Adaptation Research Alliance

Catalysing local solutions for urban adaptation challenges: highlights from ARA micro-grants

Every year, millions of people move to cities in search of jobs and other economic opportunities. Urban residents also often enjoy a better quality of life overall than their rural counterparts, with greater access to education, healthcare, public transport, and even basics such as electricity and safe drinking water.

Yet cities also concentrate climate risks and vulnerability. Built-up areas can be highly prone to flash flooding during heavy rainfall, as the ground cannot quickly absorb large quantities of water. Streets, buildings and other infrastructure also absorb and radiate heat, exacerbating the impact of rising temperatures and heatwaves.

And in lower-income countries, especially, living conditions for the urban poor can be dire, with low-quality (even improvised) housing and little or no access to basic services. In many cities, the poorest people, including vulnerable rural migrants, are also relegated to marginal areas, such as hillsides, along rivers or in low-lying coastal zones, where the risks of deadly floods and landslides are particularly high.

This is why, since the ARA's launch, adaptation in urban areas has been a priority for action-oriented research. As of 2025, the UN has estimated, 45.6% of people in middle-income countries and 34.7% in low-income countries lived in cities, and those shares are projected to keep growing for decades (UN DESA, 2025). With disasters already occurring year after year, urban climate resilience cannot wait.

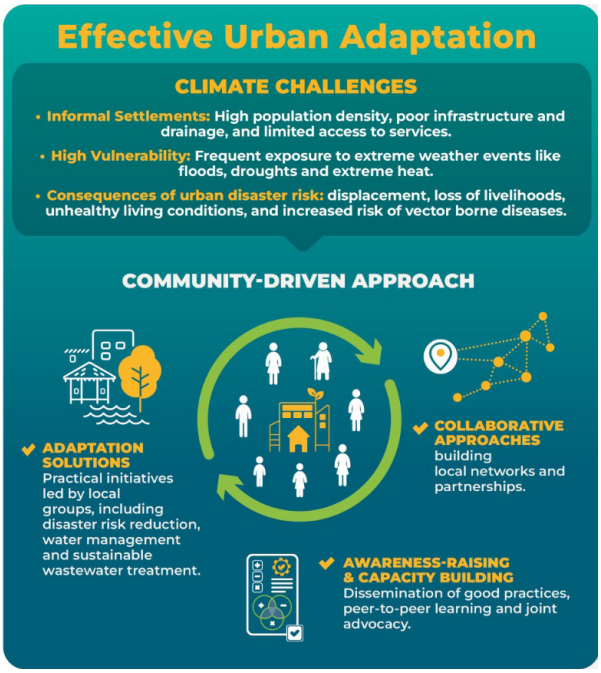
As part of the ARA's 2023 Grassroots Action Research Micro-grants programme, 30 projects were awarded up to USD 18 700 each to conduct inclusive, locally led research to identify needs and opportunities for building resilience. About a third of the micro-grants were focused on urban adaptation challenges in particular (see Table 1).

Flood Risks, Environmental Sanitation and Health Research in Riverine Communities in Iloilo, Philippines (Project FRESH)

Collaboration to empower local actors

The projects were collaborative by design, often led by grassroots organizations and engaging a wide range of stakeholders – from research institutions to government agencies at different levels, community organizations and ordinary citizens. Figure 1 illustrates the ARA's overarching approach.

Figure 1. **A collaborative, multi-stakeholder approach to action-oriented urban adaptation research**



The project in Thailand, for example, which focused on marginalized coastal communities, used citizen science to empower local residents, including in informal settlements, to participate in data collection, analysis and mapping activities. This fostered a strong sense of ownership of the results and ensured that the solutions identified reflected local priorities and needs.

The micro-grant brought stakeholders together through dialogue and joint data collection and mapping, creating a solid foundation for longer-term engagement. The project team also secured new funding through the Inclusive GEF Assembly Challenge Program to continue its innovative citizen science work, with local groups enlisted to monitor the beachfront and becoming leaders in local resilience.

In India, a project led by Gujarat Mahila Housing SEWA Trust to develop community-led templates for managing urban floods partnered with a research institute to identify gaps in existing data and highlight areas that would be of particular interest to officials developing national disaster management guidelines. SEWA's strong relationships with local residents enabled it to gather perspectives that the government would not otherwise have heard, including from women living in informal settlements.

SEWA shared the results with national authorities and successfully advocated for a collaboration to develop comprehensive guidance with actionable city-level recommendations. The aim is to ensure the guidelines adequately address the needs and vulnerabilities of people in informal settlements.

The Chile micro-grant enabled researchers from the Pontificia Universidad Católica de Chile to work closely with three municipalities, learning directly from city officials about the realities they faced.

In Lilongwe, the capital of Malawi, one of the partners was the City Council. The project, which focused on informal settlements, also worked to create community governance structures, and it supported immediate, concrete action: planting trees and other vegetation along the Lilongwe and Mchesi rivers.

In the Philippines, a project focused on flood risks and sanitation in riverine communities produced a risk assessment that was shared with the local council through the City Disaster Risk Reduction and Management Office. To further empower local residents, the project designed an internship programme to help bridge the community-academia gap and provide technical expertise on sea-level rise solutions in informal settlements.

What did we learn?

The funded projects contributed valuable insights for building climate resilience, enhanced the capacities of local residents, community organizations and, in some cases, government officials, and made lasting contributions to disaster risk management, flood protection and other urgent adaptation priorities.

They also provided lessons about how to maximize the impact of micro-grants. A review by Viridia Projects of the 30-grant portfolio found that all had engaged communities, co-creating knowledge through participatory workshops, learning exchanges and other activities. Most projects involved stakeholders directly in vulnerability assessments, climate risk studies, flood risk modelling and other research work. They also identified opportunities for further action-oriented research and collaboration.

The hands-on nature of the funded projects played a key role in enhancing local capacities for adaptation, benefiting community members, grassroots organizations, government staff and the private sector. As noted above, several projects also implemented some adaptation measures – a key next step.

The review found that the micro-grants had produced a wealth of research, including research papers, reports that were not published but were shared with key stakeholders, and additional studies, methodologies, toolkits and models – all valuable contributions to the evidence base. As highlighted by the SEWA project, the research gave voice to vulnerable people whose perspectives had never reached policymakers.

Delivering data and insights to policymakers does not guarantee that they will use them, however. Many project teams reported sharing their results with government officials but not securing any tangible policy commitments. Those who engaged with officials as part of the project benefited from stronger relationships as well as a better understanding of those stakeholders' own needs and perspectives. At the same time, by raising awareness within communities, the projects also increased demand for government action. As a result, officials may have a greater incentive to act on recommendations.

Table 1. **Urban adaptation projects supported by ARA micro-grants in 2023**

REGION	COUNTRY	PROJECT NAME	GRANT RECIPIENT	PARTNERS
Asia-Pacific	Philippines	Flood Risks, Environmental Sanitation and Health Research in Riverine Communities in Iloilo, Philippines (Project FRESH)	Technical Assistance Movement for People and Environment, Inc. (TAMPEI)	Coastal Cities at Risk in the Philippines (CCARPH) Iloilo City Urban Poor Federation, Inc. (ICUPFI) KAISA-BESA Homeowners Association (HOA)
	Myanmar	Community Climate Adaptation for Local Infrastructure	Doh Eain	Yangon Neighbourhood Network
	India	Supporting India's National Disaster Management Guidelines by Developing Community-led Templates for Managing Urban Flood	Gujarat Mahila Housing SEWA Trust	Integrated Research for Action and Development (IRADe)
	Thailand	Engagement of Vulnerable and Marginalized Coastal Communities for Empowerment and Climate Adaptation	Songkhla Community Foundation (SCF)	Thailand Environment Institute (TEI)
Africa	Kenya	Exploring "Community Responsive Adaptation" to Flooding in Kenya and Regional Cities	Kounkuey Design Initiative Inc.	The Technical University of Kenya KTH Royal Institute of Technology
	Madagascar	Unpacking the Needs of Boeny Coastal Cities for Adapting to Climate Change and Building Resilience	Tanjona Association	Doctoral School of Natural Ecosystem (EDEN) Governorate of Boeny Region
	Malawi	City-level Climate Information and Citizen Resilience and Adaptation Actions in Informal Settlements of Lilongwe	Centre for Community Organisation and Development (CCODE)	Equip Consulting Group Lilongwe City Council
Latin America & Caribbean	Uruguay	Perceptions and Actions to Reduce the Impact of Floods on the Community of Durazno, Uruguay	Vida Silvestre Uruguay	Technological University of Uruguay (UTEC) Civil Association Barrios Unidos en Marcha – Centro CAIF Canikas (BUEM)
	Chile	Local Urban Planning for Climate Change Adaptation in Chile	ICLEI Argentina	Centre for Global Change, Pontificia Universidad Católica de Chile Municipality of Vitacura Municipality of Renca Municipality of Independencia

References

UN DESA (2025). *World Urbanization Prospects 2025*. UN Department of Economic and Social Affairs, Population Division. https://population.un.org/wup/

Conducting field work as part of the project Perceptions and Actions to Reduce the Impact of Floods on the Community of Durazno, Uruguay (SouthSouthNorth)

This brief was written by Marion Davis, drawing on the sources cited as well as internal reports of the ARA.

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