



INSIGHTS FROM UCCRTF: A Decade of Advancing Climate Change Resilience in Asian cities

“Urban resilience is the capacity of cities to function, so that the people living and working in cities – particularly the poor and vulnerable – survive and thrive no matter what stresses or shocks they encounter.” **Urban climate change resilience (UCCR)** takes this idea further by focusing specifically on climate change as one of those challenges. UCCR involves adapting to climate change, finding ways to reduce its impact, and managing the risks it poses, all while considering the unique complexities of rapidly growing cities and the uncertainties linked to climate change.

Bahadur, A., Tanner, T., Pichon, F. (2016). Enhancing Urban Climate Change Resilience: ADB Seven Entry Points for Action. Mandaluyong City, Philippines: ADB

The Urban Climate Change Resilience Trust Fund (UCCRTF) is a \$105 million multi-donor trust fund (2013–2023) administered by the Asian Development Bank (ADB) under the Urban Financing Partnership Facility (UFPF). It was established with funding from the Rockefeller Foundation, the Governments of Switzerland, United Kingdom and the United States¹ to support fast-growing cities in Asia to reduce the risks poor and vulnerable people face from floods, storms, or droughts, by helping to better plan and design infrastructure to invest against these impacts.

In its 10 years of implementation, UCCRTF worked through various entry points in the ADB project cycle to build systemic urban resilience through (i) integrated and climate risk-informed planning; (ii) developing knowledge to strengthen urban climate change resilience (UCCR), and the (iii) implementation of physical and non-physical interventions at various scales (community, city, regional/national) and across sectors.

¹ USAID withdrew as a financing partner in 2017.

² Physical interventions are measures that involve civil works (e.g., construction or modification of infrastructure or assets while non-physical interventions focus on policy and institutional changes, community engagement, capacity building, and other technical studies.

UCCRTF’s support to ADB projects has demonstrated several key achievements:



Supported **7.78 million people** to better adapt to the effects of climate change (Out of these, 2.43 million are projected as direct beneficiaries and 5.34 million are indirect beneficiaries*)



Supported **35 priority cities** in **7 countries** in a range of interventions encompassing the spectrum of ADB’s resilience framework



- Linked to **\$10.6 billion of approved downstream investments** comprising \$5.7 billion in approved ADB loans, \$2.32 billion in co-finance and \$2.5 billion in government counterpart funding
- **Reached 28,850 individuals** who utilized the knowledge activities and planning
- **Supported** the design and implementation of resilience building investments such as cyclone shelters, emergency roads, flood early warning systems, integrated water supply and sanitation systems, waste management, healthcare centers
- **Piloted approaches** for nature-based solutions, community-led initiatives, cross-border climate issues, disaster risk financing, and use of geospatial tools
- **Played a pivotal role in influencing ADB policy** through inputs to Strategy 2030 Operational Priority 4 on “Making Cities More Livable”, Urban Sector Directional Guide, Water Sector Directional Guide, and the **urban sector guidance for adopting** the Joint Multilateral Development Bank Methodology for tracking climate change adaptation finance and Paris Agreement Alignment

* Direct beneficiaries are defined as both targeted beneficiaries and receiving high intensity of support, whereby targeted means they can be identified as receiving direct support; can be counted individually; and are aware that they are receiving support in some form. Indirect beneficiaries are defined as either: (i) targeted, and receives medium or low intensity of support; or (ii) not targeted, and receives high or medium intensity of support.

Reference: UK Government. “Number of people supported to better adapt to the effects of climate change as a result of International Climate Finance: ICF KPI 1 Methodology Note.” February 2023. (<https://bit.ly/3R5GAxX>)

Intensifying Transformational Urban Climate Change Resilience Initiatives

UCCRTF support is available to cities in the 7 priority countries through ADB instruments implemented by the operating units, employing a systems-thinking resilience approach to integrate climate change through strategic entry points in the ADB project cycle. UCCRTF has contributed to elevating climate resilience within ADB by supporting projects and pilots to operationalize the [ADB Resilience Framework](#), an integrated and holistic approach encompassing four dimensions of resilience: physical, social and institutional, financial, and ecological.



Source: Asian Development Bank.

A **systems-thinking approach** considers different dimensions for building resilience within a given thematic area or a combination of thematic areas – infrastructural, environmental, social-institutional, and economic-financial. This framework moves beyond isolated, asset-based, or sector-specific strategies to a more comprehensive, holistic, and integrated perspective that acknowledges the complexity of real-world urban systems.

UCCRTF efforts go beyond conventional climate-proofing of infrastructure highlighting the following:

Key areas	Traditional climate-proofing of infrastructure	UCCRTF's approach to integrate resilience into ADB projects
Scope, scale, and approach	Focuses on engineering measures to respond to specific climate change impacts	Designs and implements integrated solutions that encompasses scales (national, regional, city, community) and sectors (economic, social, environmental, transportation, health, etc.) combining physical and non-physical measures
Timing (when solutions are considered and implemented)	Often come at a later stage in the project cycle	Shapes projects for enhanced resilience at conceptualization stage, the ideal entry point for achieving wider impacts. Helps inform and shape the location, design, delivery and monitoring of interventions based on historical records and future climate projections.
Integrated and holistic solutions	Typically, relies on engineering solutions that focus on addressing a specific climate risk	Tests new approaches for building urban climate change resilience and to the extent possible, encompasses the technical, social, and institutional frameworks that need to be in place for these to be sustainable in the long term
How benefits are accounted	Primarily focuses on benefits of mitigating the direct and immediate impacts of climate change, e.g., reducing the risk of flooding	Takes a broader view of benefits and additionally considers long-term benefits (often extending beyond the project's immediate lifespan) related to the overall well-being of cities, communities, and environment

Lessons to Enhance Implementation of Urban Resilience Interventions in Secondary Cities

The successes and lessons derived from UCCRTF's adoption of a systems-thinking approach in secondary cities offer valuable insights into how similar approaches can be replicated in larger cities, contributing to the expanding knowledge on building climate resilience. Key lessons were summarized below:

Lesson 1

Shift from asset-centric approaches towards holistic and integrated approaches (across scales, sectors, combination of physical and non-physical interventions) is more effective in building systemic resilience.

The UCCRTF portfolio demonstrates that enhanced resilience can be achieved through applying system-based resilience principles alongside multi-level, multi-sector, and combination of physical and non-physical interventions to maximize impact. Resilience building is viewed in the context of larger system settings, with increased attention to identifying core vulnerabilities and addressing them holistically.

Lesson 2

Support to mainstreaming resilience into policies, frameworks, and regulations ensures that downstream activities align with the government's climate change objectives.

UCCRTF's work in the DMC policy level comprised its upstream interventions that included the development preparation of climate risk assessments, technical studies, and geospatial analysis that helped inform national, state and local level policies, and, where the opportunity was available, to link these to policies at the higher/lower levels of government.

- Support policies and plans with sound climate risk and vulnerability assessment (CRVA)
- Adopt inclusive processes in the development of policy and strategies to strengthen stakeholders' ownership and ensure sustainability
- Develop flexible and adaptive strategies that consider future scenarios and uncertainties
- Ensure iterative and sustained support in upstream processes using various funding modalities (e.g., technical assistance or TAs, grants)

Lesson 3

Embedding resilience at the project conceptualization stage is the best entry point for achieving wider impacts.

UCCRTF's experience has shown that resilience interventions can have the greatest impact at the pre-design or pre-concept stage. In the context of the ADB project cycle, this can be presented at the (i) concept stage, where the project has been identified in the country partnership strategy but the loan components still have to be developed and, (ii) pre-design phase where the loan project has been approved but detailed engineering design and siting of projects have not yet been finalized.

- Undertake country-level diagnostics on climate risk and downscaled (city and community level) vulnerability assessments at the project conceptualization stage to ensure alignment with climate objectives at higher planning levels
- Take a stepwise approach to effectively embed climate resilience into various components (Guidance Note on Climate Finance at ADB: An Update (July 2023))
 - o Step 1. Set out climate vulnerability context
 - o Step 2: Make an explicit statement of intent to address climate vulnerability
 - o Step 3: Articulate clear and direct link between vulnerability and project activities

Lesson 4

Participatory and bottom-up approaches ensure that resilience benefits reach the most vulnerable groups.

Failing to prioritize vulnerable groups would perpetuate inequalities, leaving them more exposed to the adverse effects of climate change and hindering overall resilience efforts. To address this gap, UCCRTF interventions focused on the following:

- Maximize community knowledge and experience to better understand climate risks and develop appropriate adaptation measures
- Invest in processes or platforms that empower vulnerable members to identify, co-design and implement fit-for-purpose solutions
- Ensure early and sustained engagement of both stakeholders and local government officials
- Intensify efforts to scale up community-led approaches within ADB (e.g., establish monitoring and learning mechanisms; highlight civil society organizations' role in the safeguarding process, implement a scorecard to measure their meaningful involvement)

Lesson 5

Use of climate risk information tools and methodologies (e.g., CRVAs, geospatial tools, resilience measurement) supports evidence-based decision-making.

Addressing the complex and urgent challenges posed by climate impacts and achieving resilience requires evidence-based decision making, backed by reliable data and research, to ensure informed and effective strategies.

- Expand CRVAs beyond asset-focused assessments to encompass a more comprehensive scope, considering the interplay of socio-economic conditions, infrastructure, climate sensitive sectors and dependent communities, and the environment at regional levels
- Integrate past climate records and future climate forecasts into CRVAs
- Use digital technologies (e.g., earth observation tools, GIS, building information modelling or BIM, etc.) for effective adaptation design
- Broaden the measurement of resilience and socio-economic and environmental benefits to include a more extensive, multi-faceted, longer-term horizon, and extending beyond mere monetary cost-benefit valuation

Lesson 6

Upstream work on climate change resilience creates an enabling environment for private sector investment.

Private sector financing for investments in climate resilience is more challenging than that for mitigation, the latter having greater potential for revenue generation (including carbon credits). UCCRTF aimed to improve knowledge around private sector delivery models through testing potential, replicable private sector models (e.g., private sector financing) and practical examples of climate resilience investments that leverage additional private sector financing, which had largely remained an untested area in ADB's portfolio. However, these efforts also revealed that the appetite for private sector engagement in resilience investments is still weak and needs enhancements on catalytic risk transfers to make them more attractive.

- De-risk or blend private sector financing with publicly financed complementary investments for viability and sustainability
- Develop innovative de-risking and operational arrangements that can tap into time-bound trust funds

Summary and Next Steps

Resilience-building is not achieved overnight; it is a continuous, often arduous process that requires ongoing commitment and effort. This includes policy reform, financial resources, technical expertise, and institutional commitment.

UCCRTF has contributed to the knowledge base on building urban climate change resilience by testing new approaches, capturing invaluable experiences, and imparting crucial lessons on how to build resilience using a systems-thinking approach. Establishing a multidonor trust fund within ADB's UFPF offered an effective platform for developing, piloting innovative approaches to address urban climate change resilience in Asia. Combining the expertise of the financing partners, taking an integrated approach on climate resilience, along with ADB's experience, scale and reach in infrastructure delivery in the region, provides a good platform for testing and scaling up new approaches developed through the program. It highlighted that building on existing capacities and promoting learning-by-doing, co-design and peer learning empower project beneficiaries. Despite notable successes, the experiences of UCCRTF revealed the inherent complexity of resilience building. The challenges remain dynamic and will continue to evolve amidst the increasing risks posed by climate change.

Ramping-up resilience through the Urban Resilience Trust Fund (URTF)

Building on the lessons learned from UCCRTF, the UK Government approved an allocation of \$82.12 million (£68.5 million) to establish the Urban Resilience Trust Fund (URTF). URTF, which will be operational from 2023 to 2031, aims to build the capacity of cities and the relevant national and subnational urban agencies, communities, and the private sector to integrate climate resilience into their policies and projects through public or private investments. URTF interventions will support holistic resilience planning, enhanced investments in resilient infrastructure, and increased opportunities for knowledge sharing. The program will help reduce risks from climate change and disasters for selected cities in 13 countries in Asia and the Pacific⁴ through technical assistance and innovative investments in eight thematic areas:

- Integrated urban policy, regulations, strategic planning, and assessment;
- Nature-positive solutions;
- Air quality management;
- Integrated water, sanitation, and solid waste management;
- Disaster resilience;
- Greenhouse gas reduction, energy efficiency, and adaptation measures;
- Urban mobility and social services improvements; and
- Community empowerment

Next steps

With the transition to URTF, collaboration with ADB will focus on developing a robust project pipeline across a broader Indo-Pacific region that will contribute to an increased level of adaptation finance; applying a holistic approach to building resilience; and, facilitating the implementation of innovative pilots across the thematic areas. These efforts align with ADB's strategy 2030, climate finance ambition, and Paris Agreement alignment and the four key shifts outlined in ADB's new operating model—enhancing the bank's climate capacity, fostering private sector development, offering a broader range of high-quality development solutions, and modernizing ways of working for increased responsiveness, agility, and client proximity.

⁴ Bangladesh, Cambodia, India, Indonesia, Kiribati, Lao People's Democratic Republic, Nepal, Papua New Guinea, Philippines, Solomon Islands, Tuvalu, Vanuatu, and Viet Nam.

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