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Building resilience: how the urban poor can drive climate adaptation

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Adaptation – preparing for and coping with climate impacts – is now a key issue in climate negotiations. This is real progress from a decade ago, when mitigation alone dominated the climate agenda. But adaptation itself needs to move on. The 900 million urban dwellers living in poverty worldwide will likely be among the worst affected by climate change, yet they hardly feature in adaptation policies and practices. These people, most living in the world's poorer countries, urgently need efficient, cost-effective solutions. Community-based adaption is one. Now widely used in rural areas, CBA allows local people to identify and address adaptation issues, building a lasting legacy of skills and ownership. But for CBA to work in urban areas, adaptation funding needs to reach the grassroots organisations and city governments that will initiate and deliver it.

The rural bias of adaptation funding

In the past few years, adaptation to climate change has climbed to the top of the international negotiating agenda. Here it rightly sits with mitigating greenhouse gas emissions as one of the key calls to action of our time. But adaptation funding has largely bypassed a population at the climate frontline: people who live in the towns and cities of low- and middle-income countries.

Neither of the two main channels of international funding for adaptation – the UN Framework Convention on Climate Change (UNFCCC) and Official Development Assistance (ODA) – sees urban adaptation as a central priority. Focusing mainly on sectoral analysis, the UNFCCC fails to make a clear distinction between the needs of rural and urban dwellers. So it is no surprise that, amid discussions on agricultural practices and water sources, many of the vulnerabilities of urban populations are not addressed. Yet the urban poor are likely to be one of the groups that suffers most from climate impacts.

Realities of climate change in cities

Many towns and cities in low- and middle-income countries are in risk-prone geographic locations, such as regions regularly affected by flooding or tropical cyclones. An added issue is that their municipal governments often lack the resources and/or inclination to implement adequate adaptation and preparedness measures.

Yet the climate impacts predicted for these urban areas will be severe. Shifts in rainfall patterns are expected to trigger flooding and drought; a likely increase in extreme weather events could cause landslides and damage to housing and infrastructure; hotter temperatures are likely, which will exacerbate the urban heat island effect; and sea-level rise will raise flood risk in coastal cities. Secondary hazards are also likely to arise from these direct impacts, such as salination of water supplies and an increase in vector-borne disease.

These pressures will be hardest on the urban poor. Typically living on the most dangerous sites in unsafe housing, their water, sanitation and drainage provision is usually inadequate and they are at higher risk of disease and injury.

Women, children and the elderly are particularly vulnerable. Water-carrying and other roles traditionally assigned to women could become more burdensome and increase their exposure to disease. The elderly are less able to move to safer sites or recover from related health problems, and children are most at risk from extreme weather events and related disease, malnutrition and injury, all of which have long-term development implications.

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A community climate solution

Meanwhile, an approach well suited to urban adaptation in poorer countries already exists. Community-based adaptation (CBA) is helping many build resilience to the effects of climate change, but it still focuses on rural communities. The CBA process harnesses community perception and knowledge – rather than the findings of climate science – to cope with climate impacts.

Why encourage CBA in urban areas? First, imposing adaptation practices on communities from above is ethically wrong. People should be able to participate as much as possible in decisions and actions that affect their own lives. With CBA, communities identify their own vulnerabilities and needs, define the problem, design the solution and implement the required actions: they own the process.

Secondly, CBA is effective. Local people know their own territory and, by defining their challenges, can tailor solutions that are more likely to succeed. For example, wetland farmers in Bangladesh are coping with increased flooding by reverting back to a local tradition: floating gardens *(baira)*. *Baira* allow farmers to grow their crops on platforms that ride the floodwater. The solution is sustainable and long-lasting, as *baira* are easy to build and the materials free, locally abundant and recyclable.

Thirdly, CBA improves efficiency by tapping into a wealth of human capital, as communities themselves are the drivers. It is also much more efficient and cost-effective to involve local people and resources rather than import them.

Adaptation methods are also likely to be more sustainable if a community handles their day-to-day management. The Orangi Pilot Project (OPP) in Karachi, Pakistan, is a case in point. In this low-cost sanitation and drainage programme, slum communities finance, manage and maintain their own systems. The result is that local government no longer has to pay for these components and are able to finance the larger external truck sewers, drains and treatment plants into which the community sewers feed.

Forging the right partnerships

Despite its strengths, CBA works at a small scale and will only succeed if supported at higher levels. Community organisations can identify needs and implement localised actions, but many of these strategies only work if supported by infrastructure and services controlled by local government. Therefore, long-term partnerships between the two are essential.

However, many local governments in low- and middle-income nations do not invest in climate change action involving community-based organisations. One reason is the mindset of local officials: pressing short-term issues often divert attention away from climate change, despite its likely effect on long-term health and development. Many also still view the urban poor as illegal citizens outside their remit.

A second reason is the limited capacity of local governments. In many cases, responsibility for infrastructure and services have been devolved from central government, but without the needed financial and human resources. So the municipality may have to provide public services, yet lack the means to do so.

It is key, therefore, that some adaptation funding is directed to municipal governments and community organisations to ensure their ability to support local adaptation methods. The kind of locally 'owned' adaptation projects promoted by the CBA approach is likely to mean that money is used more efficiently and projects are more sustainable.

The success of urban adaptation depends on good local governance combined with appropriate funding flows: one cannot work without the other. A municipality willing to facilitate adaptation by all its citizens cannot accomplish this without adequate resources. Similarly, a pro-poor adaptation strategy demands that city governments see the poor as active participants in identifying and helping implement solutions to the challenge of climate change.

Next steps

- Urban governments must research ways in which they can implement CBA in their area, ensuring they involve community-based organisations in all aspects of the process.
- CBA works at a small scale and can only succeed if supported by local government, which can provide trunk infrastructure and services. So it is important that adaptation funding reaches municipal governments and community-based organisations.
- More focus is needed on urban vulnerabilities as well as rural vulnerabilities at the policy level, particularly in the influential guidelines of the UNFCCC.

Further reading

Hasan, A. 2008. Financing the sanitation programme of the Orangi Pilot Project-Research and Training Institute in Pakistan. *Environment and Urbanization* 20(1): 109-119.

Bartlett, S. 2008. *Climate Change and Urban Children: Implications for adaptation in low and middle income countries.* IIED Working Paper. IIED, London.

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