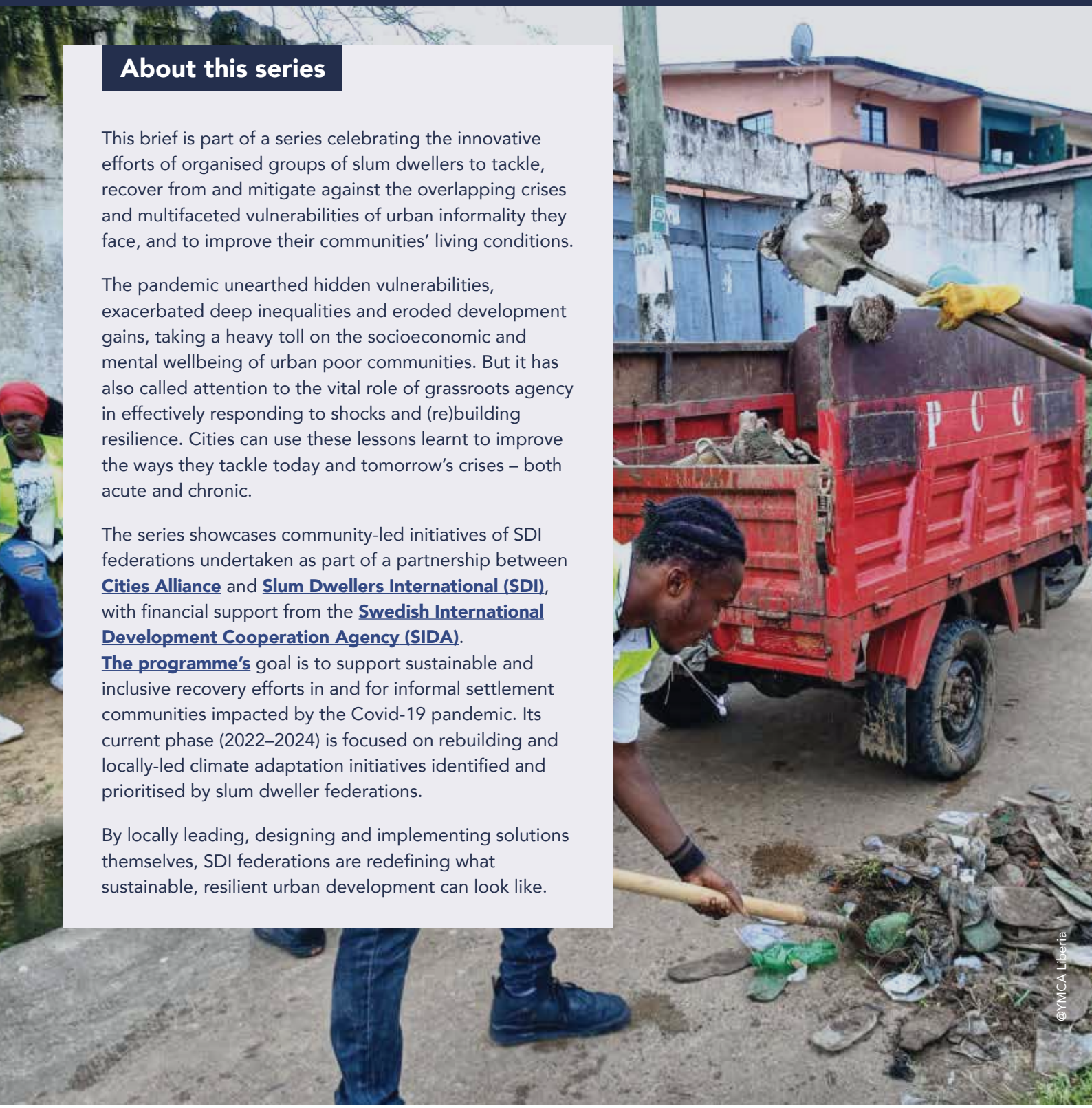
LOCALLY LED INFRASTRUCTURE PROJECTS:
SMALL BUT SCALABLE CLIMATE ADAPTATION



©YMCA Liberia

About this series

This brief is part of a series celebrating the innovative efforts of organised groups of slum dwellers to tackle, recover from and mitigate against the overlapping crises and multifaceted vulnerabilities of urban informality they face, and to improve their communities' living conditions.

The pandemic unearthed hidden vulnerabilities, exacerbated deep inequalities and eroded development gains, taking a heavy toll on the socioeconomic and mental wellbeing of urban poor communities. But it has also called attention to the vital role of grassroots agency in effectively responding to shocks and (re)building resilience. Cities can use these lessons learnt to improve the ways they tackle today and tomorrow's crises – both acute and chronic.

The series showcases community-led initiatives of SDI federations undertaken as part of a partnership between **Cities Alliance** and **Slum Dwellers International (SDI)**, with financial support from the **Swedish International Development Cooperation Agency (SIDA)**. **The programme's** goal is to support sustainable and inclusive recovery efforts in and for informal settlement communities impacted by the Covid-19 pandemic. Its current phase (2022–2024) is focused on rebuilding and locally-led climate adaptation initiatives identified and prioritised by slum dweller federations.

By locally leading, designing and implementing solutions themselves, SDI federations are redefining what sustainable, resilient urban development can look like.

Cities Alliance
Cities Without Slums
Hosted by UNOPS

sdi.

Sida
This material/production has been financed by the Swedish International Development Cooperation Agency, Sida. Responsibility for the content rests entirely with the creator. Sida does not necessarily share the expressed views and interpretations.

CitiesAlliance
citiesalliance.org
cities-alliance
info@citiesalliance.org

A lot of structural inequalities within cities became much more visible during the pandemic. In Harare, Zimbabwe, households without electricity struggled to access public health bulletins disseminated online and via radio and TV.[1] In Lilongwe, Malawi, cancelled bus services to marginalised informal settlements left the lucky few still employed without the means to get to work. And how to follow safety advice without water for handwashing? In Zambia's overcrowded low income urban areas, much of the water infrastructure is old and dilapidated. Taps are broken and women and girls mainly bear the responsibility of looking for water, spending long hours queuing at communal (and oftentimes congested) kiosks.

Almost a billion people live in slums, in very different but always inadequate situations of tenure security and access to infrastructure and essential public services – housing, water, electricity, sanitation, roads, and drainage. This means poor everyday living conditions and constant public health issues. Especially in rapidly-urbanising contexts, it makes a city's informal population the most vulnerable sector of society to current and future shocks and stresses like pandemics or climate change impacts. Such crises exacerbate existing vulnerabilities and create new ones. And, made worse by infrastructure deficiencies, communities' vulnerabilities create pretexts for authorities to crack down on informality. This could be demolishing market stalls during a Cholera outbreak or evicting climate vulnerable settlements after flooding – damaging lives, livelihoods and assets.


@PPHPZ, Zambia

Informality is a means of survival for many marginalised urban communities, and it is critical that they are engaged in being part of development solutions for meeting their basic needs. Across the SDI network, organised groups of citizens are designing, building and maintaining small infrastructure projects that contribute to human welfare and reduce structural inequalities in cities. These projects seek to create contexts where communities and businesses can grow and thrive. At the same time, they demonstrate workable and scalable climate resilient solutions to infrastructure challenges in informal settlements.

Some of the approaches SDI affiliates are taking include:

Applying innovative water and sanitation technologies that work with the realities of informal settlements while mitigating public health issues and addressing climate adaptation needs.

Plugging capacity gaps by providing municipal authorities' upgrading efforts with local knowledge and technical support.

Repairing and maintaining dilapidated communal/public facilities within informal areas to restore and sustain resilience.

Decarbonising slum upgrading: harnessing solar energy technology in places with poor trunk connections.

Maintenance is a radical act

Investing in repair and maintenance is key to strengthening the resilience of infrastructure over time and ensuring basic service provision can adapt to climatic changes. An aspect of human infrastructure is also essential to such efforts, especially for communal facilities in slums like toilets, shower blocks, and water points. Usually this comes in the form of local management committees: women-led savings or youth groups running the service as a social enterprise, ensuring local ownership and sustainability in the long run.

In **Libera**, the SDI federation is doing essential maintenance to public facilities in informal settlements and strengthening community groups' capacities to own and manage their local water and sanitation infrastructure. This also involves evidence-based advocacy with authorities that showcases low cost solutions for improving access to services while building resilience.

In **Zambia**, the federation has been rehabilitating water reservoirs in public spaces and employing youth to do the work. The **Tanzanian** federation is also restoring public toilets, and collecting data on urban risks in informal settlements. The data informs community-led maintenance efforts. It also provides evidence for federation advocacy focused on engaging municipal and national government to attract infrastructure investment capital.


@YMCA Liberia


@SPARC, India

In situ upgrading is not always an option

Vulnerable locations and disasters can result in displacement and city plans can demand informal settlement residents relocate. When this happens, interventions by organised community groups before, during and after relocation can facilitate better and more sustainable processes that respect the rights and dignity of displaced communities. This can be by leveraging community engagement and participatory planning to gather input and ensure residents' voices are heard in decision-making, and by supporting local leaders in navigating choices. It can also involve making links with government agencies to negotiate better relocation options that improve living conditions and access to basic services, and minimise damage to livelihoods. Community groups can also play a critical role in following up on the challenges faced by relocated communities.

In Mumbai and Ahmedabad, the **Indian** SDI Alliance is working with displaced slum communities living in relocation colonies. One focus is to design better uses for neglected and misused open public spaces – seeking to address common challenges like insecurity, dumping and lack of shade by designing interventions that improve access, play space and seating, green areas, and add civic features like community gardens and water taps. Enhanced public spaces improve social and relational wellbeing, which play a vital role in the lives of the marginalised urban poor.

Creating the conditions for thriving urban economies

Many federations are directing efforts and funds to support small infrastructure projects that both build resilience and create a supportive context for local enterprises and businesses to thrive. Some of the public facilities described above are located in informal markets, keeping areas hygienic for vendors and shoppers. In **South Africa** and **Brazil**, income-generating infrastructure projects are addressing the need for climate-smart food security. The South African SDI Alliance is training low income workers in innovative climate resilient technologies like water-saving wicking bags at urban farming hubs across the country. In Brazil, the federation is constructing composters in communities and training urban farmers in composting and waste recycling.


@INTERAÇÃO, Brazil

Connecting, scaling and going off grid

Participatory basic infrastructure upgrading processes build social capital as well as demonstrable models, strengthening the ability of organised groups in informal settlements to advocate with government institutions for recognition and investment in their areas. In **Malawi**, the federation is exploring how to make individual plot-level water connections affordable, using their revolving urban poor fund to support installation costs and advocating with the water board around pricing. They are also working with authorities to deliver community-led infrastructure projects like stormwater drainage and water culverts, to build climate resilience in anticipation of the rainy season.

The **Zambian** federation is leveraging its many local level solutions relating to water and sanitation – renovating water kiosks, rehabilitating boreholes, building toilets, facilitating household-level water connections, installing solar water pumps – to engage with city authorities around areas of cooperation. In areas disconnected from trunk infrastructure in Bulawayo, **Zimbabwe**, the SDI affiliate is procuring solar-powered boreholes to improve water access for communities living in drought-prone areas, and solar household kits for lighting and charging phones. In the process demonstrating how locally-led upgrading solutions can decarbonise while meeting communities' needs.

In **Namibia**, while there is still a critical need to maintain and increase bottom-up responses to lack of infrastructure and shelter, the context is more favourable. Largely due to the successful efforts of the Namibian SDI Alliance, participatory community-led upgrading is now recognised by the government and generally understood as viable. Here, the focus has shifted towards 'learning from past experiences to undertake a scaled-up nationwide endeavour'.[2] The Alliance's activities include community-led settlement profiling and enumerations, site analyses, taking part in spatial planning studios, contributing technical drawings for building plans and water and sewer reticulation, and developing costed engineering layouts for plot-level services. Their participatory approach focuses on climate resilient planning, such as identifying protected trees to prevent further deforestation, analysing possible stormwater and drainage issues, and addressing waste and pollution management.


@Dialogue on Shelter, Zimbabwe


@PPHPZ, Zambia

@CCI, Tanzania

SMALL INFRASTRUCTURE, BIG CONTRIBUTIONS

Without letting local authorities off the hook, this briefing has highlighted the contributions that small community-led basic services and infrastructure projects can make to charting a different path for urban development: a path towards incremental and inclusive informal settlement upgrading that addresses both climate resilience and intra-city structural inequalities. In complex and dynamic urban contexts, infrastructure and service delivery is always a work in progress. In unplanned and informal settlements, many pragmatic, innovative (and often imperfect) local models already exist that produce, reproduce and sustain everyday access to basic services. They are drawn from expert local knowledge of an area's needs and vulnerabilities – as were the emergency grassroots responses to livelihood losses, food insecurity and water scarcity during Covid-19. As cities grapple with better meeting people's needs while simultaneously adapting to climate change, these models can be built on, learnt from, scaled up and connected to.

References

[1] Lines, K, Dzimadzi, S, Ernstson, H, Kimani, J, Koyaro, M, Luka, Z, Manyowa, T, Masimba Nyama, G, Mudimu, P, Muganyi, S, Mukwaya, PI, Nuwahereza, V, Nyamangara, T, Songoro, E, Ssebanja, JA, Sseviiri, H, Sverdlik, A, Wairutu, J and Zidana, H (2024). "'My business challenges are far worse right now, I will go for Covid-19 vaccine later': Post-pandemic lessons from the Covid-19 vaccine rollout in informal settlements in Harare, Kampala, Lilongwe and Nairobi". ACRC Working Paper 2024-11. Manchester: African Cities Research Consortium, The University of Manchester. Available online: www.african-cities.org.

[2] Delgado, G., Muller, A., Mabakeng, R., & Namupala, M. (2020). Co-producing land for housing through informal settlement upgrading: lessons from a Namibian municipality. Environment and Urbanization, 32(1), 175-194. https://doi.org/10.1177/0956247820903981.

CitiesAlliance
citiesalliance.org
cities-alliance
info@citiesalliance.org

Cities Alliance
Cities Without Slums
Hosted by UNOPS

sdi.

Sida
This material/production has been financed by the Swedish International Development Cooperation Agency, Sida. Responsibility for the content rests entirely with the creator. Sida does not necessarily share the expressed views and interpretations.

Published by Cities Alliance in September 2024.