

# **ISSUE BRIEF**

# **Reducing Disaster Risk in Urban Settings**

### Ministerial Roundtable

### 1. Stock taking

The world is experiencing a historically unprecedented transition from predominantly rural to urban. In 1950, one-third of the world's population lived in cities; today the number has already reached more than one-half, and in 2050 city dwellers are expected to account for more than two-thirds of the world's population. This rapid rise will mainly take place in developing countries. Africa and Asia – both still comparatively less urbanized than other regions – will be the fastest urbanizing regions with the urban population projected to reach 56% in Africa and 64% in Asia by 2050 (currently at 40% and 48%, respectively).<sup>1</sup>

With 60% of what will be urban in 2030 still to be built, cities also represent unparalleled opportunity. The report of the Secretary-General's High Level Panel on the post-2015 development agenda states poignantly that 'cities are where the battle for sustainable development will be won or lost.' Indeed, cities are drivers of economic growth, innovation and resilience.

Higher population density can create negative externalities, especially when urbanization is rapid, poorly planned and occurring in a context of widespread poverty. Estimates suggest that 40% of the world's urban expansion is taking place in slums, exacerbating socioeconomic disparities and creating unsanitary conditions that facilitate the spread of disease. <sup>2</sup>The risk of losses from disasters is exacerbated in such contexts. Cities are made up of complex interrelated systems and can be points of risk convergence, making them particularly vulnerable to cascading failures.

The growing concentration of people and assets in cities, combined with increasingly intense and frequent disasters in recent decades means disasters are affecting more urban dwellers with increasingly harmful consequences for employment, housing and critical infrastructure, such as roads, power and water supplies. This is especially the case in fast-urbanizing developing nations, where poorly planned and managed cities create new risks and threaten to erode previous development gains when disasters strike.

### 2. Overview

The interconnectedness of cities forms the backbone of global trade, with cities generating a large majority of the world's GDP. As per available data, over 80% of global GDP was generated by cities in 2007<sup>3</sup>. Protecting the economic and development gains made in urban contexts will be increasingly difficult as urban systems expand and grow more complex.

<sup>&</sup>lt;sup>1</sup> WEF 2015

<sup>&</sup>lt;sup>2</sup> http://knowledge.zurich.com/risk-interconnectivity/the-risks-of-rapid-urbanization-in-developing-countries/

<sup>&</sup>lt;sup>3</sup> <u>http://www.mckinsey.com/insights/urbanization/urban\_world</u>

The volume and pace of urban growth anticipated over the next 10-15 years offers an opportunity to avoid past development mistakes and reflect resilience in policy, planning, design and investment decisions that will ultimately shape the long-term physical, social, and environmental urban landscape. But action must be taken swiftly.

National governments can work with, and build on, the knowledge of local officials to ensure that new economic investments, infrastructure projects and social programs contribute towards reducing existing disaster risk, preventing new risk, and building the resilience of the urban economy and population.

In the last decade since the adoption of *Hyogo Framework of Action 2005-2015* (HFA) the issue of local resilience has generated great momentum. International partnerships and campaigns have spearheaded on providing urban solutions that are adaptable. To date, one of the most successful effort to raise awareness on local risk reduction has been the 10 Essentials of UNISDR's Making Cities Resilient Campaign<sup>4</sup>. In 'localizing' the five priorities of the HFA, the 10 Essentials have shone a spotlight on the importance of reflecting cities' needs and challenges in international and national level policies and frameworks, thus helping to pave the way for the set of post-2015 agenda to call out urban-specific goals.

It is now widely recognized that actors must come together to realise holistic urban development approaches for delivering sustainability and resilience. The urban future relies on a cross-sector and multi-level approach. Integrated urban and territorial planning, risk management, and governance, will have to be coupled with resource and energy efficiency, sustainable consumption and production and inclusive economic growth. Additionally, city-to-city learning will have to be harnessed as an important source of knowledge.

Still, some of the looming issues that need to be addressed include the resilience of a city's built (or physical) environment (or structure) and critical infrastructure - its housing, institutional buildings, businesses, schools, hospitals, electricity, public transportation, sanitation, telecommunications, protective infrastructure and so forth. The condition and resilience of the built environment not only determines the city's resilience to disasters but also its quick functional, institutional and economic recovery. Availability and quality of infrastructure are at the core of many of the challenges faced by rapidly urbanizing cities in developing countries. As cities in developing countries are expanding rapidly, it is likely that infrastructure will not be able to keep pace with their growth nor the increased exposure to natural hazards.

Most governments are under budget constraints and many developing countries already spend a large proportion of their income to meet the basic needs of their population. Consequently, cities are looking for public-private collaboration to involve the private sector in the financing, design, construction and maintenance of infrastructure. However, to enable effective public-private collaboration at the city level requires factors such as transparency and the availability of accurate data to allow risk assessments needs to be considered. Publicprivate collaboration is a way for cities to identify where cooperation can address problems that neither municipalities nor the private sector can solve alone and both will have a major role to play.

<sup>&</sup>lt;sup>4</sup> http://www.unisdr.org/campaign/resilientcities/

Social environment is an important factor in both creation as well as reducing risks in cities and urban settings. It is evident today that social issues such as poverty, employment, violence and migration play a direct role in causing various types of vulnerabilities in particular in cities.

Another factor driving rapid urbanization in emerging economies is rural-urban motivated by the prospect of greater employment opportunities and the hope of a better life in migration social issues and parameters cities. In many developing countries, migration from rural areas to cities may also be driven by extreme weather as well as severe but frequent disasters leading to land degradation and desertification, thereby rendering agriculture less productive.

The rapid, inadequate and poorly planned expansion of cities in developing countries is also leaving urban populations highly exposed to the effects of natural hazards which will likely be aggravated by climate change. If well managed, urban planning, can act to prevent risk by guiding settlement in safe areas and reducing vulnerability. The role of urban planning and policies aiming to improve access to water, sanitation, appropriate housing, good drainage systems, safe land, and the like is crucial. A city can work to address its problems of services and infrastructure, plan to have safe land available, work with and respond to the needs of all groups but especially to those of the most vulnerable, and guide urban growth along sustainable parameters to manage disaster risk.

Inadequacy and incompatibility of traditional disaster preparedness and response<sup>5</sup> approaches and tools in the increasingly complex urban set ups is another underlying factor. Most current disaster preparedness, response and recovery methodologies and tools are developed for rural areas. For successful urban disaster risk reduction, the existing approaches, methodologies and tools should be upgraded based on understanding and knowledge of needs and priorities of people, communities and institutions in cities and urban set ups.

Finally, encompassing all these issues is the capacity and mandate of local governments to address risks or monitor progress. Local governments are often at the frontlines of disaster risk management, as the most direct service providers to citizens. Roles of local governments vary by country and context, but they are critical partners to ensure that the specific drivers of risk in the local context are addressed appropriately. Decentralisation<sup>6</sup> to a certain extent has been able to fill this gap, however, care must be made to ensure that local governments can act as willing, interested, and sufficiently empowered towards urban resilience.

# 3. Way Forward

Reinforcing commitments to a new, enhanced disaster risk reduction agenda presents a key strategic opportunity to ensure wider traction across the international system; increase capacity to support cities and address their concerns; and broaden the resource pool from which to ensure accountability, track and report results, and ultimately build safer more resilient cities throughout the world.

Climate change is expected to increase the frequency and intensity of hydro-meteorological and climatological disasters. There can be no sustainable development if development gains

<sup>&</sup>lt;sup>5</sup> http://www.ifrc.org/en/what-we-do/disaster-management/preparing-for-disaster/risk-reduction/building-safer-and-resilientcommunities/

<sup>&</sup>lt;sup>6</sup> http://www.uclg.org/en/issues/decentralization-and-local-democracy

are to be constantly and increasingly swept away.

A post-2015 framework for disaster risk reduction is well placed to recognize the critical role of local governments' in limiting the creation of new risk and strengthening communities' economic, social, physical and environmental resilience. Some of the key issues that could be considered in deliberations on urban risk reduction and resilience for implementation of a post-2015 framework for disaster risk reduction are:

i) Understanding and communicating cities' unique risks to spur appropriate action. Cities are complex systems and like all systems, a city depends on the smooth functioning of its constituent elements and the larger organization in which it is nested. A city's resilience is therefore affected by the resilience of those smaller and larger systems. Disruptions to the basic city services can have cascading impacts well beyond the city itself. Focusing on one policy goal, without considering others can lead to undesirable outcomes. These decisions may come as explicit trade-offs, unintended consequences, or some combination of the two. Building a resilient city therefore requires a holistic, multi-sectoral, and flexible approach to urban development. Better knowledge of how such risks interconnect in their materialization at the city level is the first step towards helping cities build resilience. Appropriate assessments that are designed to answer specific questions and explain risks to given audiences can help drive an agenda of enhancing urban resilience forward.

ii) Urban Planning and land-use management are at the core of city resilience. Urban planning and land-use management can help bring the vision of future growth in line with the idea of long-term sustainable development such that new risks are minimised. Managing the exposure of urban development to hazards will remain one of the key drivers of urban risk. Urban planning and land-use management are political processes that should involve different stakeholders in bringing about equity in access to land and urban services, including the empowerment of poorer and vulnerable citizens, for example, through inclusive and participatory forms of planning.

iii). Wider engagement with private sector and communities as integral part of the process. Efforts to enhance urban resilience must engage a diverse base of stakeholders, including the private sector and communities. As a major investor in cities, the private sector needs to protect valuable urban-based assets. Clearly, while business has yet to play a prominent role in building urban resilience, companies are starting to think more strategically about how they can participate. As there is growing awareness about the potential of risks related to natural hazards to directly impact business operations, the private sector has become a more prominent player in broader urban resilience-building efforts. More action is needed, however, to ensure cities and businesses recognize all the key local risks. Once cities assess climate change risks, they are likely to take action. While cities and business must work more closely to align their understanding and response to climate change risks, it is significant that cities are recognizing the most severe risks identified by businesses. This mutual recognition of climate change risks is an important step to taking action that creates safe, resilient cities that are also attractive places to do business, invest and innovate.