

Key points

Redefine success for urban living labs.

Measure progress by strengthened influence and self-organisation capacity, not only pilots delivered. Focus on who gains voice in planning and investment decisions.

Treat co-production as empowerment.

Use repeated, embodied engagement to build confidence, legitimacy and negotiating power, rather than one-off workshops that gather input but leave authority unchanged.

Be strategic about who is involved.

Use political context analysis to identify excluded groups, key decision makers and the relationships that must be brokered for community influence to matter.

Work with 'open moments'.

Use disruption points (such as the official designation of wetlands or land, zoning changes and upgrades) to build new relationships and shared understanding before decisions harden into fixed, irreversible pathways.

From power to influence: counter-mapping for urban living labs

Urban climate adaptation is increasingly shaped by dual uncertainties: rapid urbanisation is changing exposure and vulnerability, while climate pressures are accelerating in unpredictable ways. Urban living labs (ULLs) have emerged as a practical response, but many remain organised around solution pilots and 'naive participation', which generates visible outputs without shifting who has influence over planning and investment decisions. This briefing argues that ULLs need to move beyond solutionism, and treat empowerment and self-organisation capacity as core adaptation outcomes. It introduces counter-mapping as a facilitation methodology that supports this shift. Counter-mapping works through repeated, embodied engagement that helps communities and institutions re-see the territory, reopen simplified risk narratives and change who can speak with authority about the future.

Why urban living labs must move beyond solution pilots

Rapid urbanisation is reshaping exposure and increasing vulnerability to climate change, while climate pressures are accelerating in ways that make 'predict-plan-deliver' approaches less reliable. And adaptation pathways are rarely linear — they involve trade-offs, institutional negotiation and repeated adjustments as conditions change.

This is why experimental governance — and ULLs in particular — has gained traction. ULLs are meant to create a practical way to work through uncertainty: convening actors who rarely collaborate, co-designing and testing interventions in real neighbourhoods, and learning what works through iteration rather than fixed blueprints.^{1,2}

But can ULLs reliably produce transformative change beyond isolated pilots? Many ULLs struggle to achieve durable, scalable shifts in how

cities plan and invest. This is not because experimentation is unhelpful, but because too many ULLs are organised around a solutionist logic. They prioritise visible deliverables and short funding cycles, while underinvesting in the political and relational work that makes adaptation durable. This includes mediating conflict and contradictory objectives, negotiating responsibilities and strengthening the influencing capacity of marginalised groups.^{3,4}

This is where 'naive participation' becomes a central issue. Co-design and co-production can be active and well-intentioned, but lead to pre-defined solutions, rather than enabling shifts in voice and authority. When this happens, participation can slide into responsibility offloading, asking communities to maintain interventions without the resources or influencing power.

An emerging response is the Strengthening and Enhancing Contextual Urban Resilience

Participatory mapping produces outputs, but not influence; counter-mapping treats mapping as a facilitated practice, not a product

(SECURE) framework.⁵ This helps teams design ULLs more strategically by starting with politically-informed context analysis: mapping collaboration barriers, power relations, institutional incentives, and the governance and finance dynamics that shape risk and development pathways. Because ULLs need to be designed not only around what they deliver, but around whose influence they strengthen and which decision processes they reshape.^{6,7}

This brief builds on that design logic and moves to the next step: methodological innovation for facilitation. Counter-mapping is presented here as a practical alternative and a way of structuring ULL encounters so marginalised groups can build self-organisation capacity, make their lived knowledge clear and relevant to decision makers, and influence formal planning and adaptation decision making.^{8,9,10}

How counter-mapping works: the 3-Rs approach

The goal of counter-mapping is to help marginalised communities build real influence in planning and adaptation decision making, not just by sharing information, but by strengthening relationships, having shared reference points and the capacity to self-organise to make sustained engagement possible.

This matters because, in many ULLs, participation is still organised around a solutionist logic. 'Participatory mapping', for instance, is often treated as a shortcut to collect inputs, validate a pilot site or build buy-in for an existing proposal. Communities contribute time and knowledge, but the process does not reshape how boundaries are drawn, risks interpreted or who has authority. The result is active engagement that remains politically shallow, producing outputs but not influence.

Counter-mapping flips this. It treats mapping as a facilitated practice, not a product. A repeatable sequence of encounters (walking, drawing, narrating, debating) reorganises how a place is understood and governed. Its practical value is not the 'map' itself, but what the process builds around it: stronger coordination, greater confidence to speak up and a shared base for negotiation with institutions.

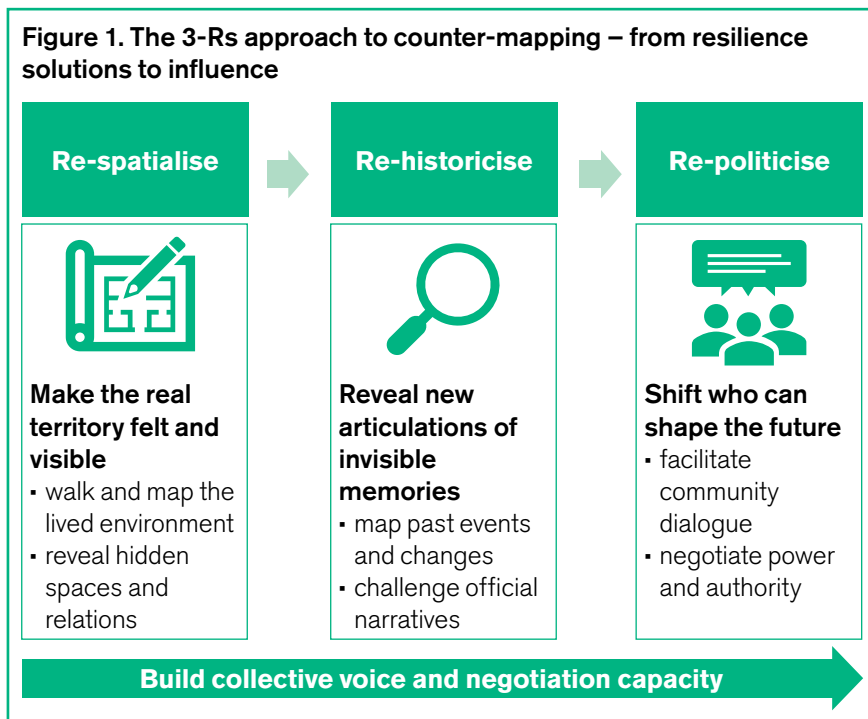
A useful way to understand how this works is the 3-Rs approach. Each 'R' contributes to the same goal: making community knowledge politically relevant and strengthening communities' capacity to organise and influence decisions.

Re-spatialise

Counter-mapping helps ULL members encounter the territory as people live it, beyond what appears in official boundaries or technical plans. Through walking, stopping, pointing and drawing together, it reveals multiple interpretations of the same place: what different groups experience as safe or dangerous, accessible or blocked, valuable or threatened.

But re-spatialisation is not only about producing 'better information'. It is also experiential and affective. Being present in the territory — experiencing heat, water, smell, noise, crowding and distance — reshapes what is noticed and what is taken seriously. This cultivates a shared sensitivity to how the place functions through everyday relations between people, infrastructure and local ecologies.

In doing so, counter-mapping rebuilds affective connection to what formal planning often erases: the labour of upkeep (cleaning drains, managing waste, maintaining paths), the fragile ecologies that absorb water or provide shade, and the informal infrastructures that enable movement and livelihoods. When these sustaining relations are both visible and felt, they become harder to dismiss as 'noise' around a technical intervention, and harder to exclude from what counts as legitimate evidence in planning.



This matters because standard plans often flatten complexity into what a small number of institutions can measure and manage. By contrast, counter-mapping fosters new orientations toward action, as ULL members become connected to lived realities that planning must work with, rather than overwrite.

Re-historicise

Adaptation never starts from zero. Every place carries histories of settlement, displacement, investment, neglect and repair. These shape who is exposed to risk, who has access to services and who is recognised as having legitimate claims. While re-spatialisation reconnects people to the multiple ways in which the territory is experienced, re-historicising can reopen the past and challenge official narratives that are used to explain why risks exist and how they became normal.

This is important because planning processes often rely on simplified causal narratives produced by powerful institutions using a few 'official' explanations that turn vulnerability into a problem of behaviour or presence. Examples include framing informal communities as lacking risk awareness or being the cause of environmental degradation. Counter-mapping disrupts this by anchoring memory in a place. People locate past events, such as shifting water flows, previous evictions, incremental upgrades and informal protections onto shared sketches and diagrams, making visible the many decisions — and inequalities — that produced current conditions.

Re-historicising strengthens influence because it does more than add context; it changes what futures become possible. When multiple histories and causalities are recognised, responsibility can no longer be pushed onto marginalised groups alone. Instead, counter-mapping creates a firmer basis for claims to recognition, safeguards, repairs and durable institutional support, and makes it harder for adaptation to proceed as if it were politically neutral.

Re-politicise

Counter-mapping changes how authority works in public discussion. If re-spatialisation helps ULL members *feel* the territory in its lived relations and re-historicising reopens the stories through which risk was produced, re-politicising is where these insights translate into voice, leverage and influence. It creates moments where the usual order of participation is reversed. People who are normally spoken *about* become those who speak

with authority, while officials and technical actors listen, ask questions and seek clarification.

This reversal matters because it is not only cognitive, it is embodied. Marginalised groups may have already developed deep knowledge and shared explanations through the earlier stages, but still carry an emotional sense that their voice is 'less valid' in front of elites. Through recognition, curiosity and public attention from those actors seen as powerful, the knowledge produced through counter-mapping is validated, and so are the people producing it. What becomes credible is not only a different account of place and history, but a different sense of what futures are legitimate to demand.

In this setting, the map becomes a negotiation platform: communities can contest assumptions, propose alternatives and make trade-offs visible on their own terms. Crucially, what they demonstrate is more than information — they have the ability to self-organise, coordinate, interpret and speak collectively from the affective connections they have built with place and with each other.

Box 1. Dunga wetlands, Kisumu (Kenya): what counter-mapping changed

Dunga wetland, on the edge of the city of Kisumu, is a living ecosystem that supports fishing, papyrus harvesting, ecotourism and local crafts. Kounkuey Design Initiative — Kenya (KDI) used counter-mapping to help communities influence conservation and adaptation planning. The work took place while the county government was considering the official designation (gazettement) of the wetland, creating uncertainty around land, livelihoods and rights. Instead of starting from official boundaries, the process began with community-guided walks across the wetland and hands-on, 'sand-mapping' (collective map drawing in a sand pit) with elders, young people, women, fishers and farmers.¹¹

Re-spatialise: walking the territory exposed how unclear the wetland boundary really was. In one meeting, local chiefs asked: "What is a wetland? Do we have a wetland?" Some described it as wetland, others as farmland that became wet. These differences mattered because categories shape who is seen as legitimate and what actions are allowed. The walks also reshaped the boundaries of the wetland.

Re-historicise: through sand-mapping, people drew old shorelines, flood histories and past decisions into the map, including memories of colonial drainage practices and long-term pollution. They also mapped tenure timelines (titles from 1978, new allotment processes in 2023), showing how today's risks are linked to earlier planning and inequality.

Re-politicise: when community sketches were taken into a multi-stakeholder workshop attended by the municipal government, officials asked questions rather than just presenting plans. The county environment director said the community diagrams gave a more grounded understanding than technical reports — a concrete shift in what counted as usable evidence in decision spaces.

At the same time, repeated encounters reshape institutional behaviour. Institutions are no longer the only ones explaining and deciding, but increasingly responding to organised, local actors who can hold them to account.

Taken together, the 3-Rs approach shows why counter-mapping is a strong alternative to basic co-design. It shifts ULLs away from co-producing a single output (map, plan, pilot) to building what makes adaptation durable — relationships, shared reference points and self-organisation capacity. By re-spatialising, re-historicising and re-politicising the territory, counter-mapping strengthens the ability of marginalised groups to shape the decisions that produce risk and development pathways.

The SECURE framework helps teams design ULLs strategically by analysing collaboration barriers, power relations, and where influence sits in planning and public finance systems — and by selecting strategies that can shift these conditions. Counter-mapping strengthens collective voice and legitimacy, so communities can influence planning processes, instead of simply being consulted on plans made elsewhere.

Recommendations: what we can learn from counter-mapping

Redefine what success means

Counter-mapping redefines success by using ULLs to strategically empower marginalised groups. The value is not the map *per se*, but the process — of negotiation and confidence building, along with the ability to organise collective action. This can shift the power dynamic, defining who is protected, who carries risk and who benefits from adaptation investment.

Use co-production to strengthen the conditions for empowerment

The power of counter-mapping is its focus on repeated, real encounters that change how people relate to places, institutions and each other — not by 'gathering input'. Walking,

mapping and explaining together create moments where marginalised groups become legitimate interpreters and decision makers. This shift is felt as much as it is understood: confidence, collective voice and legitimacy grow through recognition and connection, not information alone. ULLs should consider engagement as a sustained process that turns participation into influence.

Be strategic about who you include

Counter-mapping will only shift influence if ULLs deliberately include groups who are routinely excluded, and connect them to actors who control planning decisions and resources. The SECURE framework can help read the political landscape: to understand collaboration barriers, power relations and where influence sits in planning and public finance systems. This helps to decide who to empower, which alliances matter and where institutional entry points exist for community influence to translate into decisions.

Work with 'open moments' when futures are still negotiable

Counter-mapping works best when business-as-usual is disrupted and a live decision is on the table, for example during formalisation processes such as gazettelement. People will be more alert, more willing to connect across divides and more open to challenging the status quo. That window can be used to build new relationships that shift understanding and what the future can look like, bringing lived knowledge and collective voice into the room before decisions lock in.

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Knowledge Products

IIED's mission is to build a fairer, more sustainable world, using evidence, action and influence in partnership with others.

KDI is a non-profit that partners with under-resourced communities to co-design and build equitable 'productive public spaces', advancing planning, research and advocacy for vibrant, just neighbourhoods.

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Notes

¹ Bulkeley, H, Coenen, L, Frantzeskaki, N, Hartmann, C, Kronsell, A, Mai, L, Marvin, S, McCormick, K, van Steenberg, F and Voytenko Palgan, YV (2016) Urban living labs: governing urban sustainability transitions, *Current Opinion in Environmental Sustainability*, 22, pp.13–17. / ² Bulkeley, H, Marvin, S, Palgan, YV, McCormick, K, Breitfuss-Loidl, M, Mai, L, von Wirth, T and Frantzeskaki, N (2018) Urban living laboratories: conducting the experimental city?, *European Urban and Regional Studies*, 26(4), pp.317–335. / ³ Evans, J and Karvonen, A (2011) Living laboratories for sustainability: exploring the politics and epistemology of urban transition, in Bulkeley, H, Castán Broto, V, Hodson, M and Marvin, S (eds) *Cities and low carbon transitions*. Routledge, London. / ⁴ Voytenko, Y, McCormick, K, Evans, J and Schliwa, G (2016) Urban living labs for sustainability and low carbon cities in Europe: towards a research agenda, *Journal of Cleaner Production*, 123, pp.45–54. / ⁵ Barcena, A and Bahadur, A (2024) The SECURE framework: an approach to thinking about power and politics when using co-production interventions for urban resilience. IIED, London. / ⁶ Steeves, J, Schoonman, N, Karol, A, Priya, S, Raj, R and Barcena, A (2025) Strengthening and Enhancing Contextual Urban Resilience (SECURE) toolkit. IIED, London. / ⁷ Grogan, A, Grist, G and Barcena, A (2025) Strengthening urban resilience in informal settlements: the SECURE framework in practice. IIED, London. / ⁸ Peluso, NL (1995) Whose woods are these? Counter-mapping forest territories in Kalimantan, Indonesia, *Antipode*, 27(4), pp.383–406. / ⁹ Rundstrom, R (2009) Counter-mapping, in Kitchin, R and Thrift, N (eds) *International Encyclopedia of Human Geography*. Elsevier, Oxford. doi:10.1016/B978-008044910-4.00017-1. / ¹⁰ Sletto, BI (2009) "We drew what we imagined": participatory mapping, performance, and the arts of landscape making, *Current Anthropology*, 50(4), pp.443–476. doi:10.1086/593704. / ¹¹ Kounkuey Design Initiative, HAKI-Dunga, www.kounkuey.org/projects/hakidunga

FIND OUT MORE

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