

Key points

Strengthening urban resilience in low- and middle-income countries, especially in informal settlements, requires moving beyond top-down, 'expert'-led investment and planning to address the governance and cultural factors that drive risk and vulnerability.

Urban living labs (ULLs) are a promising alternative that can broker inclusive collaboration between city actors by aligning incentives, mediating conflicts and enhancing marginalised groups' influence on decision making.

To scale up their impact and avoid reinforcing marginalisation and vulnerability, ULLs must move beyond generic participatory approaches and integrate rigorous institutional, cultural and physical context analysis.

Establishing transparent impact assessment frameworks and embedding structured learning mechanisms in existing knowledge hubs can help scale ULL impacts and optimise investments.

Using the SECURE framework to scale urban living labs

Rapid urban development in low- and middle-income countries drives the accumulation of climate risk globally and will continue to do so over the coming decades. 'Expert'-led, risk-informed planning have proven to be ineffectual. Urban living labs (ULLs) offer a promising alternative, but to effectively build resilience and scale up impact, they must be informed by a context-specific understanding of what drives decision making, planning and development investments. This briefing presents the Strengthening and Enhancing Contextual Urban Resilience (SECURE) approach — a structured framework that underscores the importance of accounting for institutional, cultural and physical drivers of urban development. It outlines how researchers and practitioners can use SECURE to inform the design of ULLs for urban resilience and calls on researchers, practitioners and funders to integrate the SECURE philosophy in all their urban resilience interventions and investments.

Urbanisation in low- and middle-income countries, where informal settlements are the norm,¹ is set to drive the growth of global risk in the coming decades.² Many city and national governments evict residents from informal settlements, arguing that relocating them reduces their exposure to climate hazards. But this approach can, and often does, have the opposite effect, exacerbating their vulnerability.³

To foster urban resilience, it is important to act on the institutional, political economy and cultural drivers of urban development that push residents to live in highly exposed neighbourhoods and exacerbate their vulnerability.⁴ But this is no simple task. Transforming the drivers of development is a complex problem⁵ that often involves tense negotiations between city actors.

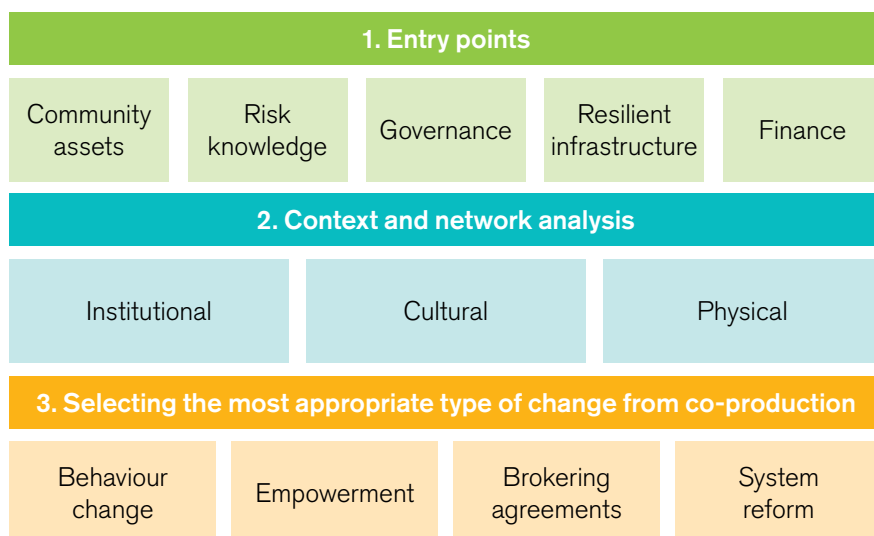
ULLs offer a response to this challenge,⁶ facilitating dialogue and allowing city actors to

identify resilience priorities and co-design and test resilience solutions. And the SECURE framework (see Figure 1) provides a structured approach to inform the design of ULLs with a context-specific understanding of urban development drivers that helps ensure they better contribute to urban resilience.⁷

Understanding who influences decision making and resources

Researchers and practitioners can use the SECURE framework to examine a city's institutional, cultural and physical contexts, which provides a useful understanding of how research and decision making interact and whose knowledge about risk is considered in planning.⁸ Teasing out conflicts and collaborations between city actors, this exercise offers insights into how networks of city actors come together and compete while trying to influence urban

Figure 1. SECURE framework: power-informed co-production interventions for urban resilience



development planning, policy and, more generally, the way city resources are distributed. There are various steps to this process, outlined here.

To assess the city's institutional context, users can explore how public and private institutions contribute to and prevent collaboration and the formation of networks of city actors with different abilities to influence city decisions and investments. During this step, users examine the motivations, agendas and incentives that drive collaboration and conflict between city actors; how the control and exchange of knowledge, (institutional) resources and capacity strengthen the authority and influence of certain actors to the detriment of others; and how regulations and policies facilitate and constrain the exchange and influence of city actors.

To assess the city's cultural context, users can explore how worldviews and social norms contribute to and prevent collaboration and the formation of networks of city actors with different abilities to influence decisions and investments. Worldviews influence how an actor envisions future developments in the city or its resilience priorities, and conflicting worldviews limit the possibility of actors collaborating together. Social norms constrain what city actors and groups of different genders, races, ethnicities, castes and socioeconomic classes can do, influencing whose knowledge counts when it comes to decision making in different arenas.

Finally, to assess the city's physical context, users can explore how the built environment and disaster events contribute to and prevent collaboration and the formation of networks of city actors with different abilities to influence city decisions and investments. Disaster events can present pivotal moments for learning, bringing

new resources or encouraging the questioning of well-established institutions, policies or cultural biases, which can lead to the reconfiguration of city networks, influencing how resources are distributed in the city. The built environment allows certain city groups to interact, develop mutual trust, exchange and influence one another, while limiting other groups. For example, large transport infrastructure, such as highways, can divide and disconnect nearby neighbourhoods; but it can also facilitate commercial exchange with distant districts.

Gathering insights into the city's institutional, cultural and physical contexts can help identify:

- Which city actors exchange knowledge and resources
- How these exchanges help strengthen the influence of some actors over other actors and city resources, with implications for the resilience of some and vulnerability of others
- How these gains motivate collaboration and conflict between different groups, leading to the formation and maintenance of competing city networks
- How the built environment imposes constraints and facilitates collaboration between different actors and groups, and
- Which windows of opportunity for institutional and policy change, and reconfiguration of city networks, are opened by disaster events, policy processes and new funding opportunities.

Reconfiguring city actor networks through ULLs

ULLs can use various strategies to reconfigure city actor networks, fostering more inclusive decision making and planning. But they often encounter resistance from actors and institutions whose incentives and worldviews discourage collaboration. To effectively contribute to inclusive development and resilient urban futures, ULLs must be strategically designed, guided by a contextual analysis that reveals how city actors form networks and exert influence over resources. By understanding how city actors exchange knowledge, resources and influence, the organisations that facilitate ULLs can make informed, strategic choices about the most effective approaches to maximise impact. It is important to consider the following when designing a ULL.

Behavioural change: ULLs can play a pivotal role in transforming social norms that perpetuate exclusion, marginalisation and vulnerability. For example, deeply ingrained gender norms often restrict women's participation in decision making.

By using methodologies that foster iterative collaboration around well-defined, shared goals across gender groups, ULLs can help reshape gender norms and promote more inclusive decision making.

Empowerment: ULLs can help city actor networks develop a shared vision and resilience agenda while strengthening coordination, resource-sharing and information exchange to drive collective action. By reducing collaboration efforts, aligning objectives and mediating internal conflicts, ULLs can amplify the influence of marginalised groups in decision making. This is crucial for emerging civil society groups that are committed to resilience issues but face resource and organisational capacity constraints. ULLs allow such groups to enhance their collective voice, foster strategic partnerships and increase their influence on urban resilience initiatives.

Brokering agreements: ULLs can serve as intermediaries, brokering agreements between city actor networks by reframing conflicting worldviews, aligning agendas and mitigating disincentives for collaboration. This approach is particularly valuable in resolving deadlocks on critical urban resilience issues, when tensions arise between powerful stakeholders, such as real estate developers and environmental regulators. Developers often prioritise commercial expansion, while environmental agencies push for stricter zoning laws and green infrastructure to mitigate climate risks. Where developers and local governments negotiate a designated quota of social housing, such deadlocks can delay or restrict access to affordable housing for marginalised communities, exacerbating housing insecurity.

System reform: ULLs can play a crucial role in lifting regulatory, policy and planning barriers that hinder collaboration and knowledge exchange between city actor networks. By reforming these frameworks, ULLs can open pathways for more inclusive decision making. For example, requiring governments to work with technical consultancy firms for socioenvironmental impact assessments in infrastructure projects often marginalises civil society organisations, despite their valuable context-specific risk knowledge. Strategically designed ULLs, on the other hand, can advocate for and facilitate the adoption of more participatory planning to integrate diverse expertise, ensuring that vulnerable communities have a voice in shaping urban resilience.

For ULLs to drive meaningful and lasting change, they must do more than simply create participatory spaces — they also need to be strategically designed and contextually informed. By using the SECURE framework to integrate

context analysis into their approaches, ULLs can rebalance power asymmetries, align incentives, mediate conflicts and foster collaboration where resistance might otherwise prevail. Whether through behavioural change, empowerment, brokering agreements, or system reform, ULLs must ensure that interventions address the institutional, cultural and physical barriers that perpetuate marginalisation and vulnerability in urban development. It is only by developing a deep understanding of city actors, their interactions and exchanges, and the sources of their authority and influence that ULLs can move beyond surface-level engagement and truly reconfigure decision-making networks for more inclusive and resilient urban development.

Applying the SECURE framework to large infrastructure investments

Large infrastructure projects, such as transport systems, are often controversial, with conflicting perspectives on their risks and benefits. But they also present opportunities to rebalance power dynamics and reconfigure decision-making networks within cities. Researchers and practitioners can use the SECURE framework to understand and influence these dynamics, ensuring that infrastructure investments contribute to more inclusive and resilient urban development.

Examining a city's institutional landscape may reveal that major projects are controlled by national development authorities with little accountability to local communities. When municipal and national governments have conflicting development visions and unequal influence, tensions arise. In some cultural contexts, these can lead to political manoeuvring, such as preferential funding for politically aligned municipalities, fuelling local competition. To strengthen their political legitimacy, municipal governments may also exchange public resources for political support, which can weaken civil society collaboration.

Transport infrastructure projects offer a crucial opportunity to reshape these networks of city actors, either by reducing fragmentation and making planning more inclusive or by further marginalising vulnerable communities. Thoughtfully designed transport systems can improve connectivity and attract new investments, benefiting specific areas. But they can also trigger forced evictions and worsen climate risks, such as flooding. Given their far-reaching effects, infrastructure planning is not just a technical process; rather, it is embedded in power struggles that can either reinforce existing

inequalities or promote a more equitable, inclusive and resilient city.

Strengthening knowledge sharing, coordination and accountability between selected civil society organisations and municipal governments can build urban resilience through more inclusive infrastructure development. To ensure effective collaboration, the selection of municipalities and civil society organisations should be guided by a conflict analysis that identifies the key incentives and barriers to cooperation. This helps assess which conflicts can be mediated and how the infrastructure project can be leveraged to reduce disincentives for collaboration.

With this understanding, ULLs can be strategically designed to broker agreements, align visions and mediate conflicts, fostering a collaborative network of local stakeholders with greater influence over infrastructure projects. They do this by:

- **Facilitating dialogue and negotiation** to develop a shared agenda for the project and future urban development opportunities
- **Establishing oversight mechanisms** to ensure agreements with national development agencies deliver equitable benefits
- **Implementing conflict resolution and enforcement strategies** to reduce the risk of agreements being broken, and
- **Encouraging learning-by-doing** through joint initiatives, such as partnerships for basic service delivery, to rebuild trust between civil society groups and municipalities.

Recommendations for researchers, practitioners and funders

Contributing to urban resilience in low- and middle-income countries requires moving beyond top-down, 'expert'-led investment and planning. ULLs are a promising alternative; but to drive meaningful and long-lasting change, they must go beyond simply applying participatory methodologies. ULLs need to be strategically

informed by a rigorous context analysis. A common but flawed assumption is that participatory approaches inherently lead to inclusive decision making. But without an in-depth understanding of institutional, cultural and physical contexts, such initiatives risk reinforcing existing marginalisation, exacerbating climate vulnerability.

An intentional and informed approach to ULLs considers who holds influence over decision making, how networks of city actors collaborate and compete, and what constraints shape their interactions. By mapping these dynamics, ULLs can act on institutional barriers that limit engagement and social norms that exclude certain voices, and mitigate the effects of the built environment over accessibility and interaction. This allows ULLs to tactically align incentives, mediate conflicts and unlock opportunities for collaboration.

To realise this ambition, there is a need to take concerted action. We call on researchers, practitioners and funders to:

- **Invest in the SECURE framework** to analyse how networks of government agencies, private businesses and civil society organisations shape urban development before deploying ULLs, ensuring they do not unintentionally reinforce marginalisation and vulnerability
- **Deploy transparent impact frameworks** along with ULLs to assess how strategic interventions interact with city actor networks, determining whether they foster inclusive and long-lasting resilience, and
- **Institutionalise learning mechanisms** within existing knowledge hubs to track and share best practices, helping new ULLs navigate institutional, cultural and physical challenges in cities, while scaling impact and optimising investments.

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Knowledge Products

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ISBN: 978-1-83759-137-4

This material has been funded by UK International Development from the UK government, and Canada's International Development Research Centre. However, the views expressed do not necessarily reflect the views of these donors.



Notes

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Our work on urban resilience was undertaken as part of IIED's SECURE project supported by the Adaptation Research Alliance and run with partners Participatory Research in Asia and ICLEI Africa. Find out more about our work on this topic at www.iied.org/secure-strengthening-enhancing-contextual-urban-resilience

