

Reducing future risk in the city: an agenda for integrated risk management

In African cities, orienting risk management towards a developmental agenda can confront the root causes of poverty and risk. Transition to an integrated approach has the most chance of success when it combines interventions working on the risk culture of a city, which include planning and specific sectorial and local decision-making processes. Risk cultures that prioritise and combine integrated poverty reduction and risk management with examples of successful outcomes of decision making at sectorial and practical levels can be effective and make backsliding more difficult.

Introduction

Integrating risk reduction into urban development processes requires action at the levels of urban risk planning and decision making for urban risk policy and practice. Both are equally important. Where risk planning is limited, the integration of risk management is more difficult to sustain in the long run. Where decision-making policy and practice are underdeveloped and limited to individual policy areas, integrated planning can lack grounding in professional practice and may more easily be reversed. The integration of risk management into urban planning also includes working on the role of science and its communication with both policy and the public, on the relationship between civil society and urban administrations, and through leadership that is locally accountable. A range of participatory methods exists that can combine these elements into practical activities to promote thinking and action on risk planning amongst local communities, city level actors and the scientific community.

Reducing risk can benefit from twin approaches that reduce vulnerability and exposure for the urban poor, while simultaneously containing loss and enabling pro-poor development. The Sustainable Development Goals (SDGs) capture this in their ambition to 'leave no-one behind', specifically in Goals 1, 11 and 13, which include the same indicator for 'the proportion of local governments that adopts and implements local disaster risk reduction strategies in line with national strategies'. This is a 'systems approach' that brings together place-based actions, infrastructure-wide interventions and broader engagement with the urban and national risk culture. While such a 'systemswide' view of risk management is necessarily ambitious, evidence suggests that it also brings an opportunity to work at both multiple locations and scales, and in ways that can be mutually reinforcing.

Building disaster risk planning culture for integrated risk management

For many African cities, building capacity for transition has begun with innovative multipartner governance arrangements. These have taken advantage of opportunities to creatively link new agendas to existing goals, plans and programmes.¹ The emergent framings can

Policy Pointers

• The integration of risk reduction into urban development processes can be advanced by working on urban risk planning and decision-making practices. These are complementary activities.

• Participatory strategies for scoping risk and resilience planning are key mechanisms for shifting urban risk culture towards integrated risk management.

• Reducing risks can benefit doubly from approaches that reduce the urban poor's vulnerability and exposure to risks while simultaneously containing losses and enabling pro-poor development.

• Working on the root causes of risk, loss data management and household resilience are key entry points for the practical integration of risk management into sectorial policy and local practice.



support the incorporation of social justice concerns in towns and cities as a critical dimension of inclusive and equitable development and risk reduction.²

Figure 1 identifies three blockages and three mechanisms for overcoming obstacles in the transition of risk management from an external practice outside development to an intrinsic practice within integrated development planning.

Key identified constraints are:

- 1. Existing donor priorities: very often the city is either not a priority at all for global civil society and international development actors, or the city is reduced to a technical system with interventions seldom expanding beyond investments in physical infrastructure.
- 2. Fragmented city governance: where urban planning is constrained, the city is shaped by multiple single acts of development, from large shopping malls to individual informal sector dwellings. In this way, fragmented city governance leads to a fragmented urban morphology. A mosaic of interacting urban land uses is produced where risk can spread and act to reduce risk in one location while increasing risk in another (eg drain cleaning can be frustrated by a lack of action in neighbouring areas).
- 3. Data and monitoring gaps: evidence-based policy formulation becomes difficult when systematic and long-term data archives are not available. This is most pressing for event loss data. Without georeferenced data, disaggregated by gender, planning becomes open to value rather than evidence-based planning. That creates the

potential for capture by urban interest groups and, in extremes, the denial of risk or exaggerated risk to increase land value or to justify forced relocation.

Opportunities to move beyond these constraints have been observed where there are:

• Risk data and forecasting: providing not only data but also institutional architecture and human resources for the collection, management and analysis of data that is connected to key planning processes. In some cities, this might be motivated by opportunities for early warning and scope for early action. Elsewhere, a more basic priority might be for loss data to track policy and to hold decision makers to account. There are also roles here for academia, for citizen's science, and for government agencies to collaborate by sharing resources and data.

• Community networks collaborating with city authorities: these actors bring different resources into risk management. Community networks can offer detailed knowledge of vulnerability and its drivers, as well as scope for co-benefits when action embedded in the community strengthens leadership, livelihoods or infrastructure access. City authorities have a legal mandate and bring the ability to work at scale to address structural root causes. Where communities and city authorities work in partnership, opportunities open up for integrated risk management.

• Locally accountable leadership: risk and loss are felt locally and, in African cities, are tied to vulnerability rooted in poverty and inadequate development opportunity. At the same time, especially in larger cities, decision making for urban investment tends to be more focused on global markets and land speculation than on enabling opportunities for endogenous economic development. Locally accountable leadership can help reverse this trend and prioritise investments that provide economic growth and support demand for adequate urban services and infrastructure.

These opportunities are achievable, meaning that reducing risk is within the grasp of city actors. Action planning tools at community and city levels provide mechanisms to do this. For instance, in Dar es Salaam, Tanzania, the availability of data, including modelling for sea level rise, has helped focus the attention of city planners and organised civil society on the tensions between relocation and upgrading in coastal, low-income settlements at risk. In Nairobi, Kenya, organised civil society, in collaboration with the city county, have developed innovative approaches to the replanning and upgrading of informal settlements. For example, in March 2017, Nairobi City County declared Mukuru informal settlement a Special Planning Area (SPA). This was a direct outcome of a recently formed collaborative approach to governing this area initiated by the Akiba Mashinani Trust (AMT). The intent is to integrate risk management into securing land tenure, settlement upgrading and redevelopment schemes through innovative multi-level governance, linking community members with both low and high levels of government.

Science has a key role to play in facilitating reflection amongst local and city level actors on ways in which existing development produces risk and how such processes might be redirected to reduce risk. Examples include UN-Habitat's City Resilience Action Planning (City RAP) tool that works with city level planners to define key risks, available resources and a realistic action plan. City level science engagement can also be helpful in bringing diverse stakeholders

around the table. In many cities, there is a lack of interaction and trust between departments of the same city authority as well as between the city and community organisations. City level science engagements based on urban risk data and analysis can be a part of building trust and collaboration. A range of community level approaches exists. The Views from the Frontline (VFL) tool mirrors the City RAP tool in facilitating local actors to think through risk priorities and reflect on what resources can be made available to enhance resilience. Where this works well, community strengthening and leadership will be built. The ReMapRisk tool works through local leadership, including traditional leaders, to define risk and plan local interventions which then become capacity-building exercises.

Entry points for integrated risk management in urban policy and practice

Figure 2 summarises key entry points for urban decision-making policy and practical action to reduce risk. It illustrates these with examples and identifies cities where capacity has been built, data has been generated, or actors have collaborated in applied research for planning or action.

Addressing the root causes of risk

Figure 2 identifies four domains of the root causes of risk:

1. Those that work through the natural and physical environment: city climate downscaling that aims at translating global and regional scale climate models so that they become useful for city planners. This requires both rescaling and communication of science processes. City planners are more interested in the impacts of climate change and how these might be prepared for in disaster risk or public health sectors, than in statements about climate change itself.



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- 2. Those produced through land-use change – eg accounts of urban texture drawn from satellite data to track the growth of the city and changing land use better interpret the dynamics qualities of land use and associated risks, including the shifting of risk from one part of the city to another as the built form and use of neighbourhoods change.
- 3. Those generated by critical infrastructure: eg solid waste management systems, the management of which can either reduce or produce and concentrate risk through interactions with drainage, air quality and disease vectors.
- 4. Finally, those arising from social and political relationships of power: eg social conflict and power analysis that can highlight the blockages and opportunities for collective action and for collaboration between community groups and the political dynamics of city government.

Loss inventory

Without data on losses and damage it is impossible to track the effectiveness of local and policy interventions or of overall trends in urban development. City records on disaster are almost always very limited. Some emergency response agencies keep records of callouts; hospitals have detailed data on admission while newspapers and other media report on newsworthy events. But it is rare to find centralised data management systems that can provide the kind of spatially and socially disaggregated data that can make a difference in strategic policy making. Building these linkages and institutions takes time but can be achieved. UNISDR's promotion of the Desinventar data management tool provides such a mechanism. Although it is mainly deployed for national data archives, it is also appropriate for cities and has been successfully deployed as such.

Household adaptation

Most often household adaptation is presented as a static agenda, whereby risks are defined and solutions to mitigate these identified. The lived reality for the urban poor, however, is more dynamic. Resilience arises from the ability of individuals, families and households to obtain at least post-event basic necessities (food, water, security, shelter, companionship) when established access mechanisms may have been disrupted. In African cities where events are small, the humanitarian sector is rarely involved and the urban poor manage the transitional times alone. Social safety nets can help but are rarely in place. Refocusing both humanitarian and government safety nets to serve the needs of the poor during recovery is a key opportunity to help build resilience into African cities.

Conclusion

Combining action on overarching urban planning risk culture and the details of decision making for sectorial policy and local practice can be a powerful and long-lasting way to approach the integration of risk management into urban development. Once these are working together, positive feedback can be built. Success at project and policy level reinforces the importance of risk culture across the city which, in turn, leads to the prioritisation of inclusive risk reducing practice and policy.

For risk reduction in urban Africa, the emergence of strongly networked civil society organisations, acting in concert with local and city authorities to address root causes, record event losses and better understand and support household resilience, provides a specific opportunity for equitable and sustainable risk reduction. The lessons reveal practical and achievable mechanisms through which risk reduction can also help meet the SDG targets.



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Urban Africa: Risk Knowledge (Urban ARK) breaking cycles of risk accumulation in sub-Saharan Africa

A three-year programme of research and capacity building that seeks to open up an applied research and policy agenda for risk management in urban sub-Saharan Africa. Urban ARK is led by 12 policy and academic organisations* from across sub-Saharan Africa with international partnerships in the United Kingdom.

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Notes

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