

Transforming Coastal City Adaptation: From Idea to Practice

People living in coastal cities around the world face great risks from the impacts of climate change. In the developing world, these often combine with the challenges of urban development and overcoming poverty and sharp inequalities, generating a particularly difficult set of tasks for local policy makers. Adaptation measures often focus on large infrastructural measures such as coastal defenses, at the expense of integrated and inclusive solutions that tackle not only people's exposure to hazards, but also social vulnerabilities and their root causes. This Brief introduces three key considerations for transformative policy change that builds resilience in highly exposed coastal cities.

Coastal cities are hubs of rapid urbanization and socio-technological innovation, drivers of economic growth and capital accumulation, and often highly exposed to the increasing impacts of climate change. In many countries, coastal cities grapple with complex and interlinked development challenges that need to be overcome in order to achieve the Sustainable Development Goals and ensure the full enjoyment of human rights and justice for all. Many such cities grow unplanned, and it is estimated that a total of one billion people around the world live in slums, often lacking access to improved water and sanitation, energy and social protection (UN-Habitat 2018).

Increasing climate change impacts, and flood risks in particular, call for effective adaptation measures to protect people in coastal cities. While there is a good understanding of technical adaptation measures and flood protection infrastructure, there is less knowledge and agreement on transformative adaptation measures that could tackle not only hazard exposure but vulnerability and social development challenges more broadly. Transformative adaptation is understood here as change that tackles the root causes of poverty, inequality and environmental destruction, and which can be driven by innovative policies that are grounded in normative values of social justice and environmental sustainability (see UNRISD 2016 Flagship Report). As such, adaptation needs to go beyond technical solutions and address structures and processes that currently lead to highly uneven development outcomes and exacerbate vulnerabilities. Adaptation can negatively impact parts of the population, in particular poorer and marginalized people, either as a result of prioritizing adaptation measures that protect high-income and revenue-generating areas, or as a result of targeting low-income areas for redevelopment and resettlement that displaces people from their livelihood bases (Anguelovski et al. 2016). It can generate further cascading impacts over time as well as lock-in effects, ultimately leading to maladaptation. Successful and inclusive adaptation needs to address visions, values and voices for transformation.

👁 Visions

Transformation calls for radical change and often implies a significantly different vision of the future. In many cities, visions of the future are enshrined in master plans and strategies for urban development that are often rooted in a particular vision of a modern and global city. Cities are centres of capital and

wealth accumulation and often designed for upper and upper-middle classes. In many developing cities, the visions and plans for urban development stand in stark contrast to local realities, reflecting an idealized, growth-focused image of the city (Watson 2014). Informal settlements—a reality in most developing cities—often simply do not exist in these plans, on the assumption that they will eventually be upgraded and/or resettled (see Box 1). Consequently, poor and lower-income households are not sufficiently represented in these visions. Instead, future coastal cities are imagined as high-end urban waterfronts, carefully engineered to withstand flood risk at least in the short and medium term.

Transformation in line with the values enshrined in the 2030 Agenda requires something different. A process of collective deliberation and articulation of alternative scenarios is needed that takes into account diverse narratives of potential futures (see “Voices” below). This entails questioning whether enough different perspectives and alternatives are being considered, including alternatives to the mainstream growth-focused paradigm.

Box 1. Informality and resettlement

Informal settlements and their residents are often characterized as exposed, vulnerable and at risk. In coastal cities in particular, there is no denying their extreme exposure to flooding and limited capacity to cope with, and adapt to, impacts of climate change. Removing people from the most risk-prone areas, and resettling them elsewhere, is often the preferred political solution to reduce disaster risk but it is largely opposed by the affected residents. While relocation may not always be prevented, there are many documented cases in which implementation of resettlement plans has destroyed people's livelihoods through increasing land use restrictions, deteriorating public services, or forcibly removing them from their homes (Tadgell et al. 2017). Low-income and informal settlements are often also disproportionately affected by post-disaster resettlement compared to wealthier areas (Anguelovski et al. 2016). In too many cases, there is little to no participation of affected populations in the formulation and implementation of such plans. Shifting perspectives and mindsets to recognize the positive aspects of informal settlements, and to work with residents to identify and implement solutions, can increase not only the social acceptance of government interventions, but also the likelihood of long-term success (see Satterthwaite et al. 2018).



Values

The different visions considered in adaptation and urban development planning each reflect worldviews and values. Currently, mainstream urban development planning is often based on the ideas and values of a limited number of experts and/or elites with decision-making power or influence. Shining the spotlight on the particular values that inform development visions can bring clarity to problems of exclusion and marginalization that hinder equitable and sustainable development. These problems are not produced in isolation but rooted in a global economic system that prioritizes private sector-led development and profit orientation. In coastal cities, this may mean that large-scale capital investments are prioritized, while low-income households face increasing levels of risk, precarity and resettlement. In these contexts, transformation means achieving justice in decision-making processes and in the distribution of benefits and losses. This includes assessing (and, if necessary, rectifying) how different parts of urban systems and the people in them are valued, and what types of knowledge are taken into consideration in decision making. Moving towards transformative change also means taking steps to ensure universal and equal access to public social services, for example through alternatives to privatization and commercialization.

Voices

Real-world examples of transformative change demonstrate that leadership, participation and recognition of marginalized voices are key components of successful interventions. Political leadership can make the difference between “adaptation as usual” and transformation—or it can, conversely, hinder transformative change by perpetuating inequalities and power asymmetries that favour elites (see Anguelovski et al. 2019; Revi et al. 2014). Participation is important to create inclusive decision-making processes and to foster mutual understanding between communities at risk, and the planners and experts who are crafting visions and plans for the future city. Whose voices are heard and included in adaptation planning has a direct impact on adaptation success and is intrinsically linked to the achievement of other development goals. Recognition is an important step towards the fair distribution of benefits and losses. In many cities, official adaptation planning is at odds with the measures and strategies employed by exposed people in informal settlements, who often have to adapt not only to climate-related hazards but also to the impacts of official adaptation projects that create additional risks. Inclusive and participatory processes can counteract such problems and move towards approaches that work with and for people (see Satterthwaite et al. 2018).

From idea to practice

Moving from ideas of transformation to changes in practice presents many challenges at the local level. It requires a discussion of whose values and visions are driving policies

and practices, and how benefits and costs of different plans and strategies are distributed. Ultimately, we need to ask who the transformation is for and what direction the transformation is taking us in. For coastal cities, moving beyond the focus on exposure and coastal defenses to tackle issues of social vulnerability and justice is particularly important. When a rights-based approach to adaptation is adopted, climate change-related needs can be linked up with people's immediate needs such as health care, water and sanitation, urban mobility and housing, for example. A rights-based approach also facilitates a step-wise strategy that starts with changes in sectors or policy fields where there are already widely accepted and universal solutions such as social protection (*ILO Recommendation 202*) or health care (*Declaration of Astana*).

With this aim in mind, it might be helpful to de-idealize the concept of transformation in order to ease the translation of theory into practice. If adaptation measures can be seen as “transformative enough”—in that they facilitate incremental change, and push for more radical solutions where feasible—this could help overcome political and social resistance to transformational change.

References

- Anguelovski, I., C. Irazábal-Zurita, and J.J. Connolly. 2019. “Grabbed Urban Landscapes: Socio-spatial Tensions in Green Infrastructure Planning in Medellín.” *International Journal of Urban and Regional Research*, 43: 133–156.
- Anguelovski, I., L. Shi, E. Chu, D. Gallagher, K. Goh, Z. Lamb, K. Reeve, and H. Teicher. 2016. “Equity Impacts of Urban Land Use Planning for Climate Adaptation: Critical Perspectives from the Global North and South.” *Journal of Planning Education and Research*, 36(3): 333–348.
- Revi, A., D. Satterthwaite, F. Aragón-Durand, J. Corfee-Morlot, R. Kiunsi, M. Pelling, D. Roberts, W. Solecki, S. Pahwa Gajjar, and A. Sverdluk. 2014. “Towards Transformative Adaptation in Cities: The IPCC's Fifth Assessment.” *Environment and Urbanization*, 26(1): 11–28.
- Satterthwaite, D., D. Archer, S. Colenbrander, D. Dodman, J. Hardoy, and S. Patel. 2018. *Responding to climate change in cities and in their informal settlements and economies*. London: IIED.
- Tadgell, A., B. Doberstein, and L. Mortsch. 2018. “Principles for climate-related resettlement of informal settlements in less developed nations: a review of resettlement literature and institutional guidelines.” *Climate and Development*, 10(2): 102–115.
- UN-Habitat (United Nations Human Settlements Programme). 2018. *Sustainable Cities and Communities*. Nairobi: UN-Habitat.
- UNRISD (United Nations Research Institute for Social Development). 2016. *Policy Innovations for Transformative Change. Implementing the 2030 Agenda for Sustainable Development*. Geneva: UNRISD.
- Watson, V. 2014. “African Urban Fantasies: Dreams or Nightmares?” *Environment and Urbanization*, 26 (1): 215–231.

The United Nations Research Institute for Social Development (UNRISD) is an autonomous research institute within the UN system that undertakes multidisciplinary research and policy analysis on the social dimensions of contemporary development issues.

Through our work, we aim to ensure that social equity, inclusion and justice are central to development thinking, policy and practice.

UNRISD gratefully acknowledges support from its institutional and project funders. See www.unrisd.org/funding for details.

Our work would not be possible without their support.



www.unrisd.org

Palais des Nations
1211 Geneva 10
Switzerland
info.unrisd@un.org



Research and Policy Briefs

UNRISD Research and Policy Briefs aim to improve the quality of development dialogue. They situate the Institute's research within wider social development debates, synthesize its findings and draw out issues for consideration in decision-making processes. They provide this information in a concise format that should be of use to policy makers, scholars, activists, journalists and others.

This Research and Policy Brief was prepared by Dunja Krause. It is based on discussions at the Expert Group Meeting “Transformative Adaptation: Tackling the Root Causes of Vulnerability to Climate Change in Southeast Asian Coastal Cities” that was held in Geneva on 21-22 November 2018 and funded by the German Federal Foreign Office. The framing of visions, values and voices was proposed by Eric K. Chu (University of Birmingham).

Copyright © UNRISD. Short extracts may be reproduced unaltered without authorization on condition that the source is indicated. For rights of reproduction or translation, apply to UNRISD.

Download free from www.unrisd.org/rpb27

ISSN 1811-0142. Photo by Denis De Mesmaeker (via Flickr CC BY-NC-ND 2.0)