

Cities are getting more and more vulnerable

RAPID URBANISATION, THE WEIGHT OF ACCUMULATED FAILURES IN URBAN DEVELOPMENT AND INEFFECTIVENESS IN URBAN GOVERNANCE HAVE PLACED GROWING NUMBERS OF PEOPLE IN CITIES AT RISK, WRITES *MARK PELLING*, A SENIOR LECTURER IN THE DEPARTMENT OF GEOGRAPHY AT KING'S COLLEGE, LONDON, WHO EDITED THE UNDP'S DISASTER RISK INDEX.

These risk factors are a product of global as well as national economic and political processes. In the 1980s Amartya Sen argued that cities offered refuge from drought and famine. In the early 21st century cities are better portrayed as hotspots of risk.

When disaster strikes it can undo the development gains of households and cities exacerbating poverty and inequality. Ms. Norma Chavez from San Salvador who lost her house to an earthquake, put it this way:

"To think I have worked so much and so hard, and we have never been able to leave poverty. But this is like taking a big leap backward. We are going from poverty to misery... but we have to keep up the struggle."

Urban risk has for too long been a marginal policy concern. Rapid urbanisation makes this position untenable. More and more of humanity, and the majority of the physical assets that drive development, are located in cities at risk. This urban shift is demonstrated by UN-HABITAT's observation that between 2000-2010 for the first time in our history more people will live in urban than in rural settlements.

But urban population growth is not evenly distributed. By 2030, UN-HABITAT estimate that 27 countries will account for 75 per cent of the World's urban population – with all but seven in less developed countries. Most urban citizens live in settlements of 500,000 people or less with limited capacity to respond to disaster risk.

Larger cities – especially mega-cities with more than 10 million inhabitants like Manila, Shanghai, Dhaka, Karachi, Tokyo or Los Angeles – have more resources but depend on complex life support systems which can lead to small events triggering large scale disasters of potentially global significance. (*see map pp.12,13*)

Economic poverty and inequality are arguably the greatest immediate causes of vulnerability. Poverty limits choices for those at risk and in cities with limited finances. Worldwide, an estimated 1 billion people live in slums, according to UN-HABITAT. In many cities more than half the population lives in slums. This is the case in Kolkata, India, where 66 per cent of the city's 4.5 million inhabitants live in slums and squatter settlements at risk to flooding and cyclones.

Urbanisation modifies the hazard environment and creates vulnerability. Uncontrolled air pollution can reach disastrous levels with children most at risk. In coastal cities, the destruction of mangroves or draining of salt marshes takes away a protective barrier between the city and the sea, generating hazard. As cities grow in population and wealth, increased consumption is a motor for climate change compounding global and local insecurity.

Unregulated development deepens urban risk. Many of those who perished in Turkey's Marmara earthquake, in 1999, for example, were middle-income families living in *gececondos*, the high-rise flats built without regard to construction standards.

Elsewhere, the close proximity of residential, industrial and transport land-

uses can generate a cocktail of hazards. Reconstruction can be an opportunity to amend the planning failures that led to disaster. But, too often reconstruction leads either to the displacement of low-income families for urban development, or a simple return to pre-disaster conditions so that risk is built into the city once again.

Insecure land tenure compounds vulnerability, acting as a disincentive for families and city authorities to invest in basic services and secure construction. People living in informal settlements and those in rental accommodation are among those most at risk.

Access to clean water and sanitation is a basic need that around a quarter of urban households are denied. This undermines health and generates vulnerability. In inner-city and peripheral communities, overcrowding increases fire risk and makes the job of the emergency services more difficult. Following the Kobe earthquake in Japan new spaces were planned to provide access and refuge during an earthquake.

Disaster risk is possibly the greatest threat to urban sustainability we face today. Given the widespread experience of cities at risk from disaster, it might be tempting to resign ourselves to risk being part of the cost-benefit process of urbanisation.

But disasters, and the vulnerability that underlies them are not inevitable. They are an outcome of choices made locally, in the boardrooms of governments and businesses in the city, and also increasingly at international and national levels.

Cities become disaster traps when poor people live in danger zones like this in Monrovia. Photo © UN-HABITAT/A.Grimard



Cities at Risk: a case for better planning, management and policies

FILIPINOS ARE ALWAYS THE VICTIMS OF EARTHQUAKES, TYPHOONS, AND FLOODS. BUT BEFORE DISASTER HITS AGAIN, WRITE *GABRIELLE IGLESIAS*, AN INFORMATION AND NETWORKING COORDINATOR OF THE ASIAN DISASTER PREPAREDNESS CENTER IN BANGKOK, THAILAND AND *LOWIE ROSALES*, A UN-HABITAT HUMAN SETTLEMENTS OFFICER IN FUKUOKA JAPAN, NEW EFFORTS HAVE TO BE MADE AT CITY LEVEL TO REDUCE THE DANGERS OF SUCH CALAMITIES.

Many Filipinos do not really feel secure in their cities when it comes to natural disasters. Each time typhoons hit the country claiming hundreds of lives and cutting a trail of destruction, there are power outages, trees blocking roads, vehicles overturned, and renewed calls on the authorities to ban big advertising billboards. Too often, they go flying and kill people and crush cars and buildings when they slam back into the ground.

When the capital Manila was hit on 28 September 2006 by a typhoon that blew through 32 cities, local authorities declared a state of emergency. Millions of people were unable to go to school or work, sea, air and rail transport shut down. It took more than a week to start functioning again and caused many millions of dollars of destruction.

The disruption of power, water, transport, stock and currency trading has as much impact as the physical damage and casualties. However, these complex life support systems are part of the natural attraction and comparative advantage of cities vis-à-vis rural areas.

UN-HABITAT has developed a five-point strategy to back national governments, local authorities and communities by:

- *Developing techniques and tools for the management of disaster prevention, mitigation and rehabilitation;*
- *Designing and implementing training programmes, and supporting those of other agencies and field projects;*
- *Promoting horizontal cooperation by networking institutions, experts and experience on disaster related activities in human settlements;*
- *Designing, implementing and supporting projects at the local, national, regional and global level;*
- *Strengthening coordination and networking among communities, NGOs, governments and external support organizations in addressing disaster-related activities.*

Good urban governance is the key. Inclusion of the citizens is a must. There is a need for a city consultation process so that collectively agreed solutions can be put in place.

One example is the PROMISE project in Dagupan City. Located on Lingayen

Gulf on the island of Luzon, Dagupan has a population of 130,000 people.

The city's Disaster Coordinating Council, which normally meets only in response to emergencies, formed a technical task force to reduce disaster risk. July 16 has been declared a day of remembrance in Dagupan in commemoration of a devastating earthquake that hit the city in 1990.

The authorities arranged a series of community training workshops, and set up neighbourhood early warning centres in eight areas prone to floods. These areas now have special evacuation centers, hazard maps, evacuation plans, and problem area surveys. Citizens are helping monitor rising river water levels and relaying the results to a central city hall information office that uses the latest spaced-based geographic information system (GIS) technology.

The Dagupan early warning system constantly being updated and adapted to local requirements is a good example of how cities can work with their citizens to reduce the risk of disaster.



Mrs. Tibajuka surveys tsunami damage in Indonesia. Photo © S. Shankardass/UN-HABITAT