rather a combination of the two.

The following may help to develop policies that promote risk reduction and resilience:

- Adopt a resolution that makes your city a “Resilient City,” committed to reducing disaster risk, including the risk of climate change.
- Conduct risk assessments and integrate the outcomes in disaster risk reduction plans and in urban development design and plans.
- Raise awareness and use knowledge, both scientific and local, in disaster risk reduction practices; ensure that local capacities are enhanced and valued.
- Actively participate in national, regional and international networks and share experiences for making cities more resilient and join the “Making Cities Resilient - My City is Getting Ready!” campaign.

Example

Quito: An Integrated Policy Approach to Safety

The population of metropolitan **Quito, Ecuador** is exposed to a variety of geological and hydrometeorological hazards, yet a general lack of awareness of the potential danger has allowed the city to grow in an uncoordinated and unsafe manner. To address this reality, Quito put policies in place that take an integrated approach to security, addressing situational risks, road safety and risks to natural and technological hazards. With regard to risk reduction, these policies include:

- Making disaster risk reduction a crosscutting issue throughout the city’s planning and development processes.
- Promoting a culture of disaster prevention and preparedness for natural and manmade disasters to protect the population.
- Establishing a municipal risk management system with the appropriate human, technical and financial resources and capacities.

By carrying out policies in an integrated manner, working through inter-institutional and cross-departmental commissions, all aspects related to the safety of the population of Quito will be improved.

More information at: <http://www.quito.gov.ec> (Spanish only).

An Opportunity to Strengthen Participation

► **Community participation brings better local information to city planners, ensuring clear and direct commitment to community priorities. To be successful, local government leaders should deliver something the community needs first, to demonstrate good faith, and then follow up with practical, low-cost but important commitments to support their efforts.**

Disaster risk reduction is everyone's job. As a team effort, it provides a unique opportunity to strengthen participation.

In the city, the local government must lead the effort, as their managerial role offers the best insight into what is needed at the local level. A stakeholder assessment will help public services identify their roles and responsibilities (within their development activities and control mechanisms), identify factors that contribute to risk and adopt appropriate measures to address these.

Citizen groups in risk-prone areas, including informal settlements, local business and other groups should participate in risk assessments and the findings must be shared with them. Cities should work with national and local research institutes and hazard monitoring centres, encouraging them to contribute to documenting and assessing past and potential hazards and risk scenarios. These institutions should be part of the coordination mechanism created to deal with disaster risk reduction.

Local governments must also coordinate with national authorities, and vice versa, to apply and adapt national policies and legislation to local conditions. To enable them to take a leading position, both responsibility for activities and allocation and use of resources must be decentralized. Where this is not the case, an incremental approach is advisable. The city administration must be the first line of response and responsibility.

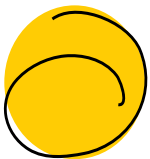


Photo: J. Valdés



Three Muniaplities working together with an NGO in Nicaragua: Telica, Quezalagua and Larreynaga-Malpaisillo

Disaster Risk Reduction is a Team Effort

- **Local Government:** Take the lead, convene other actors, regulate, monitor.
- **Sectors** (education, health, transport, environment, etc.): Integrate risk reduction as part of plans and responsibilities, contribute information, and implement activities.
- **Academia**, research centres: Provide research and data analysis; participate.
- **Citizens, community groups**, including indigenous communities and other vulnerable populations: participate, be actively informed, and take individual responsibility.
- **Private sector/business community:** Comply with safety regulations; contribute to the community with know-how and business continuity.
- **Professional groups**, including chartered surveyors, engineers, architects, and planners: Provide technical expertise on the built environment; social workers, teachers and others: organize, raise awareness, collect data; inform the media, etc.
- **Civil society**, non-governmental organisations (community-based, faith-based, voluntary, etc.): Participate, organize communities, coordinate, help oversee, monitor.
- **National government authorities and parliamentarians:** support decentralized capacities with resources, policy and enabling legislation.
- **International organisations:** provide technical cooperation, capacity development, resources, meeting space.

