



SAVING CITIES: ADAPTATION AS PART OF DEVELOPMENT

Climate Change is not on the agenda for many countries' urban development plans

Climate change adaptation measures must be built into development planning for urban centres for any genuine progress to be made in counteracting the risks of climate change.

This is the recommendation of UN-HABITAT's **Cities and Climate Change: Global Report on Human Settlements 2011.** Most of the growth in the world's population over the next few decades will occur in the urban centres of developing countries – a major proportion of these new residents will most likely live in settlements that lack the necessary resilience to climate change.

"The lives and livelihoods of hundreds of millions of urban residents will be affected by what is done, or not done, in terms of adapting to climate change over the next decade. Yet climate change still does not even make the priority list of many urban planners in developing countries," warned Joan Clos, the Executive Director of UN-HABITAT. "Local responses must be worked into long-term development plans if any real progress is to be made."

ADAPTATION AT THE HEART OF THE URBAN RESPONSE

The destruction of or damage to housing is one of the most common and most serious impacts of many extreme weather events, especially in many developing countries. Action is urgently needed to begin building into urban fabrics and systems resilience to likely future risks.

It is generally much easier to make provisions now for likely future climate-related risks – in infrastructure expansion, new buildings and new urban development – than to have to retrofit buildings, redo infrastructure and readjust settlement layouts in the future. However, resilient infrastructure is widely absent from large areas in cities in developing countries. This deficiency represents what is known as a large climate change 'adaptation deficit.' Adaptation will require very large capital sums invested in developing countries to reduce the deficit in disaster risk avoidance and risk reduction.

KEY RISKS IDENTIFIED BY THE CLIMATE CHANGE ADAPTATION STRATEGY OF LONDON, UK

- The adaptation strategy identifies responses to three key climate risks: floods, drought, and overheating.
- The Thames Barrier, constructed between 1974 and 1982, is a key part of this adaptation strategy along with 298 kilometres of floodwalls, 35 major gates, and over 400 minor gates.
- The Thames Barrier will continue to protect London from flooding, although towards the end of the 21st century it may become necessary to use green spaces adjacent to the River Thames to store floodwater.
- A city-wide water strategy seeks to reduce the effect of water shortages.
- The water strategy comprises of strategies to: lose less; use less; reclaim more and develop new resources.
- To address the risk of overheating, the strategy recommends: urban greening to reduce the intensification of temperatures by the urban heat island; designing new and adapting existing buildings and infrastructure to minimize the need for cooling; ensuring that low-carbon, energy efficient measures are used where active cooling is required; and helping urban residents, especially "vulnerable" people, to adapt their behaviour and lifestyles to higher temperatures.

NOT ON THE AGENDA

As with mitigation strategies, the main responsibility for implementing adaptation policies in cities rests with local governments. Yet, many city governments around the world have so far failed to accept and/or act on this responsibility. For those in the developing countries, climate change adaptation barely registers on their radars. Competing with more urgent and pressing needs, adaptation too often falls to the bottom of the policy agenda, if it makes it at all. The report highlights the fact that not surprisingly, many cities in developing countries have limited existing infrastructure to adapt and continue to struggle with the regular provision of basic goods and services and people are often forced to take drastic measures to beat the impacts of climate change. Paradoxically, the absence of infrastructure only makes cities at risk more vulnerable as and when the impacts of climate change strike.

RESILIENT COMMUNITIES

The result of this is that many households and communities have been forced to implement climate change adaptation measures on their own.

HOUSEHOLD RESPONSES TO FLOODING IN KORAIL, BANGLADESH

- Korail is one of the largest informal settlements in Dhaka, Bangladesh. It covers 90 acres and has a population of more than 100,000. When the site was first settled it occupied the high ground, but as the population expanded, houses have been built closer to or even over the water of the adjacent lake.
- Before heavy rainfall, some members of the community move to safer locations. This is not an option for most though, as it meant losing assets, disrupting livelihoods and losing the right to stay and live in that location.
- Most impact-minimizing actions are part of regular practice for instance making barriers across door fronts, increasing furniture height (for instance putting them onto bricks), making higher plinths and arranging higher storage facilities (e.g. placing shelves higher up on the walls).
- For houses near or on the water's edge, structures are on stilts with platforms constructed higher up the stilts. Wooden planks for flooring are preferred as they suffer less from water clogging once floods subside after heavy rainfall. Stilts also mean expansion is possible over the lake. During flooding or water clogging, most residents sleep on furniture, use movable cookers for food preparation (that can be used on shelves or on top of furniture); some shared services with unaffected neighbours. Other measures include making outlets to help get the floodwater out of the house.

RE-THINKING CITIES AND CITY LIFE

New modes of public / private governance through voluntary, private provision, and social mobilization need to accompany action by elected authorities. **Cities and Climate Change** points out interesting synergies relating adaptation responses to development and business opportunities. Although the task is daunting, this report encourages strategies and policy directions that act now to link climate change responses with urban development while there are still opportunities to do so. Nevertheless, the report recognises these new approaches call for new philosophies about how to think about the future and specifically how to connect different roles of different levels of government and different parts of the urban community. Seen this way climate change responses can be a catalyst for comprehensive urban area enhancement and renewal.