

Mainstreaming Locally-Led Adaptation into Municipal Planning: Case study of the Narayanganj Green and Resilient Urban Development Project

Adaptation Knowledge Brief:
Lessons from Implementation experience

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The challenge of scaling locally-led adaptation

Locally-led adaptation (LLA) has gained significant momentum in the global discourse on adaptation, with proponents championing the importance of placing local people at the center of adaptation decision-making.¹ The Government of Bangladesh also recently released a national framework and action plan for LLA,² demonstrating a political commitment to LLA. The push for LLA stems from the recognition that top-down adaptation approaches can marginalize vulnerable communities and exclude local actors, leading to less effective adaptation and potential maladaptation (adaptation efforts that reproduce inequalities and increase vulnerabilities).

Currently, however, there is a significant gap between the rhetoric of LLA and the reality of how adaptation is implemented. Despite growing commitments to support LLA, most adaptation planning continues to be driven by the decisions of donors and governments.³ Most examples of LLA remain focused on small, grassroots initiatives, usually coordinated by NGOs. While these examples demonstrate the potential of LLA to lead to meaningful resilience outcomes, it remains unclear whether LLA is inherently a local, small-scale process or if there are possibilities to integrate LLA into larger-scale adaptation initiatives.

GCA is particularly well-positioned to pilot approaches to scaling LLA. With a strong commitment to advancing LLA at scale and strategic relationships with government and IFIs, GCA can act as a solution broker to integrate community-generated priorities into IFI and government processes. GCA's support to the city of Narayanganj as part of the Narayanganj Green and Resilient Urban Development Project was designed to address a major barrier to scaling LLA: identifying pathways through which local knowledge and priorities can be integrated into formal decision-making processes by

1 Soanes, M., Bahadur, A., Shakya, C., Smith, B., Patel, S., Rumbaitis del Rio, C., Cogger, T., Dinshaw, A., Huq, S., Musa, M., Rahman, M.F., Gupta, S., Dolcemascolo, G., and Mann, T. (2021). Principles for locally led adaptation: A call to action. London: IIED.

2 Ministry of Environment, Forest and Climate Change Government of the People's Republic of Bangladesh. (2025). National Framework and Action Plan for Locally Led Adaptation in Bangladesh. Available at: <https://objectstorage.ap-dcc-gazipur-1.oraclecloud15.com/n/axvjbnqprylg/b/V2Ministry/o/office-moef/2026/0/d96a558e-0208-43a5-b714-58b81959a3d4.pdf>

3 Rahman, M. F., Falzon, D., Robinson, S. A., Kuhl, L., Westoby, R., Omukuti, J., ... & Nadiruzzaman, M. (2023). Locally led adaptation: Promise, pitfalls, and possibilities. *Ambio*, 52(10), 1543-1557.

governments and other actors, including IFIs. This brief captures GCA's experience⁴ and provides insights into how LLA may be operationalized in practice.

Case study

The Narayanganj Green and Resilient Urban Development Project is a 115.8 million USD investment project supported by the Asian Development Bank approved in April 2026. The project aims to develop and improve climate-resilient and inclusive drinking water supply, drainage, waste management, and transport infrastructure. It will support the Narayanganj City Corporation to develop several masterplans including an Urban Action Plan, a Solid Waste Management Masterplan, and a Sewerage Masterplan. The project also aims to increase capacity and awareness on climate-resilient, sustainable and inclusive urban services for both the municipal government and communities.

Narayanganj is a major industrial and trade center located near Dhaka. It is home to 55% of Bangladesh's knitwear factories and 33% of textile factories, which has led to rapid urbanization, significant population growth, and strained municipal services, including water supply and waste management. Although the census data suggests a population of approximately one million, based on services provided, the city corporation estimates that the population is closer to two million. A significant challenge is that residents in informal settlements lack access to basic services and are therefore highly vulnerable to climate impacts, particularly waterlogging and the urban heat island effect.

Narayanganj is representative of many secondary cities across Bangladesh, in which planning is not conducted systematically and informal settlements lack representation in formal planning processes. Climate impacts exacerbate existing vulnerabilities in these contexts, acting as threat multipliers.

Approach

GCA's support to the project applied an LLA-informed approach to help ensure that municipal master planning and investments were inclusive and responsive to the needs of climate-vulnerable communities. GCA worked with Practical Action to support communities to develop People's Adaptation Plans in 16 informal settlements across Narayanganj, selected based on a participatory climate vulnerability and risk assessment. The project also piloted Women's Adaptation Labs, a more intensive engagement with groups of women in five selected informal settlements. The Women's Adaptation Labs functioned as a platform for female representatives to organize, generate settlement-level data, develop profiles, and directly engage with city authorities to articulate their priorities.

The People's Adaptation Plans are designed to feed into the municipal master plans that will be

⁴ This brief discusses lessons learned from a pilot project implemented by the Global Center on Adaptation (GCA) in Bangladesh under the "Scaling up Investments in Nature-based Solutions for Climate Resilience" project funded by Global Affairs Canada from 2023- 2026.

supported by ADB. GCA's support of the People's Adaptation Planning process was motivated by the recognition that unless there is a mechanism for the priorities of local communities, particularly people in informal settlements, to voice their needs, they are unlikely to be reflected in formal planning processes. Using an LLA-informed approach, GCA's support helped elevate community voices so their needs and priorities could inform the masterplan.

While the People's Adaptation Plans and Women's Adaptation Labs are intended to directly inform the master planning process in Narayanganj, a process with value in its own right, the ultimate goal of GCA's support was to provide a replicable model through which People's Adaptation Plans and Women's Adaptation Labs can be established and supported in municipalities across Bangladesh to help elevate community voices so their needs and priorities could inform planning.

Lessons learned

Several transferable lessons about LLA emerged from GCA's experience.

Local communities can clearly articulate needs and priorities

GCA's support provided a replicable model for identifying vulnerable communities and systematically collecting community needs and priorities using standardized climate vulnerability assessments. The City Corporation was impressed with the speed at which the team developed People's Adaptation Plans, suggesting that this would be a feasible strategy to scale up. Despite a very short project timeline, the team was successfully able to convene Women's Adaptation Labs and facilitate new communication channels between the City Corporation and informal settlements and identify priority lists of needs.

While some discourse on LLA sometimes raises doubts about the ability of local communities to articulate their adaptation needs due to a lack of scientific expertise, the project experience demonstrates that standardized tools can support community members to articulate their needs in accessible formats.



Participants in a Women's Adaptation Lab map their community resources and needs

Importance of city champions

One of the biggest challenges for scaling LLA is that there is a significant gap between the priorities and concerns that local communities raise and the decision-making processes by IFIs and national governments. City Corporations are well-positioned to mediate these relationships and facilitate the translation of community needs into formal investments, but its role should not be taken for granted. Supporting City Corporations to advocate for LLA and building their capacity to integrate People's Adaptation Plans is critical for the uptake of LLA.

In the case of the Narayanganj City Corporation, the town planner has played a key role in promoting the use of the People's Adaptation Plans in the master planning process. His track-record of advocacy for the City Corporation (including supporting Narayanganj to be the first city with a Climate Action Plan) has enabled the project to be successful.

He clearly articulated the value of a participatory process and has championed this process with other stakeholders across the city.

"In the Climate Action Plan we considered only scientific calculations, but we didn't have the community engagement—how they feel and how they are facing problems due to the climate. In this project it is a combination of the two—the scientific and community perceptions—this is new in my city. We used the Zurich resilience tool, and the results are validated by the people and their perceptions—the result is very accurate....The new beauty of this project is the cross-calculation is very explicit and people can really easily understand, and will be helpful for the project implementation period as well as our other development and planning projects."

- Narayanganj town planner



Women's Adaptation Lab members meet with steering committee members in the Narayanganj City Corporation

The integration of community priorities requires more than a passive hand-off of the People's Adaptation Plans to decision-makers. A primary goal of the Women's Adaptation Labs is to facilitate direct communication between local communities and municipal decision-makers over time, which requires a strong political commitment. Having a strong champion in the city corporation is critical to the success of such efforts.

Combining local knowledge with scientific assessments increases the validity and legibility of LLA

Although local needs and priorities are at the center of the People's Adaptation Plans, crucially, they are integrated into a broader participatory climate risk and vulnerability assessment process. The People's Adaptation Plans built on drone-based mapping surveys and climate risk models, including the Climate Resilience Measurement for Communities tool developed by the Zurich Climate Resilience Alliance.

Organizing community needs and priorities in a systemic fashion makes it easier for these needs and priorities to be translated into climate risk-informed plans.

IFIs are critical partners, but People's Adaptation Plans have broader value for municipal planning

While the Narayanganj City Corporation values the partnership with the Asian Development Bank for the Narayanganj Green and Resilient Urban Development Project, the city also saw the value of the People's Adaptation Plans and Women's Adaptation Labs extending beyond this one individual project, and is actively identifying additional opportunities through which these can contribute to other partnerships.

Narayanganj City Corporation has signed a five-year memorandum of understanding with Practical Action to continue to cooperate across a number of different areas, which may include supporting the People's Adaptation Plans and Women's Adaptation Labs, demonstrating the value of the collaboration that was piloted under this project.

Climate vulnerabilities cannot be addressed in isolation

Many of the needs and priorities identified by communities related to a lack of basic services and insufficient infrastructure and were not necessarily directly related to climate change, although climate impacts are likely to exacerbate these vulnerabilities.

The experience with the project raises important questions regarding what kind of climate information local communities need to contribute to adaptation planning. Although it is important for long-term planning to be climate-informed, prioritizing amongst current needs may be the most appropriate entry point for participatory planning.

Identifying gaps in basic needs and services also serves as an important reminder that while adaptation planning should be based on best-available climate science, the most urgent adaptation needs may not require sophisticated solutions and much is already known about how to build resilience. The fact that communities prioritize basic service and infrastructure needs reflects GCA's

aim to mainstream climate resilience into development interventions—acknowledging that climate vulnerabilities cannot be addressed in isolation.

Challenges and recommendations

Despite the many successes of the project, the case also demonstrates the challenges of mainstreaming LLA into municipal planning.

Planning without implementation threatens the sustainability of LLA

One of the challenges for this model is that because it was intended to inform municipal-level master planning processes, engagement with local communities was limited to planning, without delivery of concrete adaptation benefits. Particularly in contexts where community voices have been systematically marginalized and excluded from decision-making, it is difficult to build trust in participatory planning processes, especially when that planning process doesn't lead to immediate investments in solutions that are responsive to the needs of communities.

There is an inherent tension between inclusive participation and timely delivery of benefits. Involving local communities early in the planning process is necessary to ensure that it meaningfully contribute to planning, but large-scale investments can take years to move from the planning phase to implementation.

Partners also reflected on the challenges that this model poses for the long-term sustainability of the institution-building work piloted with the Women's Adaptation Labs. Sustaining engagement and building the leadership required for LLA is hampered by the lack of concrete investments.

Complementary demonstration investments would strengthen trust and buy-in to the process and enable better prioritization of adaptation options. A challenge identified by partners, and one widely echoed in the literature on LLA, is that it is difficult to ask local communities to articulate visions for the future, including adaptation priorities, that extend beyond their direct experiences.

It is hard to prioritize among adaptation options that one has never seen. It is also difficult to align community priorities with the scale of potential investments without demonstration projects to showcase what is possible. Partners specifically identified Nature-based Solutions as an important area for demonstration investments that would expand the range of adaptation options identified by local communities.

Future initiatives seeking to mainstream LLA into planning should incorporate demonstration-scale investments to build trust and enlarge the scope of participatory planning.

LLA requires long-term commitments to capacity-building and skilled facilitation

The experience of this project demonstrates that while there is potential for local needs and priorities to feed into formal planning processes, this requires significant investments in capacity-building and empowerment at the local level. Local communities, particularly women in informal settlements, have faced systematic exclusion from formal decision-making and marginalization that are not overcome easily.

Locally-led does not mean that local communities can or should be expected to articulate their needs and priorities independently. The work that GCA and partners have done to support this local process has been critical to empowering communities, helping mobilize groups, and applying standardized methodologies that enable these priorities to be integrated into plans at scale.

The Women's Adaptation Labs represent an effort to institutionalize local adaptation planning, and groups articulated a wide range of future ambitions to support their community's needs. Some of these efforts centered around communication and advocacy with the City Corporation, while others represented more grassroots initiatives to mobilize the community directly in support of identified needs.

Realizing the potential of the Women's Adaptation Labs to support LLA will require long-term capacity building that should be supported to maintain the momentum initiated through this initiative.

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