



Technical Assistance Report

Project Number: 48317-001

Cluster—Regional—Capacity Development Technical Assistance (C-R-CDTA)

March 2015

Promoting Urban Climate Change Resilience in Selected Asian Cities

(Financed by the Urban Climate Change Resilience Trust Fund
under the Urban Financing Partnership Facility)

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Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
DMC	–	developing member country
RSDD	–	Regional and Sustainable Development Department
TA	–	technical assistance
UCCR	–	urban climate change resilience
UCCRTF	–	Urban Climate Change Resilience Trust Fund

NOTE

In this report, “\$” refers to US dollars.


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CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 48317-001	
Project Name	Promoting Urban Climate Change Resilience in Selected Asian Cities	Department /Division	RSDD/RSAS
Country	REG, BAN, IND, INO, MYA, PAK, PHI, VIE	Executing Agency	Asian Development Bank
Borrower	Not applicable		
2. Sector	Subsector(s)	Financing (\$ million)	
Water and other urban infrastructure and services	Other urban services		15.00
	Total		15.00
3. Strategic Agenda	Subcomponents	Climate Change Information	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Climate Change impact on the Project	Low
Environmentally sustainable growth (ESG)	Disaster risk management Environmental policy and legislation Urban environmental improvement		
4. Drivers of Change	Components	Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Client relations, network, and partnership development to partnership driver of change Civil society participation Institutional development	Effective gender mainstreaming (EGM)	
Knowledge solutions (KNS)	Application and use of new knowledge solutions in key operational areas Knowledge sharing activities Pilot-testing innovation and learning		
Partnerships (PAR)	Bilateral institutions (not client government) Civil society organizations Foundations Implementation Private Sector Regional organizations United Nations organization		
5. Poverty Targeting		Location Impact	
Project directly targets poverty	Yes	Not Applicable	
Geographic targeting (TI-G)	Yes		
6. TA Category:	A		
7. Safeguard Categorization	Not Applicable		
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		0.00	
None		0.00	
Cofinancing		15.00	
Urban Climate Change Resilience Trust Fund		15.00	
Counterpart		0.00	
None		0.00	
Total		15.00	
9. Effective Development Cooperation			
Use of country procurement systems		No	
Use of country public financial management systems		No	

I. INTRODUCTION

1. The Urban Climate Change Resilience Trust Fund (UCCRTF) aims to scale up investments in urban climate change resilience (UCCR), especially for the urban poor, across 25 secondary cities in Asia.¹ It prioritizes six developing member countries (DMCs) of the Asian Development Bank (ADB)—Bangladesh, India, Indonesia, Pakistan, the Philippines, and Viet Nam².

2. The proposed cluster regional capacity development technical assistance (TA) will make UCCRTF resources available to ADB's operations departments to provide planning and capacity-building support as well as pilot activities for project development either before or during project preparatory TA and at the initial stage of project implementation. The TA will support a range of activities to help lay the groundwork for UCCR planning processes, project pipeline, and knowledge and capacity development. A concept paper prepared for the TA was approved by the Vice-President (knowledge management and sustainable development) on 16 December 2014.³ The design and monitoring framework is in Appendix 1.

3. The TA will contribute to the strengthening of UCCR in selected highly vulnerable medium-sized cities in the region and thereby foster ADB's 3E-approach.⁴ It is in line with ADB's Strategy 2020; ADB's Midterm Review Action Plan; the Urban Operational Plan; Environment Operations Directions, 2013–2020; and the Operational Plan for Integrated Disaster Risk Management, 2014–2020.⁵ Consultations have been held with eligible country governments including Bangladesh and Pakistan, and other relevant partners.⁶

II. ISSUES

4. Cities in Asia and the Pacific are particularly vulnerable to climate change, as people and economic assets are highly concentrated in hazard-prone locations. The 238 million Asian urban poor are expected to be hit first and hardest by the effects of climate change. Disasters caused by natural hazards erase 1%–5% of gross domestic product each year.⁷

5. More than 60% of the projected increase in urban population from 2010 to 2050 will take place in Asia, and half of that growth will occur in medium-sized cities.⁸ These cities will make significant decisions on planning, land use, and major investment projects in the coming decades to support economic growth and to generate livelihoods for growing populations.

6. Urban areas that are most susceptible to climate-related shocks and stresses have fragile systems, including fragile natural ecosystems and large socially or economically

¹ Urban resilience is the capacity of cities to function, so that the people living and working in cities, particularly the poor and the vulnerable, survive and thrive no matter what stresses or shocks they encounter.

² Additional countries will be considered in consultation with UCCRTF fund donors and operations department.

³ The TA first appeared in the business opportunities section of ADB's website on 3 February 2015.

⁴ Integrated environmental (green), equity (inclusive), and economic (competitive) approach.

⁵ ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008–2020*. Manila; ADB. 2014. *Midterm Review of Strategy 2020: Action Plan*. Manila (24 July); ADB. 2012. *Urban Operational Plan, 2012–2020*. Manila; ADB 2014. *Environment Operational Directions 2013–2020*. Manila; ADB 2014. *Operational Plan for Integrated Disaster Risk Management, 2014–2020*. Manila.

⁶ Including the Rockefeller Foundation, the Department for International Development of the United Kingdom, the United States Agency for International Development, the World Bank, and the Asian Cities Climate Change Resilience Network.

⁷ World Bank. 2011. *East Asia and Pacific Economic Update 2011, Vol. 1*. Washington, DC.

⁸ United Nations. 2012. *World Urbanization Prospects: The 2011 Revision*. New York.

marginalized populations. Yet, the complexity of today's cities—rapidly growing and evolving in response to community and business demands—makes system failure difficult to predict.⁹

7. As well as physical and spatial challenges, important policy and institutional challenges are presented by agencies working across sectors, administrative boundaries, and multisector decision making. These are more daunting because of weaknesses in local government understanding and awareness of climate-induced impacts, and interface with urban environment planning. Governance and institutional capability are critical to addressing these challenges.

8. The uncertainty of what future cities will look like, and how urban systems will perform in the face of disruption, has created demand for a new approach that includes hard and soft infrastructure, policies, institutions, and ecosystems. Moving beyond efforts to make single pieces of infrastructure more durable in the face of changing climate risk, UCCR considers the ability of urban systems to withstand the impacts and maintain function in the face of climate-induced disruption. Urban resilience focuses on seven qualities: flexibility, robustness, redundancy, reflectiveness, resourcefulness, integration, and inclusiveness.¹⁰

9. Key drivers to strengthen UCCR are (i) the ability of urban systems, including key infrastructure, to maintain function in the face of climate-induced disruption; (ii) enabling peer learning within cities and across countries by engaging decision makers and vulnerable populations in how to manage changes in climate, and sharing experiences to identify critical key areas of planning, investment, and management;¹¹ (iii) involvement of multiple stakeholder and champions less subject to political cycles—research institutions, think tanks, civil society, and local businesses;¹² (iv) considering the roles that women can play in resilience planning and the different extents to which households and communities are vulnerable to natural hazards and system failure; and (v) alignment and coalition of efforts among donors and financing partners.¹³

III. THE PROPOSED CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE

10. The TA will support capacity development in preparing and responding to climate change-induced shocks and stresses in secondary cities. It will support policy dialogues, capacity building, and institutional strengthening to improve planning and other mechanisms to strengthen UCCR, and support national and regional partnerships. Activities are expected to influence country partnership strategies and urban development projects to adopt UCCR principles and approaches.

11. The TA will draw lessons from RETA 6293 Managing the Cities in Asia and RETA 7918 Support to Urban Infrastructure Development and Financing, both supporting urban infrastructure, including low carbon, climate resilient infrastructure as key areas of urban development.

12. A regional approach is justified because (i) cities in ADB's DMCs often face common challenges or limitations that either require cooperation to resolve them or they can more efficiently be addressed through pooling of resources and sharing of knowledge; (ii) programs to strengthen urban resilience can provide shared benefits, as good spillovers exist in terms of how to address

⁹ J. da Silva, S. Kernaghan, A. Luque. 2012. A systems approach to meeting the challenges of urban climate change. *International Journal of Urban Sustainable Development*, 4 (2). pp. 125-145, 2012. Socio-technical systems in urban areas are made up of four components: institutions, infrastructure, knowledge, and ecosystems.

¹⁰ ADB. 2014. *Urban Climate Change Resilience: A Synopsis*. Manila.

¹¹ S. Kernaghan and J. da Silva. 2014. Initiating and sustaining action: Experiences building resilience to climate change in Asian cities. *Urban Climate*. 7. pp. 47-63.

¹² A. Brown, A. Dayal, C. Rumbaitis Del Rio. 2012. From practice to theory: emerging lessons from Asia for building urban climate change resilience. *Environment and Urbanization*. 24(2). pp. 531-556.

¹³ Outcomes from two conferences: (i) Investing in Urban Climate Change Resilience: Sharing Lessons and Accelerating Action, Bellagio Meeting, 2-6 June 2014; and (ii) The Urban Resilience Summit: Innovation, Investment, Collaboration, Singapore, 3 December 2014.

common challenges in complex city contexts; and (iii) regional cooperation is instrumental in transferring technology and knowledge, given that climate change is a regional as well as local issue. Regional cooperation initiatives can help address UCCR at a regional scale, complementing the focus of the TA on resilient city systems.

13. The cluster approach is proposed because (i) subprojects are closely related, with common objectives and significant potential synergies; (ii) subprojects will operate collectively as a pilot for strengthening resilient urban development; and (iii) a cluster modality will maximize TA coherence and coordination better than an individual TA approach. This will allow ADB's operations departments to be more responsive to the timing of DMCs' planning cycles and ADB's country partnership strategies for these DMCs, while reducing costs otherwise devoted to processing individual subprojects as stand-alone TA projects.

A. Impact and Outcome

14. The impact will be that urban populations, especially the urban poor in selected DMC cities, are less vulnerable to the direct and indirect impacts of climate change. The outcome will be increased application of UCCR principles in selected DMC cities.

B. Methodology and Key Activities

15. The cluster TA will build on a range of ADB experience, particularly that of ADB's operations departments, in supporting capacity development for climate change responses as well as green, inclusive, and competitive cities. It will support urban climate risk, vulnerability, and system assessments to guide policy makers and communities in strengthening UCCR. It will assist governments and civil society with better scientific and economic data at the subnational level to assist decision making and provide support for project development and pilot activities. Participating governments and cities will be able to identify UCCR strategies, build related institutional capacity, and enable multi-stakeholder engagement to implement UCCR initiatives and to assess the local impacts of climate change.

16. Based on the UCCRTF implementation criteria and operations department consultation, Bangladesh, India, Indonesia, Myanmar, Pakistan, the Philippines, and Viet Nam have been identified for inclusion in the subprojects. The process of city selection, to be finalized during TA implementation, includes the following criteria: (i) vulnerability of urban poor and urban system, (ii) government buy in, (iii) local capacity and ownership, (iv) operations department commitment, and (v) synergies through partnerships. Selection criteria for cities and activities are in Supplementary Appendix A.

17. The TA will have three subprojects, to be carried out in close coordination with ADB's operations departments:

- (i) **Subproject 1: Integrated urban development plans are developed in selected developing member country cities incorporating urban climate change resilience principles.** Subproject 1 will support ADB's operations departments to integrate UCCR planning principles into the ADB project cycle. A guideline for the integration of UCCR into integrated urban development plans will be developed. UCCR experts will join project teams in the early stage to prepare UCCR inputs to integrated urban development plans, which (a) include assessments of socioeconomic vulnerability, climate risk, and urban systems; (b) provide an overview of UCCR issues and their relevance in the urban context; (c) develop action plans that respond to climate risks on critical urban systems; and (d) identify feasible soft and hard infrastructure projects to build UCCR.

- (ii) **Subproject 2: Targeted cities network to share knowledge and build capacity through peer learning and joint training activities.** Subproject 2 will strengthen participating DMCs' and development practitioners' capacity to apply UCCR knowledge to development planning. To address gaps in UCCR knowledge and identify existing centers of excellence where new knowledge can be exchanged, it will (a) conduct an institutional analysis at the national and local government levels for participating DMCs and cities to understand capabilities, and address institutional gaps; (b) assess the state of knowledge and practice, and address knowledge gaps to enhance UCCR at the project level; (c) identify replicable practices; and (d) identify opportunities for cross-regional exchange, including training and workshops to share knowledge, city exchange activities to enable peer learning, and the production and dissemination of knowledge outputs to advance UCCR.¹⁴ To strengthen UCCRTF monitoring, the subproject will (a) establish an annual monitoring regime that collects and collates data from cities, pilot activities, projects, and knowledge activities; and (b) develop annual reports that measure progress against the overall baseline in UCCRTF-supported cities.
- (iii) **Subproject 3: Development of pilot activities and project development support.** Subproject 3 will provide resources for pilot interventions and project development, which will help integrate UCCR into projects that are at risk from climate change, and seek to build more resilient urban systems. These funds will enable a diverse range of city stakeholders, including government and civil society organizations, to build their capacity and participate in the design of inclusive, integrated, and iterative approaches to project development as well as action research which tests new approaches to building UCCR. In consultation with ADB's operations departments, the subproject will identify opportunities for pilot projects to support planning and investment activities being implemented by operations departments.

C. Cost and Financing

18. The TA is estimated to cost \$15 million, which will be financed on a grant basis by the Urban Climate Change Resilience Trust Fund¹⁵ under the Urban Financing Partnership Facility and administered by ADB.¹⁶ A possible TA amount increase through additional allocation from the UCCRTF may be considered in the future subject to resource availability, implementation progress, and UCCRTF approval. The cost estimates and financing plan are in Appendix 2.

D. Implementation Arrangements

19. ADB's Regional and Sustainable Development Department (RSDD) will be the executing agency of the TA. Upon TA approval, the subproject proposals will be submitted for approval to the director general, RSDD, in accordance with ADB guidelines on cluster TA processing. RSDD's Sector Advisory Services Division, through the Urban Sector Group, will be managing the TA. The implementing agencies for the TA will comprise the urban sector divisions of ADB's regional departments—Central and West Asia Department, South Asia Department, and Southeast Asia Department. The TA will finance consulting services; workshops and training, including resource persons; pilot activities; report preparation and communications; miscellaneous administration and support costs; and equipment and surveys. Confirmation of no objection will be obtained from

¹⁴ Knowledge products will be focused on methodologies for measuring resilience and avoided loss, may be based on case studies and learn from decisions on planning, accountability, governance, construction standards, etc.

¹⁵ Financing partners: the Rockefeller Foundation and the governments of the United Kingdom and the United States.

¹⁶ The UCCRTF was formally approved on 3 December 2013. Fund allocation was secured on 17 November 2014.

participating DMCs before any activities financed by the TA commence in those DMCs. The TA and its subprojects are expected to be implemented from April 2015 to December 2021.

20. The TA will coordinate its activities with other ongoing ADB projects through existing institutional arrangements such as the Climate Change Coordination and Disaster Risk Management Unit, other sector groups, and the Cities Development Initiative for Asia. Under the TA, knowledge partnerships with centers of excellence will be established to improve project design and delivery, and to ensure that knowledge emerging from the UCCRTF is shared with key stakeholders in the region.¹⁷ All subprojects will be supported by ADB's operations departments, and activities will be closely coordinated with them.

21. The input of 401 person-months of international consultants and 364 person-months of national consultants is envisaged. Resource persons will be engaged on an individual basis. Different methods of consultant selection will apply, depending on the size and nature of the contracts. Consultants may be engaged via consulting firm(s) or individually. The consultants will be engaged using procurement modalities: quality- and -cost-based selection using a technical–financial ratio of 90:10, quality-based selection, consultant qualification selection, or fixed budget selection, as appropriate. All consultants will be engaged by ADB in accordance with its Guidelines on the Use of Consultants (2013, as amended from time to time). Annual audit reports will be prepared in accordance with the UCCRTF implementation guidelines. An indicative procurement plan is in Supplementary Appendix B. The outline terms of reference for consultants for subprojects are in Appendix 3.

22. All procurement under the TA will be carried out in accordance with ADB's Procurement Guidelines (2013, as amended from time to time). All equipment procured for pilot and project development in countries and cities will be turned over to the respective government partners at the end of each project. Disbursements under the TA will be in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).

E. Governance

23. Due diligence and capacity assessment has been done under the UCCRTF selection of its six priority countries. The core TA implementation team will consist of dedicated staff, technical staff, secondees¹⁸, and consultants with UCCR expertise. The core team will regularly communicate with subproject teams, ADB's operations departments, and UCCRTF financing partners; organize meetings; and prepare reports required for ADB and partners. The TA will be monitored through assessment of quality and timely delivery of outputs. Overall TA results will be disseminated through regional forums, the Urban Sector Group, and UCCRTF donor meetings. A clear road map of activities will be developed, monitored, and evaluated to achieve the outputs. The TA fund flow arrangement is in Supplementary Appendix C.

IV. THE PRESIDENT'S RECOMMENDATION

24. The President recommends that the Board approve ADB administering technical assistance not exceeding the equivalent of \$15,000,000 to be financed on a grant basis by the Urban Climate Change Resilience Trust Fund under the Urban Financing Partnership Facility for Promoting Urban Climate Change Resilience in Selected Asian Cities.

¹⁷ Centers of excellence may include key regional ADB partners such as the Korea Research Institute for Human Settlements, the City of Yokohama, the Singapore Centre for Livable Cities; and also partners of the Climate and Development Knowledge Network, and partners of the Asian Cities Climate Change Resilience Network.

¹⁸ Qualified professional assigned to ADB who are financed/sponsored by parent organization or Government of an ADB member country.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
Impact Urban populations, especially the urban poor in selected DMC cities, are less vulnerable to the direct and indirect impacts of climate change	At least 50% of the poor in areas that have had a UCCR intervention have improved their resilience.	Investment project monitoring UCCRTF midterm and final evaluation	Assumption Improved knowledge and capacity at city level translate into more resilient urban management and investments Risk Inadequate support from DMC governments to commit to policy and institutional reforms, and financial resources necessary to strengthen UCCR investments
Outcome Increased application of UCCR principles in selected DMC cities	By 2021: At least 10 cities have applied UCCR principles in project development or implementation (2014 baseline: 0). Three targeted DMCs have included one or more UCCR principles in ADB country partnership strategies, and national and local government strategies. At least 50% of pilot activities results replicated or scaled up.	Annual monitoring reports UCCRTF midterm and final evaluation National urban assessment reports Country partnership strategy and DMC feedback received through formal and informal channels	Assumption Commitment from cities and National Governments to implement projects that incorporate UCCR Risk Lack of professional resources at city level to structure projects and build pipeline
Outputs 1. Integrated urban development plans are developed in selected DMC cities incorporating UCCR principles	By 2021: Prepare a guideline for the integration of UCCR into integrated urban development plans. Support the preparation of UCCR inputs to integrated urban development plans in at least 10 cities (2014 baseline: 3). At least 10 UCCR planning studies, including action plans, are prepared, which respond to ADB and DMC priorities (2014 baseline: 0). At least 500 city professionals and community representatives (at least 40% of which are women) have practical experience in UCCR planning processes (2014 baseline: 0).	List of selected cities agreed with ADB's operations departments Technical assistance progress reports Consultants reports, City action plans Feedback from capacity-building events	Assumptions Enabling policy exists at national and local government levels Cities are willing to commit to exchange arrangements in order to share knowledge on UCCR Risks Organizations that represent communities are not able to, or interested in, co-developing pilot activity applications Departments or agencies working in silos prevent

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p>2. Targeted cities network to share knowledge and build capacity through peer learning and joint training activities</p> <p>3. Development of pilot activities and project development support</p>	<p>Number of city professionals and community representatives (at least 40% of which women) who participate in UCCR knowledge sharing activities increased by 1,000 (2014 baseline: 0).</p> <p>Number of city-to-city knowledge exchanges (workshops, site visits, twinning arrangements) increased by at least 10 by 2017 (2014 baseline: 0).</p> <p>Number of UCCR knowledge products disseminated increased by at least 10 (2014 baseline: 0).</p> <p>Number of people accessing disseminated UCCR knowledge products increased by at least 1,000 (2014 baseline 2014: 0).</p> <p>At least 15 pilot and project development activities are implemented.</p> <p>At least one methodology, to ensure that government and civil society organization approaches are combined, is developed and disseminated.</p> <p>3–5 knowledge products, which share findings, principles, and lessons learned from pilot activities, are developed.</p>	<p>Progress and Final reports</p> <p>Lessons learned reports</p> <p>Final reports</p> <p>Website downloads, hardcopy distribution</p> <p>Urban Financing Partnership Facility and Pilot and Demonstration Activities Facility Manager</p> <p>Pilot project implementation reports</p> <p>Technical assistance progress reports, completion report</p>	<p>multisector planning and implementation needed for improving UCCR</p>
<p>Activities with Milestones</p> <p>1. Integrated urban development plans are developed in selected DMC cities incorporating UCCR principles</p> <p>1.1 Develop a detailed assessment scope, methodology, and outline of UCCR planning studies in consultation with ADB's operations departments (August 2015).</p> <p>1.2 Undertake city selection in consultation with ADB's operations departments and target DMCs (ongoing).</p> <p>1.3 Prepare UCCR planning studies that (i) include assessments of socioeconomic vulnerability, climate risk, and urban systems; (ii) provide an overview of UCCR issues and their relevance in the urban context; (iii) develop a UCCR strategy that responds to climate risks on critical urban systems; and (iv) identify the most feasible soft and hard infrastructure projects to build UCCR (December 2018).</p> <p>1.4 Revise and finalize UCCR planning studies based on review comments from quality assurance consultants and ADB project officers (December 2021).</p>			<p>Inputs</p> <p>ADB:</p> <p>Urban Climate Change Resilience Trust Fund under the Urban Financing Partnership Facility: \$15,000,000</p> <p>Subproject 1: \$3,950,000</p> <p>Subproject 2: \$4,985,000</p>

<p>Activities with Milestones</p> <p>1.5 Develop knowledge products, synthesizing lessons learned and good practices on UCCR planning studies (December 2021).</p> <p>2. Targeted cities network to share knowledge and build capacity through peer learning and joint training activities</p> <p>2.1 Prepare and lead implementation of a knowledge, networking, and capacity-building strategy and plan in consultation with ADB's operations departments and target DMCs (August 2015).</p> <p>2.2 Develop a knowledge product that shares the UCCRTF approach and experiences to measuring resilience and avoided loss (August 2018).</p> <p>2.3 Undertake a study of system failure—causes, associated environment degradation, and habitat loss and costs (March 2016).</p> <p>2.4 Develop knowledge products based on lessons emerging from cities and investment projects in different sectors and regions (December 2021).</p> <p>2.5 Provide capacity development to strengthen target DMCs' and development practitioners' capacity to apply best available UCCR knowledge to urban development through conferences, workshops, trainings, study visits, and city exchanges (December 2021).</p> <p>2.6 Exchange knowledge with existing and emerging UCCR related networks, institutions, and actors (ongoing).</p> <p>2.7 Establish an annual monitoring regime that collects and collates data from cities, pilots, projects, and knowledge activities; and support monitoring and evaluation activities (ongoing).</p> <p>2.8 Develop annual reports that measure progress against the overall baseline and in UCCRTF-supported cities (annual).</p> <p>3. Development of pilot activities and project development support</p> <p>3.1 Using criteria established by the UCCRTF Secretariat, screen and identify possible projects for support from the ADB project pipeline for pilot and project development assistance (August 2015).</p> <p>3.2 Provides support for pilot prefeasibility, and feasibility studies, as required, for identified projects (ongoing).</p> <p>3.3 Coordinate the implementation of pilot activities, including design, application, selection, supervision, and monitoring, in close coordination with ADB's operations departments (ongoing).</p> <p>3.4 Prepare review, and finalize project development and pilot activities reports based on comments from quality assurance consultants and ADB project officers (ongoing).</p> <p>3.5 Identify opportunities to scale up pilot activities with operations departments and resident missions (ongoing).</p> <p>3.6 Develop knowledge products synthesizing current practices, strengths and weaknesses, and lessons learned and good practices, on funded activities (December 2021).</p>	<p>Inputs</p> <p>Subproject 3:</p> <p>\$6,065,000</p> <p>Total:</p> <p>\$15,000,000</p>
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ADB = Asian Development Bank, DMC = developing member country, UCCR = urban climate change resilience, UCCRTF = Urban Climate Change Resilience Trust Fund.

Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item				Amount
Urban Climate Change Resilience Trust Fund ^a under the Urban Financing Partnership Facility				
	Subproject ^b			
	1	2	3	
1. Consultants				
a. Remuneration and per diem				
i. International consultants	2,345.0	2,835.0	2,880.0	8,060.0
ii. National consultants	955.0	865.0	700.0	2,520.0
b. International and local travel	330.0	370.0	355.0	1,055.0
c. Reports and communications	5.0	5.0	5.0	15.0
2. Equipment ^c	5.0	5.0	950.0	960.0
3. Workshop, training, seminars, and conferences ^d	80.0	400.0	50.0	530.0
4. Surveys, studies, ^e and pilot interventions	0.0	250.0	850.0	1,100.0
5. Miscellaneous administration and support costs	85.0	85.0	85.0	255.0
6. Contingencies	145.0	170.0	190.0	505.0
Total	3,950.0	4,985.0	6,065.0	15,000.0

^a Financing partners: the Rockefeller Foundation and the governments of the United Kingdom and the United States. Administered by the Asian Development Bank. All expenditures under the technical assistance will be in accordance with eligible and ineligible expenses outlined in the Urban Climate Change Resilience Trust Fund guidelines.

^b Implementation period for each of the Subproject is from 2015 to 2021.

^c Includes information technology equipment (computers and printers) and software. All equipment procured for pilot and project development in specific countries and cities will be turned over to the respective government partners at the end of each project.

^d Includes travel and per diem for workshop participants, travel of Asian Development Bank staff as resource persons, and costs for external resource persons for workshops and peer reviewers.

^e Includes publication and translation costs.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The implementation of the cluster regional capacity development technical assistance (TA) of the Asian Development Bank (ADB) will require (i) a core team of permanent staff who will oversee the running of the constituent subprojects, and (ii) staff with designated responsibility for the three subprojects. A range of consultancy inputs will be needed to supplement core staff inputs. This implies the retention of some international and national consultants in long-term support roles. Short-term consultancy inputs are also likely to be required for a range of technical tasks.

2. The subprojects will require the services of experts in urban climate change resilience (UCCR), urban planning, monitoring and evaluation, knowledge and communication, and project management. Detailed terms of reference, the precise extent of consultancy inputs, and consultant selection methods will be defined during subproject processing, in accordance with ADB procedures for cluster TA. Some of the key tasks that consultants will undertake under each subproject are outlined below.

3. Under each subproject, different methods of consultant selection will apply, depending on the size and nature of the contracts. Consultants may be engaged via consulting firm(s) or individually. The consultants will be engaged using procurement modalities: quality- and -cost-based selection using a technical–financial ratio of 90:10, quality-based selection, consultant qualification selection or fixed budget selection, as appropriate.

A. Subproject A: Integrated Urban Development Plans are Developed in Selected Developing Member Country Cities Incorporating Urban Climate Change Resilience Principles

4. **International and national** (firm and individual, urban planning, climate risk, socioeconomic experts, 134 international person-months and 140 national person-months). The experts will do the following:

- (i) Develop a detailed assessment scope, methodology, and outline of UCCR planning studies in consultation with ADB's operations departments.
- (ii) Consult ADB's operations departments and target developing member countries on city selection.
- (iii) Undertake an urban analysis, which (a) includes a review of current urban trends; and (b) identifies critical urban systems and current priorities, socioeconomic statistics, likely urban development scenarios, and existing plans for urban development in the short and long term.
- (iv) Review historical hazard profiles, develop scenarios of climate change variables, and provide detailed guidance on how climate (and sea level, if applicable) scenarios interact with urban development scenarios.
- (v) Engage with government and other relevant stakeholders as part of a multi-stakeholder vulnerability assessment.
- (vi) Through an iterative approach, develop a draft UCCR planning studies and action plan, including possible pilot projects.
- (vii) Identify and define possible resilience-building actions (including structural and nonstructural measures) that have emerged; comment on their likely feasibility and sustainability, cost and benefit, and potential sources of finance.
- (viii) Review and finalize the climate change resilience assessment in consultation with relevant local stakeholders (including government) and ADB project officers, and support the transition to implementation.

- (ix) Develop knowledge products, synthesizing lessons learned and good practices from UCCR planning.

B. Subproject B: Targeted Cities Network to Share Knowledge and Build Capacity through Peer Learning and Joint Training Activities

5. **International and national** (firm, knowledge management, communication, monitoring and evaluation experts, 162 international person-months and 124 national person-months). The experts will do the following:

- (i) Develop a knowledge, networking, and capacity-building plan for the TA, including identifying key UCCR knowledge gaps, and how the knowledge generated by the Urban Climate Change Resilience Trust Fund (UCCRTF) will be shared internally within ADB and externally to wider stakeholder groups.
- (ii) Develop and manage relationships with external peer learning networks—at country and regional levels—to ensure that UCCRTF cities are using best practices, and that UCCRTF experience and learning is being shared with existing networks.
- (iii) Identify capacity gaps and assist with the development of training inputs (technical and financial) and knowledge-sharing workshops that build capacity on UCCR with identified external audiences.
- (iv) Manage the production of a range of knowledge outputs to disseminate the learning and experiences emerging from the UCCRTF cities and investment projects, including (a) the UCCRTF approach and experiences with measuring resilience and avoided loss; and (b) a study of system failure—causes, associated environment degradation, and habitat loss and costs.
- (v) Work with ADB's operations departments to support peer learning on UCCR through the implementation of knowledge hubs and/or urban management partnerships, and develop lessons learned reports to share internally and externally.
- (vi) Organize and coordinate the participation of UCCRTF partners in panels and/or sessions at key urban and climate change conferences in the region.
- (vii) Arrange city exchanges and city twinning between UCCRTF cities with shared challenges.
- (viii) Manage relationships with ADB's Department of External Relations and Cities Development Initiative for Asia capacity development and communications officers.
- (ix) Establish effective communication through various channels, including the internet, publications, promotional material, and a newsletter; and disseminate to UCCRTF partners.
- (x) Design and implement a monitoring system process, which ensures that progress against indicators across all applications can be assessed at 6 monthly intervals.
- (xi) Work closely with external monitoring and evaluation consultants to scope, implement, and finalize annual monitoring and midterm evaluation reports.

C. Subproject C: Development of Pilot Activities and Project Development Support

6. **International and national** (firm, urban planning, climate change adaptation experts, 105 international person-months and 100 national person-months). The experts will do the following:

- (i) Use criteria established by the UCCRTF Secretariat to screen and identify possible projects for support from the ADB project pipeline for pilot and project development assistance, focusing on cities already selected or where UCCR action (planning or investment projects) is already initiated.
- (ii) Support the design, implementation, and management of a small grants program for UCCR pilot and demonstration activities to test and validate new and/or innovative approaches, strategies, technologies, and methodologies, on a small scale, with the intention of replicating and scaling up such successful innovative practices across the region. Pilot activities may benefit from being designed as hypothesis-driven structured experiments, with an impact evaluation component to test and compare effects on dependent variables of interest.
- (iii) Provide support to ADB's operations departments for prefeasibility and feasibility studies, as required, for identified projects.
- (iv) Prepare, review, and finalize project development and pilot activities reports based on comments from quality assurance consultants and ADB project officers.
- (v) Work with nongovernment organizations and community-based organizations to develop applications that meet the criteria for the UCCR pilot and demonstration activities.
- (vi) Support the review of application batches, and make recommendations on which applications should be considered for approval.
- (vii) Review draft reports in consultation with ADB project officers and provide quality assurance on project outputs.
- (viii) Identify opportunities to scale up pilot activities with ADB's operations departments and resident missions.
- (ix) Develop knowledge products, synthesizing current practices, strengths and weaknesses, and lessons learned and good practices, on funded pilot activities.