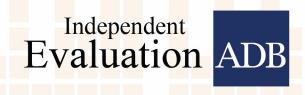
Thematic Evaluation

ADB's Support for Livable Cities, 2017-2024





Thematic Evaluation

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NOTE

In this report, "\$" refers to United States dollars.

Director General Director	Emmanuel Y. Jimenez, Independent Evaluation Department (IED) Nathan Subramaniam, Sector and Project Division, IED
Team leader	Sung S. Shin, Senior Evaluation Specialist, IED Srinivasan Palle Venkata, Senior Evaluation Specialist, IED (until May 2025)
Team members	Aldous Tirona, Senior Evaluation Officer, IED Alexander Wellsteed, Principal Evaluation Specialist, IED Arjun Guha, Evaluation Specialist, IED Christine Marvilla, Senior Evaluation Assistant, IED (until July 2025) Hans Woldring, Senior Evaluation Specialist, IED (until April 2025) Jerome Jovellanos, Associate Evaluation Officer, IED Jullie Ann Palomares, Senior Evaluation Assistant, IED Shimako Takahashi, Senior Evaluation Specialist, IED (until July 2025) Sonia Chand Sandhu, Principal Evaluation Specialist, IED Sónia Leonardo, Evaluation Specialist, IED

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Abbreviations

ADB – Asian Development Bank COVID-19 – coronavirus disease

CPS – country partnership strategy
CRF – corporate results framework
DMC – developing member country
DMF – design and monitoring framework

EBRD – European Bank for Reconstruction and Development

GHG – greenhouse gas

IED – Independent Evaluation Department

LGU – local government unit

MDB – multilateral development bank

NOM – new operating model
NSO – nonsovereign operations
NUA – national urban assessments
O&M – operation and maintenance

OMDP – Office of Markets Development and Public–Private Partnership

OP4 – operational priority 4

ORM – Office of the Risk Management
PPP – public–private partnership
PRC – People's Republic of China
PSO – private sector operations

PSOD – Private Sector Operations Department

TA – technical assistance
TOC – theory of change
UOP – urban operational plan

WUD – water and urban development

WUS – water and other urban infrastructure services

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Foreword

The Asia and the Pacific region is urbanizing rapidly and many urban areas face socioeconomic challenges, including inadequate infrastructure, urban poverty, pollution, and environmental and ecosystem degradation. The Asian Development Bank (ADB) has been supporting its developing member countries (DMCs) to put in place clean, inclusive, and resilient urban environments. This evaluation examines how well-positioned and responsive ADB is to deliver effective support for urban livability and resilience in Asia and the Pacific. It is based on a review of ADB projects from 2017 to 2024, which were categorized as contributing to livable cities.

ADB has progressively incorporated the livable city agenda into its urban operations. Its portfolio is aligned with the DMC needs and concentrates on strengthening infrastructure. However, more rigorous urban sector diagnostics are needed so ADB can better prioritize investments and prepare project pipelines. The evaluation found that while ADB's institutional arrangements for thematic and cross-sectoral operations are still evolving, the project results indicators were often not fully aligned with the country partnership strategy (CPS) and corporate results frameworks (CRF).

For ADB to elevate its cross-sectoral engagement, it must improve its staff skills, capacity, and incentives, while strengthening its engagement with various levels of government and stakeholders. ADB can also pursue opportunities to scale up its subnational engagements, including through targeted direct subnational lending to municipalities and capacity-building through technical assistance (TA).

The findings and recommendations of this evaluation can form a basis to guide ADB's future operations in strengthening ADB's support for livable cities.

Emmanuel Jimenez
Director General
Independent Evaluation

Executive Summary

Improving Urban Livability in Asia and the Pacific is an ADB Priority

The Asia and the Pacific region is urbanizing rapidly, with cities expected to comprise 55% of the region's population by 2030 and 66% by 2050. Asia has 20 of the world's 33 megacities. Cities contribute 80% of the region's gross domestic product (GDP). Urbanization brings economic opportunities, but it also strains resources and services. Many urban areas face socioeconomic challenges, including inadequate infrastructure, urban poverty, pollution, and environmental degradation. Informal settlements are common and usually feature insecure tenure and poor access to water and sanitation, and other services. Addressing the region's urban infrastructure shortfalls will require significant investment.

The Asian Development Bank (ADB) has supported its developing member countries (DMCs) to address their urban challenges by emphasizing clean, inclusive, and resilient urban environments. Livability was a focus area under ADB's Strategy 2020 and its Urban Operational Plan (UOP), 2012-2020, which aimed to reorient operations toward a more integrated approach to urban development. ADB's Strategy 2030 included an operational plan for one of its priorities (OP4), Making Cities More Livable, 2019–2024. Strategy 2030's midterm review in 2024 de-emphasized these operational plans, including that for OP4. Instead, it prioritized five focus areas relevant to urban livability: climate action, private sector development. regional cooperation and integration, digital transformation. and resilience and empowerment.

Although livable cities have been a clear priority for ADB, it has not developed a precise definition or measurement criteria for them. The OP4 operational plan considered livability

to be "the quality of life and community well-being, supported by strong governance systems and practices." A livable city is one that is sustainable, green, inclusive, healthy, safe, and resilient.

Evaluation Purpose and Scope

The evaluation examined how well positioned and responsive ADB has been in delivering effective support for urban livability and resilience in Asia and the Pacific. The findings from the evaluation will inform future ADB operations in support of livable cities. ADB projects from 2017–2024 that were categorized as contributing to livable cities were reviewed, although identifying an accurate portfolio was a challenge because of the lack of a precise definition and tagging methodology.

In the absence of a precise definition within ADB, the evaluation focused on ADB's five operational approaches to supporting livable institutional arrangements cities: (i) cross-sector and thematic approaches beyond traditional sector-based approach; (ii) supporting staff skills, capacity and incentives implementation of cross-sectoral approaches; (iii) engagement at different levels of government, improving their governance and institutional and financial capacities; (iv) engagement with nonsovereign operations (NSO); and (v) coordination with other stakeholders and partners.

ADB Strategy, Portfolio and Results Tracking

ADB has tried to incorporate the livable city agenda into its urban operations. Strategy 2020: UOP, 2012–2020; Strategy 2030; and OP4 all encouraged design and implementation approaches that would support the urban livability agenda. Since the launch of

OP4, Country Partnership Strategy (CPS) has placed greater emphasis on operations that support the sustainability of urban services.

According to the tagging of operations contributing to livable cities, ADB's portfolio during the evaluation period (2017-2024), amounted to a financial commitment of \$42.8 billion. Of this, the sovereign project portfolio was \$38.8 billion. The water and other urban infrastructure services (WUS) sector categorized 97% of its operations as contributing to livable cities. Other sectors contributing to livable cities were: transport (31%), energy (26%), and agriculture, food, nature, and rural development (20%). ADB's nonsovereign financial commitment was approximately \$4.0 billion during 2017-2024, the major sectors being energy (33%), finance (21%), WUS (18%), and transport (14%). ADB's related technical assistance (TA) operations amounted to \$3.3 billion and were concentrated in WUS, transport, energy, and public sector management.

The livable cities portfolio was generally aligned with developing member country needs but missed out on several key priorities. ADB's investments were generally aligned with country priorities and incorporated approaches that reflected the varying needs of DMCs. In the WUS sector, commitments were predominantly for water supply, sanitation, and sewerage; commitments for urban housing (2%) and informal settlements (1%) were minimal. Energy operations had limited engagement at the city level despite the significance of energy for urban livability. In ADB transport operations, 51% of the OP4-related commitments were for urban public transport and 17% for rail transport. The analysis of OP4-tagged projects for this evaluation revealed fewer health or education projects.

ADB's initiatives to encourage integrated urban development in its developing member countries, such as the national urban assessments, were not undertaken as widely as envisaged in ADB's Urban

Operational Plan, 2012–2020. Out of the 50 DMCs in the Asia Pacific region, national urban assessments (NUA) were prepared for 11 countries during 2012-2024, six of which were in ADB's Central and West Asia region. OP4 had three pillars, but targeted support for pillar 2 components (urban planning and financial sustainability of cities) was incorporated in 59% of OP4 projects during the evaluation period which was lower than that of pillar 1 of 87% (improve coverage, quality, efficiency, and reliability of services in urban area) and pillar 3 of 70% (improve urban environment, climate resilience, and disaster management of cities).

results indicators **Project** were not well-aligned with country partnership strategy or corporate results frameworks and lacked specificity. The project design and monitoring framework (DMF) indicators and the CPS results framework indicators used for OP4 interventions have evolved as ADB has improved the alignment of its operations with Strategy 2030 and with the operational priorities approved in 2019. However, the indicators did not facilitate a full assessment of ADB's OP4 engagement. Despite some efforts to integrate cross-sectoral approaches under OP4 projects, monitoring processes remained inadequate for validating whether desired livable city outcomes were being achieved. Output indicators were often generic, and planning-related indicators were not specific enough. DMFs did not include enough indicators related to financial sustainability.

Regarding alignment with the corporate results framework (CRF) 2019-2024, CPSs provided good coverage for air pollution, but the corresponding inclusion in project DMFs was low. In assessing the alignment with CRF 2025–2030, CPSs provided good coverage of the CRF indicator related to targeted numbers—people benefiting from improved infrastructure, financial, and economic services—but the coverage in projects was only medium.

Operational Approaches to Support Livable Cities

While ADB supported projects and programs aimed at making cities more livable were not based on a concrete definition of livability, they shared some key common attributes, such as the need for: cross-sectoral approaches, with different engagement levels government, direct financial support to cities. and broad stakeholder consultation.

ADB's institutional arrangements for cross-sectoral and thematic operations are evolving. ADB investments that designed to enhance city livability addressed multiple topics of the livable cities agenda, but cross-sector synergies were not fully captured. ADB's processes and expertise in supporting coordinated cross-sector interventions and activities by sovereign and nonsovereign interventions were not fully optimized. Some cross-sector benefits were achieved, but this was primarily through integrated approaches within sector-specific projects. TA helped with country diagnostics, sector assessments. policy development, NUA, green city action plans, integrated urban action plans, and livable city action plans, but these were seldom institutionalized. ADB's new operating model (MOM) could contribute to greater cross-sectoral working, but it is a work in progress.

Improving staff skills, capacity. incentives are critical in the implementation of cross-sectoral approaches. ADB has internal capacity gaps, particularly in the emerging areas critical for integrated urban development, such as climate resilience planning, affordable housing, municipal finance, and digital urban management. ADB's incentive structure and internal its organizational silos further constrain knowledge sharing across departments. An ADB staff survey found that only 26% of respondents from sector and thematic groups agreed or strongly agreed that ADB has adequate staff capacity and skills to deliver interventions to make cities more livable. Only

21% agreed or strongly agreed that they received adequate support and training to plan and implement the complex, multisectoral and thematic projects necessary for making cities more livable. The evaluation reviewed ADB project designs and found that 51% of ADB projects that planned to enhance the livability of cities over the evaluation period had design elements that required collaboration across ADB departments. However, only 26% of respondents agreed or strongly agreed that there was adequate coordination among sector groups, thematic groups, the private sector, and regional departments in the design and implementation of projects to improve urban livability. Incentives such as formal shared acknowledgement and credit for joint efforts between sector and thematic teams were not fully in place.

Engaging more intensely with different levels of government is essential for the livable cities' agenda. Although major infrastructure is often provided by national governments, municipalities must deliver the basic services and infrastructure in cities. When ADB engaged directly with efforts governments, its reform and investments were more in line with local needs.

ADB financing for livable cities generally took the form of lending to the central government with a sovereign guarantee. Direct subsovereign lending was not prioritized, and ADB's efforts did not adequately target in developing credit or lending relationships with individual cities. While using the central government as a conduit for livable city financing initiatives reduces risk for ADB, this approach means that urban development priorities are often driven by national, rather than local priorities. This can lead to a misalignment between project designs and local on-the-ground needs.

Lending to local government units (LGUs) without the need for counter-quarantees requires upstream work to prepare the environment for such financing. Support for LGUs to build capacity, reduce overreliance on fiscal transfers, assess and collect revenues, and develop bankable projects is needed. ADB has not accomplished as much in this area as other multilateral development banks (MDBs). The European Bank for Reconstruction and Development (EBRD), for example, has supported LGUs to develop lending projects and public-private partnership (PPP) projects, while the International Finance Corporation has supported municipal lending through bond issuances.

There is limited evidence of interaction between ADB's sovereign and NSO or of integrated approaches. ADB's lack of NSO subsovereign operations has meant it has not engaged with private sector investors in urban services to the extent envisaged under OP4.

Stakeholder coordination and engagement were modest at the cross-sectoral level. ADB's OP4 investments were largely aligned with the needs of DMC governments and the operations of other development partners. However, stakeholder engagement practices varied across the portfolio and with limited mechanisms for meaningful involvement of vulnerable groups, civil society organizations, or local enterprises in project design and implementation. **Projects** with participatory mechanisms tended to be more aligned with community priorities and sustained post-implementation outcomes.

Stakeholder partner coordination was mainly through cofinancing arrangements with other MDB. bilateral donors, and commercial banks. However, such collaboration was confined within sectoral boundaries and was not oriented towards achieving holistic livable city through complementary outcomes cross-sectoral interventions. The evaluation found some evidence, mainly in Central Asia, between ADB of discussions and its partners development to explore complementary projects or activities that spanned different sectors to achieve livable cities objectives.

Recommendations

- 1. Undertake stronger diagnostics to clearly prioritize the aspect of livability relevant to the local context to facilitate more targeted and measurable interventions, and combine infrastructure investments with advisory and capacity support at national and subnational levels. Such support should take the form of comprehensive urban assessments planning, and capital investment programming.
- 2. Strengthen ADB's monitoring and evaluation systems to track project outcomes that promote livability, closely align project DMF with CPS results frameworks, and support DMCs to build and strengthen their own monitoring, reporting, and verification systems.
- Tailor ADB's 3. organizational arrangements to support the attainment of cross-sectoral priorities and institutionalize incentive mechanisms to facilitate credit sharing, establish interdepartmental project teams, enhance staff capacities through internal capacity development programs and partnership mechanisms, improve learning approaches, and strategically realign the design and deployment of TA.
- 4. Scale up ADB's engagement with subnational entities through direct lending to LGUs in local currencies, underpinned by robust upstream TA focused on strengthening municipal governance, accelerating regulatory reform, enhancing financial management, and adopting a differentiated approach for each country.

Linkage Between Findings and Recommendations

Recommendations

Supporting Findings

- 1. Undertake stronger diagnostics to clearly prioritize the aspect of livability relevant to the local context to facilitate more targeted and measurable interventions, combine infrastructure investments with advisory and capacity support at national and subnational levels, supported by strong diagnostics. Such support should take the form of comprehensive urban assessments and planning, and capital investment programming.
- (i) Although Country Partnership Strategy's (CPS) generally supported making cities more livable, rigorous urban sector diagnostics such as the national urban assessments (NUAs) envisaged in the Urban Operational Plan (UOP), 2012–2020 have not been fully institutionalized. The lack of appropriate institutionalized urban analysis made it difficult for ADB to identify critical issues, prioritize investments, and prepare project pipelines (para. 25).
- (ii) Support for pillar 2 components, urban planning and financial sustainability of cities, represented 59% of ADB's livable cities project portfolio in 2017–2024. This compares with 87% for pillar 1 and 70% for pillar 3 (para. 47). ADB's technical Assistance (TA) operations have supported NUAs, green city action plans, integrated urban action plans, and livable city action plans. They have also financed urban profiling and analysis to help identify priority investments and have provided knowledge and capacity support. However, further upstream collaboration among ADB sector groups is needed (para. 68). At the operations level (both in project teams and in country offices), the approach is still focused on input–output-oriented processes. ADB has not devoted enough attention to livability outcomes (para. 80).
- (iii) ADB's support for livable cities has been unable to maximize the benefits of incorporating cross-sectoral approaches, supporting integrated urban planning, or leveraging sovereign operations to attract increased nonsovereign operations (NSO) financial resources. More capacity building and training is needed to strengthen ADB's cross-sectoral expertise, particularly in increasing awareness of the value addition of integrated urban approaches and skills (para. 113).
- 2. Strengthen ADB's monitoring and evaluation systems to track project outcomes that promote livability, closely align project DMF with CPS results frameworks, and provide clear guidance for proper tagging at the project level and support developing member countries (DMCs) to build and strengthen their own monitoring, reporting, and verification systems.
- (i) CPSs largely internalized the livable cities objectives in their results frameworks and were aligned with the corporate results framework (CRF), 2019–2024. However, there is scope to improve the alignment of project DMF indicators with the operational priority 4 (OP4) plan. Overall, the indicators in the CPSs and DMFs provided broad coverage but did not allow for a full assessment of OP4 engagement (para. 55).
- (ii) While most projects had indicators to monitor access to services in terms of the number of beneficiaries, indicators measuring the improvements in institutional strengthening or efficiency in service provision were less common. Indicators monitoring pillar 3 outcomes were also limited to CO₂ emission reductions, and areas or people affected by floods. Indicators to measure outcomes, such as the extent of access to green spaces, jobs created in green industries, and recycling rates of waste, were lacking (para. 57).
- (iii) Despite some efforts to integrate cross-sectoral approaches in ADB's projects that aim to enhance the livability of cities, ADB's monitoring processes remain inadequate for validating whether or not desired livable city outcomes are being achieved. The generic output indicators often fail to capture long-term impacts, planning-related indicators lack specificity, and the validation of financial sustainability outcomes was limited (para. 61).

Recommendations

Supporting Findings

- Tailor ADB's organizational support the arrangements to attainment cross-sectoral priorities and institutionalize incentive mechanisms to facilitate credit sharing, establish interdepartmental project teams, enhance staff capacities through internal capacity development programs and partnership mechanisms, improve learning approaches, and strategically the realigning design and deployment of technical assistance (TA).
- ADB's capacity building and training opportunities appear to have been limited to supporting staff to acquire the knowledge and skills needed for cross-sectoral thinking and promoting the use of modern technology to enhance efficiency and effectiveness throughout the project cycle to achieve the desired livable city outcomes. However, only 21% of the respondents to the staff survey agreed or strongly agreed that they had received adequate support and training to plan and implement complex, multisectoral or thematic OP4 projects (para. 77). There are capacity gaps within ADB, particularly in emerging areas critical for integrated urban development, such as capital investment and climate resilience planning, affordable housing, municipal finance and digital urban management (para. 112).
- (ii) At the operations level (both in project teams and in country offices), the approach is still focused on input-output-oriented processes. ADB has not devoted enough attention to livability outcomes. Only 21% of the staff responded that they agreed or strongly agreed that ADB has adequate organizational arrangements and provides incentives for crosssectoral/thematic collaboration (para. 80).
- (iii) Only 26% of respondents to the survey agreed or strongly agreed that there was adequate coordination among sector groups, thematic groups, the Private Sector Operations Department (PSOD), and regional departments in the design and implementation of ADB's urban projects (para. 84).
- 4. Scale up ADB's engagement with subnational entities through direct lending to local government units (LGUs) in local currencies, underpinned by robust upstream TA focused on strengthening municipal governance, accelerating regulatory reform, enhancing financial adopting a management, and differentiated approach for each country.
- ADB has not developed substantive credit or lending relationships with individual cities and other LGUs. Its sovereign operations provide only limited capacity development TA support to help LGUs to plan, structure, and manage local infrastructure projects (para. 91).
- (ii) ADB financing of subnational government projects has been undertaken largely on a sovereign basis; the subsovereign lending business line through ADB's NSO has fallen behind other multilateral development banks (MDBs) starting with upstream activities that support subsovereign lending to livable cities (para. 94). For ADB to provide broader and more effective support under its livable cities agenda at the LGUs level, it needs to engage in policy reform through policy-based lending, sector development programs, financial intermediation loans, or subordinated activities within TA under the One ADB approach (para. 93).
- (iii) While subnational commitments represented only 6% of ADB's NSO volume in 2017-2024, the European Bank for Reconstruction and Development (EBRD) allocated 18%-24% of its infrastructure sector commitments to subnational projects over 2019-2023. With only two transactions on record in the ADB NSO portfolio classified as directly livable related to cities, ADB has fallen behind other MDB on upstream activities that support subsovereign lending to livable cities (para. 97, Box 5).

Context of the Evaluation

A. External Context and Urbanization Challenges

- 1. The Asia and the Pacific region is urbanizing rapidly, with cities expected to contain 55% of the region's population by 2030 and 66% by 2050. The region includes some of the most densely populated cities in the world, the fragile urban areas of the small island developing states of the Pacific, and many cities located in coastal areas. Asia has 20 of the world's 33 megacities (with a population of 10 million or more). Asian cities contribute 80% of the region's gross domestic product (GDP). Increasing urbanization not only presents opportunities for growth and innovation, but also huge demands for service provision.
- 2. Unplanned urbanization increases the pressure on already deficient services, exacerbating poverty, inequalities, and environmental degradation. Some 50% or more of the region's urban population lives in informal settlements without secure tenure or adequate access to municipal services. ⁴ Tackling urban poverty and inequality requires increasing job opportunities, undertaking more inclusive urban planning, and extending infrastructure and services to underserved communities. Access to clean drinking water and sanitation is poor in many cities. Fecal sludge management and sewage treatment are minimal, and only a fraction of the solid waste generated is collected and disposed of in sanitary landfill sites. The cities discharged 80% of their wastewater into water bodies without primary treatment..
- 3. Increasing urbanization and the limited resources available to city governments have led to a lack of investment in basic municipal services that has exacerbated environmental pollution and degraded the land, air, and seas. Air pollution is a leading contributor to disease and death in urban areas. Cities are vulnerable to climate change and natural hazards, including pandemics, such as coronavirus disease (COVID-19). These mostly affect vulnerable people, especially those living in informal settlements, many of which are located in fragile environmental areas along shorelines and major river basins.
- 4. Governments face the need to rehabilitate existing physical and social infrastructure, invest in new infrastructure, tackle poverty, promote jobs, reduce carbon emissions, expand public transport, and improve the natural environment. Planning and monitoring urban development need to be more rigorous, and local staff capacities require strengthening. Furthermore, government commitment to and action on policy and regulatory reform, community participation and engagement, and local resource generation are needed to make cities more livable.
- 5. Despite increasing decentralization, governments of cities and urban regions often have weak institutional and management structures and lack capacity. Overlapping responsibilities and jurisdiction between national and local government and a lack of coordination among urban service providers often lead to duplication of efforts or no action at all. Low tax and revenue collection limit the income of city governments. These constraints are exacerbated by a lack of

¹ UN. 2019. World Urbanization Prospects. The 2018 Revision.

² UN. 2018. World Urbanization Prospects 2018 Highlights.

³ Urbanization trends in Asia and the Pacific | ESCAP.

⁴ Habitat for Humanity. 2019. Issue Brief: Slum Upgrading & Land.

engagement by the private sector, civil society, and local governments. Weak urban planning and enforcement often result in unregulated and unplanned growth. In the absence of comprehensive capital investment plans, urban investments are seldom related to cities' structure or land use plans and often lead to inefficient resource allocations that do not meet the needs or priorities of the population or businesses.

6. Development partners, including the Asian Development Bank (ADB), have supported national, regional, and municipal governments to prepare urban policies and planning frameworks, enhance governance, improve informal settlements, promote social equity, and strengthen data collection and management. Clean air and water, which are regional public goods, also require coordination across administrative boundaries, while effective waste management needs inter-municipal cooperation.

B. Evaluation Purpose, Scope and Methodology

- 7. ADB does not have a unified or well understood definition of what a livable city is. Its Urban Operational Plan (UOP), 2012–2020, targets support in developing cities that are competitive, socially inclusive, and environmentally attractive. It pursued a "3Es" approach: economy, equity, and the environment. ADB's operational priority 4 (OP4) of Strategy 2030 considered livability to be "the quality of life and community well-being, supported by strong governance systems and practices." ADB's Strategy 2030 urban sector directional guide defined a livable city as one that is sustainable, green, inclusive, healthy, safe, and resilient.⁶
- 8. The evaluation reviewed projects in the ADB portfolio from 2017–2024 that were tagged as contributing to OP4. However, not all of these projects were directly relevant to livable cities. For example, a project in Viet Nam included as one of its outcomes "urban infrastructure assets established or improved" although the project site was described as "predominantly salt fields which are highly modified." Similarly, another in the Philippines was tagged OP4 because "a renewable energy project with a total capacity of 300 MW is considered as an urban infrastructure asset." However, the initial environmental examination indicated the "project location in the rural and scenic barangays of Bulawen and Salaza in the municipality of Palauig, Zambales."
- 9. Because of the lack of a precise definition of a livable city, Chapter 3 examines five common approaches how ADB has supported livability: (i) ADB's institutional arrangements for cross-sector and thematic approaches beyond a traditional sector-based approach; (ii) supporting staff skills, capacity, and incentives for the implementation of cross-sectoral approaches; (iii) ADB's engagement at different levels of government, improving governance and institutional and financial capacities; (iv) ADB's nonsovereign operations (NSO) subnational engagement; and (v) ADB's stakeholder partner coordination.
- 10. The evaluation's overarching question was: how well positioned and responsive is ADB in delivering effective support for improving urban livability and resilience in Asia and the Pacific? Answering this, the evaluation addressed three subsidiary questions. First, how well were ADB's operational plans and guidance aligned with developing member country (DMC) priorities, and to what extent was the design of country partnership strategies (CPS) influenced by this guidance and the underlying theory of change (TOC)? Chapter 2 examines how support for livable cities

⁷ ADB. 2022. Report and Recommendation of the President to the Board of Directors: Proposed Loan and Administration of Grant BIM Wind Power Joint Stock Company AC Energy Wind Power Project (Viet Nam).

⁵ ADB. 2019. Operational Plan for Strategy 2030 Operational Priority 4: Making Cities More Livable, 2019–2024.

⁶ ADB. 2022. Strategy 2030 Urban Sector Directional Guide.

⁸ ADB. 2022. Report and Recommendation of the President to the Board of Directors: Proposed Loan and Partial Credit Guarantee to ACEN Corporation ACEN Sustainability-Linked Facility (Philippines).

⁹ The theory of change highlights links between the expected outputs and outcomes (Appendix 1).

was reflected in ADB's corporate and CPS and in its investment portfolio: how well the ADB's operational plans and guidance were aligned with DMC priorities; and the adequacy and quality of indicators used to measure, monitor, and track progress in achieving the objectives of livable cities.

- Second, how internally and externally coherent were ADB's interventions? Internal 11. coherence refers to cross-sectoral and thematic contributions and synergies within ADB and is discussed in Chapter 3. External coherence concerns complementarity with activities by DMC national and subnational governments and other development partners and is also discussed in Chapter 3. This chapter suggests ways in which the approach and design of projects could be improved in future interventions by ADB, especially relating to the use of integrated, cross-sectoral approaches. The evaluation focused on the water and other urban infrastructure services (WUS), transport, and energy sectors. Other sectors and thematic areas listed in the OP4 operational plan were also considered. In particular, the evaluation assessed the extent to which OP4 was operationalized.
- 12. Third, how well organized is ADB to deliver livable-city-related operations, and to what extent were the project design and monitoring framework (DMF) indicators and CPS results frameworks capable of tracking progress toward making cities livable and resilient? This was addressed throughout the report in Chapters 2 and 3. Chapter 2 examines the adequacy and quality of the indicators used to measure, monitor, and track progress in achieving the objectives of livable cities. Chapter 3 assesses ADB's institutional arrangements and staff skills, capacity, and incentives for collaboration. Chapter 4 summarizes the findings of the evaluation and lessons identified to support future ADB operations aimed at improving urban livability.
- 13. The evaluation includes: (i) a review of the OP4 plan, its midterm review, and that of Strategy 2030; (ii) a review of background papers on urbanization, urban service provision and urban development; (iii) portfolio analysis of ADB projects identified as contributing to livable cities. i.e., those tagged as OP4 interventions by the Strategy, Policy, and Partnerships Department; 10 (iv) country case studies of Bangladesh, the People's Republic of China (PRC), the Philippines. Tonga and Uzbekistan, which included field visits, and interviews with government officials, private sector clients, ADB staff, and development partners; and (v) an institutional assessment of ADB's staffing and organizational arrangements and a staff survey (Linked document).

¹⁰ Projects tagged by SPD as a livable cities project, operational priority 4 (OP4), included any project classified as water and other urban infrastructure and services (WUS), or transport sector projects with urban public transport subsector or urban roads and traffic management as subsectors; or projects classified as "high" for urban under location impact.

CHAPTER 2

ADB Livable Cities Strategy, Portfolio, and Results Tracking

14. ADB's rationale for making cities more livable in the Asia and the Pacific region can be found in its corporate and country strategies. This chapter assesses the scope and relevance of those strategies and how they were represented in ADB's operations portfolio. The evaluation addressed the evolution of ADB's approach and whether project results indicators were aligned with its CPS and corporate results frameworks (CRF). The chapter examined how well-positioned and responsive ADB is in delivering effective support to improve urban livability and resilience.

A. Strategy

1. ADB's Evolving Strategic Approach to the Livable Cities Agenda

- 15. ADB's UOP, 2012–2020, aimed to promote livable cities that are competitive, socially inclusive, and environmentally attractive. The UOP also emphasized the need for an integrated approach to urban investment operations to achieve systemic benefits and improve the quality of life in urban regions, and the importance of national and city-region strategic assessments. The UOP intended to provide an urban context for the implementation of ADB's Energy Policy, Sustainable Transport Initiative, and Water Operational Plan. This implied support for energy-efficient, high-density development within urban corridors and better urban planning. These efforts were to be undertaken through technical assistance (TA), which would lead to national urban assessments (NUAs) that focused on the structure of urban governance, urbanization trends, infrastructure planning, and financing systems. The city-region assessments would concentrate on planning and its resulting investment and identifying priority projects.
- 16. ADB's operational plan for OP4 of Strategy 2030 was adopted in 2019 with the aim of providing a cross-sector and thematic platform for urban development interventions (footnote 5). It recognized the need for an integrated and holistic planning approach to the provision of infrastructure and services and other public goods to make cities more livable. This was based on economic competitiveness, environmentally sustainable growth, social and financial inclusion, and resilience. The plan had three pillars. Pillar 1 focused on improving the coverage, quality, efficiency, and reliability of services in urban areas. It envisaged more energy-efficient, genderresponsive, inclusive, and sustainable services by improving staff capacities and promoting highlevel technologies. Pillar 2 addressed the need to strengthen urban planning and the financial sustainability of cities by promoting inclusive and participatory processes and supporting the more efficient use of financial resources. Pillar 3 aimed to improve the urban environment, climate resilience, and disaster risk management, including increasing resources and building capacity. Pillar 2 interventions were critical to achieving the outcomes and outputs under pillars 1 and 3. since enhanced financial sustainability and urban planning are needed to improve livability and encourage further private sector participation in infrastructure provision and operation.

To support the strategic vision of OP4, ADB issued a guidance note in December 2020 17. that included short- and medium-term actions post-COVID-19. These covered social protection measures for the most vulnerable groups in cities, effective use of technologies and digital solutions to improve urban infrastructure and services, and strategic urban planning. The lessons from COVID-19 were incorporated into the note, which had a focus on healthy and environmentally sustainable cities and building resilience. To complement the operational plans that would translate Strategy 2030 and its operational priorities into action. ADB prepared sector directional guides for education, energy, finance, health, transport, urban, and water. 12 The urban sector directional guide included seven guiding principles for urban sector operations (Table 1).

Table 1: Urban Sector Directional Guide: Seven Guiding Principles

- 1. Address urban development complexities by designing projects that incorporate multisectoral and cross-thematic benefits
- 2. Pursue pro-poor, inclusive, gender-responsive, and participatory approaches
- 3. Foster the competitiveness of cities for economic growth and job creation
- 4. Adopt efficient technologies and digital solutions
- 5. Focus on environmental sustainability, low-carbon development, and climate and disaster resilience
- 6. Enable public-private partnerships (PPP) and private sector participation to enhance synergies with sovereign operations
- 7. Improve governance and institutional capacities of cities

Source: Strategy 2030 Urban Sector Directional Guide.

- 18. The midterm review of Strategy 2030 in August 2024 recommended that the operational priorities be de-emphasized in favor of more direct reporting on development results linked to the Sustainable Development Goals. The focus was to be on five strategic areas relevant to urban livability: (i) climate action, (ii) private sector development, (iii) regional cooperation and integration, (iv) digital transformation and resilience, and (v) empowerment. The midterm review concluded that, while the seven operational priorities provided flexibility, they were unable to provide an adequate ADB-wide framework to guide decision-making on trade-offs, competing priorities, and the allocation of scarce human and financial resources. For the sector groups to support the five focus areas in a way that is relevant and aligned with ADB's strategic focus areas and the CRF, consideration needs to be given to providing guidance not only at the sector group level but also by providing a separate framework for making cities more livable. The framework needs to be capable of tracking multi-sectoral and cross-thematic efforts.
- 19. The midterm review's five strategic areas were relevant to ADB's urban interventions. In 2023, cities produced 60%-70% of global greenhouse gas (GHG) emissions, more than 41% of which were emitted in ADB DMCs. 13 Hence, cities are best placed to implement emission reduction strategies. The vulnerability of cities to the impacts of climate change means that appropriate measures for adaptation, mitigation, and resilience building in urban areas will affect many people. Private sector engagement in cities is the engine of economic growth, increasing employment opportunities and enhancing cities' competitiveness. In addition to infrastructure financing, the private sector brings the advanced technology and innovation needed to support more sustainable urbanization. Digital technologies, such as devices, sensors, and mobile applications, allow for the application of data-driven solutions in traffic management, waste management, efficient use of energy, and scheduling of public transportation.

¹¹ ADB. 2020. Guidance Note. COVID-19 and Livable Cities in Asia and the Pacific.

¹² ADB. 2018. Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific.

¹³ 2025, European Commission. GHG Emissions of All World Countries 2024 Report.

- 20. Under Strategy 2030, integrated approaches to support cities and activities to achieve green, competitive, inclusive, and resilient cities were emphasized. Similarly, the sustainable transport initiative operational plan promoted equity and supported affordable and efficient operations, competitive economies, balanced regional development, and GHG emissions reduction. ADB's environmental operational plan promoted sustainable infrastructure, investment in natural capital, strengthening environmental governance and management capacity, and responding to climate change. ADB's operations focusing on urban resilience and low carbon development in urban areas were also guided by the Climate Change Action Plan, 2023–2030. Under ADB's new CRF (2025–2030), climate action is one of the five strategic focus areas. The framework emphasizes systemic urban resilience—physical, ecological, social, and financial. This requires adopting a holistic approach to climate mitigation and building urban resilience in preparing future urban development project pipelines.
- 21. The evaluation focused on key aspects of livable city interventions, including the use of cross-sectoral integrated approaches and working with different levels of government and stakeholders. ¹⁴ These were to improve governance and provide financial and institutional strengthening to enable private sector finance to be mobilized through public—private partnerships (PPPs) and other means. This approach was adopted because most of the portfolios examined by the evaluation are ongoing, and it would have been premature to base the evaluation on the achievement of livable city outcomes. Furthermore, the definition of livable cities has changed over the years.

2. Livability Discussion in ADB Country Partnership Strategies

- 22. A comprehensive review of 24 CPSs showed a marked improvement in the integration of livable cities objectives after the adoption of the OP4 operational plan in 2019. Since then, CPSs have been more strongly aligned with the three OP4 pillars, particularly in addressing sustainable urban service delivery, climate resilience, and integrated urban planning. Most CPSs now address the need for improved coverage, quality, efficiency, and reliability of urban services in the WUS, transport, and energy sectors. For example, the Nepal CPS, 2020–2024, targeted enhanced service delivery in the Kathmandu Valley and other municipalities, while the Bangladesh CPS, 2021–2025, emphasized climate-resilient infrastructure to make cities more livable. In Bhutan, ADB's approach combined long-term financing for physical investments with capacity development to promote reliable, green, and efficient public services, with a focus on climate and disaster resilience. These CPSs demonstrated an increasing recognition among DMCs of the importance of integrated, multisectoral approaches to urban development. Several CPSs supported resilient urban clusters and prioritized multi-sector investments to address poverty and inequality.
- 23. While post-OP4 CPSs increased their emphasis on the reliability and sustainability of urban services, the focus on quality and affordability remained relatively low. Among the OP4-tagged projects analyzed in this evaluation, coverage of health and education sectors within the urban context was low, and operations in the agriculture, food, nature, and rural development sectors were seldom linked to urban livability, except in PRC. Although CPSs frequently included output indicators—such as the number of water and sanitation connections, length of new roads, or renewable energy capacity—there was less emphasis on intermediate outcomes, such as service reliability, affordability, and the financial sustainability of service providers. Less than a

¹⁴ The term "stakeholders" includes government agencies at all levels (national, provincial, and municipal), civil society, private sector partners, civil society, NGOs, local community organizations, and members of the general public with an interest in or who are affected by the decisions, activities, or outcomes of a project, business, or institution.

third of CPSs specified such outcome-oriented indicators. This constrained countries' ability to track progress toward livable and resilient urban environments. There was also limited evidence of systematic support for financial sustainability, integrated planning, or digital innovation in urban management, with these aspects appearing only in some recent CPSs.

- CPSs that have achieved some success in operationalizing livability objectives often did 24. so by embedding capacity building, governance reforms, and knowledge solutions in urban strategies. For example, the Uzbekistan CPS, 2019–2023, supported digital tools for improved urban planning and service delivery, while the India CPS, 2018-2022, promoted analysis and pilots for climate-proofed urban planning and green infrastructure. The Georgia CPS, 2024–2028, prioritized integrated urban cluster development under which transport corridors became economic corridors, and climate and disaster risk considerations were mainstreamed. These approaches were strengthened by measures to enhance institutional capacity, promote private sector participation, and foster "One ADB" collaboration across sovereign and NSO. However, the translation of TA and analysis, such as NUAs and green city action plans, into lending operations was inconsistent and often was hindered by limited government ownership and insufficient cross-sectoral coordination within ADB.
- 25. Although CPSs generally supported making cities more livable, rigorous urban sector diagnostics, such as the NUAs envisaged in the UOP, 2012-2020, have not been fully institutionalized. The lack of appropriate institutionalized urban analysis made it difficult for ADB to identify critical issues, prioritize investments, and prepare project pipelines. Sound upstream urban diagnostics, aligned with downstream project and TA pipelines, are essential for understanding national and local circumstances and identifying critical issues. Such diagnostics would support subsequent projects to address the key constraints and the capacity and institutional requirements needed for effective project implementation.
- Out of the 50 DMCs in the Asia Pacific region, ADB has prepared NUA for 11 countries during 2012 to 2024, including the Philippines (2012), Viet Nam (2013), Sri Lanka (2013), Mongolia (2014), Pakistan (2014 and 2024), Georgia (2015), Azerbaijan (2016), Kazakhstan (2017-2018), Armenia (2019), Uzbekistan (2021) and Tajikistan (2024) to feed into the respective CPSs. Other countries prepared a sector assessment and strategy for the CPS. The upstream diagnostics are important for the livable cities' agenda because of the still evolving understanding of its cross-sectoral nature and how it applies to the specific urban context.

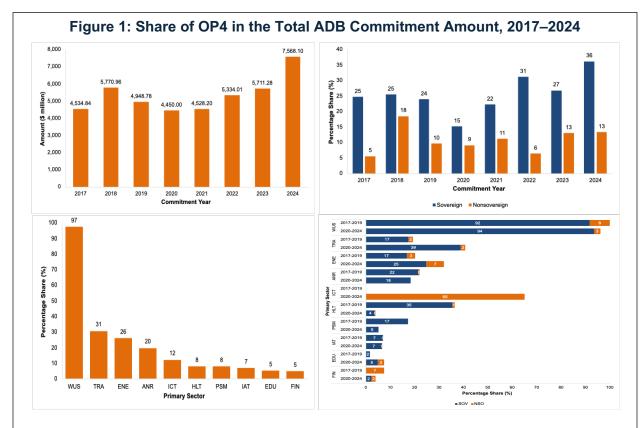
B. **Portfolio**

27. The amount of ADB's OP4 portfolio, a marker for its support for enhancing the livability of cities, has increased since the adoption of the operational plan in 2019. The OP4 portfolio focused largely on sovereign operations, with NSO operations accounting for only 10% of the portfolio.

1. **Trends in Portfolio Commitments**

28. The ADB portfolio relating to livable cities from 2017 to 2024 represented a financial commitment of \$42.8 billion. The sovereign project portfolio comprised \$38.8 billion and NSO \$4.0 billion. Since 2020, the share of OP4 projects in total ADB financing commitments has risen, underscoring the operational plan's potential influence in reprioritizing urban investments and reversing the decline seen in earlier years. The OP4 share of ADB's sovereign financial commitments decreased from about 25% in 2017 to 15% in 2020 but increased to 36% in 2024 (Figure 1). Of the sovereign project portfolio, the WUS sector categorized 97% of its operations as contributing to livable cities. Other sectors that contributed were: transport (31% of operations),

energy (26%), and agriculture, food, nature and rural development (20%). The OP4 share of NSO commitments decreased from 18% in 2018 to 6% in 2022 but increased to 13% in 2024. The list of OP4 project loans and grants (Linked document).



ANR = agriculture, natural resources and rural development, EDU = education, ENE = energy, FIN = finance, HLT = health, ICT = information and communication technology, IND = industry and trade, OP4 = operational priority number 4, PSM = public sector management, TRA = transport, WUS = water and other urban infrastructure and services.

Source: Strategy, Policy, and Partnerships Department (SPD) Loan and Grant Commitments Database, 2017-

2. Sector Distribution of Sovereign Operations

29. The sectoral distribution of the sovereign OP4 portfolio changed during the evaluation period. The combined total for the WUS and transport sectors increased from 54% to 67% of sovereign commitments after OP4's launch. During the period, ADB OP4-tagged investments in health and education were limited, despite their importance for urban livability. This is a critical gap, since these sectors contribute to improving human capital and thus enhance the quality of life. Integrating health and education outcomes into urban planning and governance reforms would help cities become more equitable, resilient, and sustainable. Embedding relevant indicators into policy reform programs, such as a decentralization of governance that empowers local governments, supports the move toward more livable cities. Providing TA to strengthen local government institutions is also important. For example, the Ulaanbaatar Air Quality Improvement Program integrated health outcomes by setting a target for air pollution reduction.

¹⁵ The projects outside the OP4 tagging that also contributed to ADB's livability agenda were beyond the scope of the portfolio analysis performed as part of this evaluation which may have understated the actual ADB contributions in enhancing the livability in cities. This underscores the importance of more robust tagging protocols to ensure future evaluations can present a complete picture of livability-related investments.

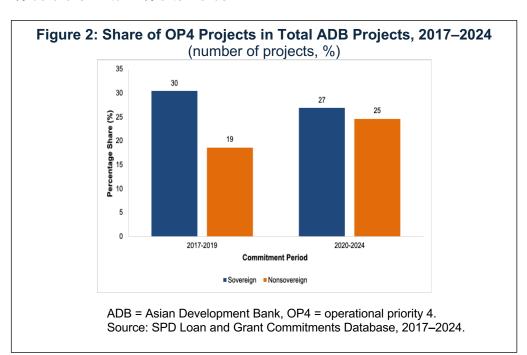
- Some targeted investments in health and education have improved urban livability. 30. The Urban Primary Health Care Services Delivery Project in Bangladesh and the Cygnus Affordable Hospitals Project in India increased access to affordable, quality care for underserved urban populations. Similarly, the Hubei Yichang Comprehensive Elderly Care Demonstration Project that achieved financial closure in 2024 introduced an innovative model that could be used to address the needs of aging urban populations. The Chongging Innovation and Human Capital Development Project and the Sustaining Access to and Quality of Education During Economic Difficulties Project have strengthened human capital and ensured the continuity of learning during crises. These projects demonstrated how targeted investments in health and education can reduce urban inequality, enhance resilience, and contribute to more inclusive and livable cities. Expanding such investments can help address the current sectoral imbalance and ensure that urban development is not only physically sustainable but also socially equitable.
- 31. The agriculture, natural resources, and rural development sector appeared in the PRC CPS, 2021–2025, which highlighted the importance of this sector by integrating nature-based solutions and circular economy principles into enhancing climate and disaster resilience. 16 It promoted low-carbon, climate-resilient infrastructure for more efficient urban services. Based on the PRC example, ADB's East Asia Department formed an Urban and Social Sectors Division, which enabled stronger cross-sector collaboration with integrated project designs supported by urban and social sector experts within a single division. It was the only regional department to take this approach.
- 32. ADB's livable cities portfolio focused mainly on subsectors within the WUS, energy, and transport sectors. Water and urban infrastructure commitments were predominantly for water supply, sanitation, and sewerage. Operations for urban housing (2% of the portfolio) and informal settlements (1%) were insignificant. However, after the launch of OP4, allocations to urban housing increased from 0.5% of the total to about 3%. Allocations for urban policy, institutional and capacity development increased from 6% before OP4 to 20% after it was launched.
- In the energy sector, 43% of commitments were for electricity transmission and distribution, 16% for energy efficiency and conservation, and 11% for renewable energy generation. Energy sectors in most DMCs are overseen by national ministries, and this impacts how urban-focused energy interventions are planned, resourced and implemented. This has implications for the extent to which ADB can contribute to urban-centric initiatives in the energy sector. Few commitments covered demand-side energy efficiency and smart energy infrastructure, despite their importance for sustainable urbanization. Energy strategies require the integration of renewable energy generated by solar and wind into the electricity grid; improvements to energy efficiency by adopting district heating and cooling systems through the use of renewable energy; and the construction of new buildings that are energy-efficient and conform to green building standards or upgrading existing buildings with more energy-efficient technologies. However, only a small percentage of ADB's energy commitments were for such green interventions, which it can support by enabling policy and regulatory frameworks and urban planning policies to promote green energy; encourage compact, mixed-use developments that reduce the need for long commutes; and increase the number of green spaces to reduce the urban heat island effects.

¹⁶ A circular economy is a system designed to minimize waste and maximize the use of resources by keeping products and materials in circulation for as long as possible through reuse, recycling, and repair.

- 34. ADB's energy operations have untapped potential to enhance internal synergies and support demand-side energy efficiency, smart infrastructure, and electric vehicle charging. Such initiatives can complement existing operations to expand power generation, transmission, and distribution in DMCs. However, ADB's financing and operational structure has provided only limited support for small and widely dispersed energy subprojects, especially for demand-side energy efficiency. ADB has supported smart energy infrastructure in Azerbaijan, India, the Marshall Islands, Nepal, Pakistan, and Sri Lanka through the inclusion of components in distribution operations. Electric vehicle charging has mostly been supported through private sector operations (PSO), transaction by transaction, along with market development in Thailand and Viet Nam, with limited involvement from the transport and energy sector groups. Energy projects tagged as OP4 varied among DMCs as ADB sought to satisfy countries' unique geographies and development priorities.
- 35. In the transport sector, 51% of OP4-related commitments were for urban public transport, and 17% for rail transport. The combination of urban public transport and rail transport rose to 70% after the launch of the OP4 operational plan, mainly because of the approval of a few very large projects. Transport policies and institutional development received only 1.5% of ADB's total commitments for OP4-related investment during the period (2.8% before the launch of OP4 and 0.6% after).

3. **Nonsovereign Operations**

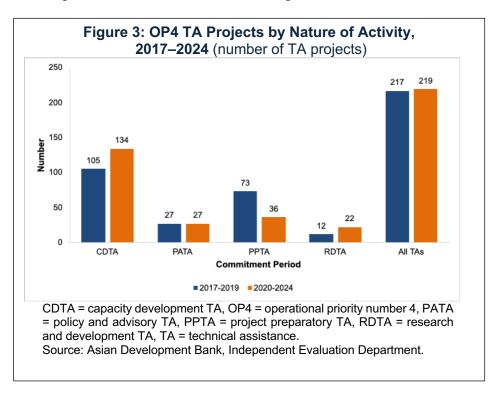
36. The operational plan envisaged greater private sector participation through NSO investments and advisory services that would improve the financial sustainability of cities. However, the percentage of NSOs in total OP4 financing commitments fell from around 12% in the pre-OP4 period to 8% afterwards. Nevertheless, in terms of the number of projects, the percentage of NSO increased from about 15% before the launch of OP4 to about 25% afterwards. The percentage share of OP4 NSO in the total number of ADB NSO increased from 19% before OP4 to 25% afterwards (Figure 2). In terms of financing amounts, there was a small decrease from 12% before OP4 to 11% afterwards



37. NSO OP4 investments were predominantly in the infrastructure sectors; energy (33% of total ADB investments), followed by finance (21%), WUS (18%), and transport (14%), while other sectors made up the remaining 14%.

4. **Technical Assistance and Capacity Building**

38. Technical assistance (TA) remains a critical enabler for OP4 operations, with ADB supporting project preparation, capacity development, and policy advisory work through TA. The number of TA projects did not increase significantly post-OP4 (Figure 3), suggesting this is an area that requires further strengthening. The concentration of TA in WUS, transport, energy, and public sector management mirrors the main loan and grant commitments of ADB.



Other international financial institutions play a crucial role in supporting urban governance in Asia and the Pacific by providing TA, capacity building, and financial support. The World Bank Group, and United Nations (UN) agencies, including UN-Habitat, have programs to strengthen municipal finance, improve urban planning, and promote sustainable development. They also facilitate knowledge sharing and best practice exchanges between cities globally. The World Bank's support for the Tamil Nadu Urban Development Project in India strengthened municipal finances and improved urban services through performance-based grants and capacity building. In Nepal, the World Bank's Urban Governance and Infrastructure Project supported strengthening municipal capacities and improving urban infrastructure in many cities. These projects have enhanced local government capabilities, strengthened service delivery, and promoted more transparent and accountable governance practices.¹⁷

¹⁷ World Bank. 2020. World Bank's \$150 Million Urban Governance and Infrastructure Project to Support Federalism and Improved Service Delivery in Nepal's Secondary Cities.

5. ADB Portfolio and the Operational Priority 4 Pillars

40. To determine whether the specific pillars were reflected in a project design, the evaluation identified the percentage share of total projects tagged according to the OP4 pillars in making cities livable, where the project designs could include one or several pillars. Pillar 1 operations (improving coverage, quality, efficiency, and reliability of services in urban areas) dominated, accounting for 82% of total OP4 projects during the pre-OP4 period (2017–2019) and 91% in the post-OP4 period (2020–2024). ¹⁸ The share of pillar 1 NSO increased from 10% to 22%. The percentage of pillar 2 (strengthening urban planning and the financial sustainability of cities) projects was not affected by the endorsement of the OP4 operational plan, remaining at about 59%. The share of NSO under pillar 2 operations was minimal in both periods. The percentage of pillar 3 projects (improving the urban environment, and climate and disaster resilience) increased from 66% in 2017-2019 to 71% in 2020-2024. Both sovereign and nonsovereign pillar 3 operations increased gradually.



ADB increased its investment in urban services related to pillar 1 by supporting government priorities within national development plans, urban sector strategies, and policies. The influence of the operational plan and its theory of change (TOC) was evident in the design of WUS projects that focused not only on developing water supply and sanitation infrastructure, but also on capacity development for operation and maintenance (O&M). The projects generally included components for strengthening the capacity of municipal governments in financial and project management and helping improve municipal finances by establishing tariff collection systems and O&M plans. Project designs also helped build community awareness and encourage behavioral change, a critical element for sanitation and solid waste management. These changes stemmed from the lessons learned from the weak performance of previous ADB projects.

¹⁸ Some of the projects that were approved in the post-OP4 period (2021–2024) were designed in the pre-OP4 period (2017-2019).

- 42. Overall, the ADB investments under pillar 1 were relevant, aligned with country priorities. and incorporated approaches that reflected the different requirements and needs of DMCs, policy and regulatory regimes, and governments' commitment to reform agendas. The design approaches were predominantly focused on water supply and sanitation, sewerage, solid waste management, and urban transport. Capacity development was provided to support the sustainable management, technical, and financial operation of the systems. Best practices and digital technologies were included in the design. Sector development projects and multi tranche financing facility tranches incorporated key reform agendas. More integrated multisectoral urban development approaches were approved during the 2020–2024 period. This integrated approach supported moves toward a circular economy and included urban-rural links and interdependencies. The approach encompassed the flow of resources, service delivery, and planning.
- 43. The change to more integrated urban service projects required urban development plans to be prepared but, although inter-dependences were recognized, more consideration needs to be given in future project designs to environmental improvement (pillar 3), how wastewater is used (treated or untreated), sewerage, solid waste management, and landfill use.
- 44. While project designs were appropriate, many projects were extended, given delays in effectiveness, procurement and contracting issues, and capacity constraints. To reduce such delays, project readiness filters were developed and applied to newly approved projects. Funding modalities, using project readiness financing and multitranche financing facilities, were used to prepare detailed designs and contract packages.
- The level of private sector engagement and use of PPPs varied significantly across DMCs. 45. In part, this reflected the focus of ADB urban service interventions and the policy and regulatory environment in individual DMCs. Private sector participation and PPPs for O&M services and solid waste management were supported in water supply interventions, but opportunities to expand private sector involvement exist, particularly for PPP's involving private finance. The One ADB team approach, supported by strong resident mission staff participation and engagement with the government, should facilitate further private sector expansion.
- Pillar 2 focused on integrated urban planning, capacity building, governance, risk management, technological integration, community engagement, and policy support. ADB operations under this pillar supported: (i) strengthening multisectoral planning to ensure effective implementation, (ii) facilitating additional financing through market mechanisms and PPPs, and (iii) enhancing local governance to advance the livable cities agenda. Effective interventions under pillar 2 require scalability, replicability, and community involvement from project inception. When these elements are in place, pillar 2 operations can serve as a catalyst for achieving the objectives of pillars 1 and 3.
- 47. ADB's support for building capacity in cities to undertake risk-informed urban planning and strengthen financial sustainability (which was part of the outcomes targeted under pillar 2) was lower than for other pillars. Support for pillar 2 components, urban planning, and financial sustainability of cities represented 59% of ADB's livable cities project portfolio from 2017 to 2024, compared to 87% for pillar 1 and 70% for pillar 3.
- Pillar 3 had two outcomes: "urban environment improved" and "capacity of cities for climate resilience and disaster risk management improved." There were five specific areas under urban environment: (i) support environment improvement projects, (ii) promote energy efficiency in ADB operations, (iii) support risk-sensitive land use management, (iv) promote circular

economy practices, and (v) adopt nature-based solutions. Under climate resilience and disaster risk management, there were three areas: (i) support resilient cities, (ii) strengthen disaster preparedness and emergency response plans, and (iii) adopt a systematic approach to urban infrastructure resilience.

- ADB's efforts under pillar 3 increased over time, although many initiatives pre-dated the 49. issuance of OP4, including environmental improvement projects such as wastewater collection and treatment, fecal sludge management, solid waste management, air quality improvement, energy efficiency, reduction of GHG emissions, low-carbon transformation, and the development and use of renewable energy. While support for risk-sensitive urban and rural land use planning and management, particularly in flood risk management, was included in projects before and after the approval of OP4, operations adopting nature-based solutions and circular economy practices were more recent. The evaluation's portfolio review found that throughout the evaluation period, ADB had incorporated pillar 3 elements into urban investment project design and introduced innovative approaches, especially in its PRC operations.
- Related to the support for urban air quality, ADB implemented important projects in the 50. Beijing-Tianjin-Hebei region in the PRC and Ulaanbaatar in Mongolia. However, ADB needs to extend its support for the reduction and control of urban air pollution beyond East Asia. This would include addressing the pressing need for ADB support in the large metropolitan areas of the South, Southeast, and Central Asia regions. Such operations would be suitable for a combination of policy-based lending and investment loans.
- 51. Support for the circular economy and nature-based practices was evident in some project designs, although there is considerable room for further innovation and improvements in the future. 19 One issue with such investments is the extent to which environmental benefits, including those from protecting natural capital, can be adequately valued in project economic analyses. Nevertheless, resilience principles dealing with the effects of disasters and extreme weather events were included in many designs of the urban projects reviewed over the past decade and these encompassed several sectors. ADB's ongoing monitoring and future evaluations of the current urban portfolio will need to assess how effective these design measures have been.
- Findings from the case study countries indicated that, in more advanced DMCs and in cities that have stronger capacity and finances, cross-sectoral integrated approaches were implemented more widely (Box 1).

¹⁹ ADB has supported several projects in the PRC and India that incorporated circular economy principles. In the PRC (i) the Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project adopted integrated water resource management, green spaces, and circular use of urban materials, and (ii) the Xin'an River Ecological Protection and Green Development Project (Anhui) emphasized pollution control, water recycling, and nature-based solutions. In India, (i) the Integrated Urban Flood Management for the Chennai-Kosasthalaivar Basin Project will build storm drainage infrastructure and over 18,000 catchpits with rainwater harvesting structures to store water and reduce flooding, and (ii) the Varanasi Solid Waste Management Project promoted waste-to-energy conversion and recycling.

Box 1: Key Findings from Case Study Countries on **Urban Development and Resilience**

Bangladesh. The Bangladesh country partnership strategy (CPS), 2021-2025 noted that Asian Development Bank (ADB) should focus on quality infrastructure development that is sustainable, climate-resilient and makes cities more livable. It also noted that ADB should support strengthening urban governance. Projects were designed and implemented to help improve the reliability and sustainability of water supply through capacity development and support for improved governance. ADB support for the Dhaka Water Supply and Sewerage Authority was successful.

People's Republic of China (PRC). ADB's projects in the PRC were aligned with national urbanization strategies and policies, particularly those in the 13th and 14th Five-Year Plans. They supported the PRC's transition toward a greener, more resilient economy and efforts to promote a sustainable and inclusive society. ADB has often adopted integrated and multisector approaches, combining efforts across water and other urban infrastructure services, energy, and transport sectors. The health sector was added as a strategic priority under the current CPS. The Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project exemplifies a cross-sector initiative of water and other urban infrastructure services and the transport sectors using an innovative and integrated approach.

India: India's CPS, 2024–2027 attaches considerable importance to livable cities through its focus on transport and energy infrastructure and capacity development. It prioritizes vulnerable people in its programs, emphasizes the integration of climate adaptation and mitigation measures into urban development, and strengthening subnational entities.

Philippines. ADB's focus was on transport projects—five out of the nine sovereign operations reflecting the need to reduce transport costs and the economic distance between cities. The portfolio was in alignment with the priorities specified in the CPS, 2018-2023, which identified physical connectivity, creating livable cities through multimodal transportation solutions, and pedestrian green walkways as ADB's focal areas. In the portfolio, ADB added value through technical assistance (TA) for preparing a comprehensive public transport strategy and developing capacity to prioritize and screen projects.

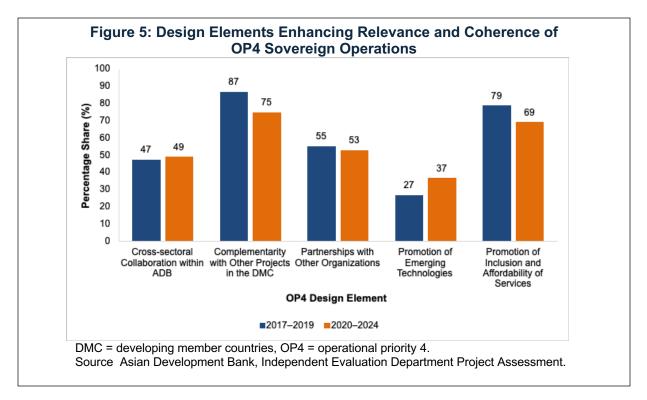
Tonga. In view of the country's vulnerability to natural hazards, including cyclones, earthquakes, and tsunamis, the ADB portfolio mostly focused on the resilience aspects of urban infrastructure.

Uzbekistan. ADB's support was aligned with its strategic development priorities of improving water and urban services and ensuring green growth. While the operational priority 4 (OP4 projects support the government to adopt sustainable approaches, further work is required to improve and incorporate the adoption of circular economy approaches.

Source: Asian Development Bank (Independent Evaluation Department).

53. ADB's portfolio during the evaluation period contained design elements that were relevant to livable city outcomes. Of the OP4 projects, 87% in 2017-2019 and 75% in 2020-2024 complemented other government or development partner initiatives. The share of projects tackling inclusion and affordability was 79% in 2017-2019 but declined to 69% in 2020-2024. The evaluation found that ADB had formed partnerships with other organizations in 53%-55% of the reviewed projects during the evaluation period. Only 27% of projects in 2017–2019 adopted emerging technologies, such as internet of things and geographical information systems, although this increased to 37% in 2020–2024, reflecting a growing recognition of digital solutions to urban management. 20 Projects that included collaboration within ADB in their design elements accounted for 47%–49% of the projects during the evaluation period (Figure 5).

²⁰ Data from ADB's Digital Technology for Development Unit reported that digitalization support across ADB's entire project portfolio(2010-2020) increased to 17% in 2020 from 15% in 2019. Though adoption of digitalization in ADB's water projects over the last decade was one of the lowest, an increase was reported between 2016 and 2020 of ADB's water projects having a digitalization component; ADB. 2022. Digitalizing H₂0: Digitalizing for Water Security and Resilience in Asia and the Pacific.



54. Overall, ADB investments were aligned with country priorities, and incorporated approaches that reflected the different requirements and needs of DMCs, took account of their policy and regulatory environments, and governments' commitment to reform agendas. In those DMCs where cities found it difficult to deliver sustainable basic services and increase access for low-income communities, ADB support focused on providing infrastructure, promoting the efficient delivery of services, and encouraging city governments to assume increased responsibility for O&M. However, many DMCs have found it difficult to sustain outcomes after project completion, notably in institutionalizing and sustaining the capacity developed in the project management offices.

C. **Results Tracking**

- 55. Project level results indicators are not fully aligned with the CPS or the Corporate Results Framework (CRF). Over the review period, the indicators used in CPS results frameworks and project DMFs for ADB's investments to enhance the livability of cities evolved as ADB improved its alignment with Strategy 2030 and the operational plans that were approved in 2019. CPSs largely internalized livable cities objectives in their results frameworks and were aligned with the CRF, 2019–2024. However, there is scope to improve the alignment of project DMF indicators with the OP4 operational plan. Cross-sectoral and outcome-focused indicators would enable progress toward livable cities outcomes to be tracked. Overall, the indicators in the CPSs and DMFs provided broad coverage but did not allow for a full assessment of OP4 engagement.
- 56. Regarding alignment with the CRF, 2019–2024 (Table 2), about two-thirds of CPS results frameworks were aligned with the CRF indicator for air pollution (a high score), but only one third or less of project DMFs were aligned (low). For the OP4 pillar 1 CRF indicator (number of people benefiting from improved urban services in urban areas), two-thirds or more of CPS results frameworks were aligned with this CRF indicator (high), while only about half of DMFs were aligned (medium). Regarding the OP4 pillar 2 CRF indicator (number of entities with improved

urban planning and financial sustainability), about half of the CPS results frameworks were aligned (medium), but fewer than one-third of the DMFs were aligned (low). For the OP4 pillar 3, the CRF indicator (number of zones with improved urban environment, climate resilience, and disaster risk management) and about half of the CPS results frameworks and project DMFs were aligned (medium for both).

57. CPS indicators largely reflected outputs from the provision of infrastructure by sector. The largest number of indicators was for WUS, followed by transport and energy. The most common indicators were the number of water and sanitation connections, the length of new roads constructed or rehabilitated, passenger capacity for public transport, the number of electricity connections, and the renewable energy capacity. There were fewer mentions of intermediate outcomes, such as the adequacy, reliability, quality of service, affordability, financial sustainability of service providers, or private sector participation for all three sectors. Fewer than one-third of the CPS results frameworks specified these. While most projects had indicators to monitor access to services in terms of the number of beneficiaries, indicators measuring the improvements in institutional strengthening or efficiency in service provision were less common. Indicators monitoring pillar 3 outcomes were also limited to CO₂ emission reductions and areas or people affected by floods. Indicators to measure outcomes, such as the extent of access to green spaces, jobs created in green industries, and recycling rates of waste, were lacking.

> Table 2: Alignment of Country Partnership Strategy and **Project Design and Monitoring Framework Results Indicators** with the Corporate Results Framework, 2019–2024

OP4 Indicators in CRF, 2019–2024	Alignment of CPS Results Frameworks	Alignment of Project DMFs	Comments	
People benefiting from improved services in urban areas (number)	High	Medium	Indicators for infrastructure provision were adequate, but fewer than expected indicators were provided for the reliability, quality and affordability of service provision	
Entities with improved urban planning and financial sustainability (number)	Medium	Low	Urban planning efforts were tracked by simple output indicators for completion of plans or training. Little or no emphasis was placed on expected outcomes. Fewer indicators than expected were provided for financial sustainability	
Zones with improved urban environment, climate resilience, and disaster risk management (number)	Medium	Medium	In relevant CPSs and DMFs, there were fewer than expected qualitative or quantitative indicators for zonal tracking of the urban environment (air, water bodies, soil quality), climate resilience, and disaster risk management	
PM2.5 air pollution, mean annual exposure (micrograms per cubic meter)	High	Low	Fewer air quality indicators were provided than might have been expected from the project content and design	

Note: A scale of high, medium, or low was used to reflect the extent to which CPSs or DMFs articulated a corporate result indicator; high = about two-thirds of CPSs or DMFs covered the indicator, medium = about half of CPSs or DMFs covered the indicator, low = one-third or fewer of CPSs or DMFs covered the indicator.

CPS = country partnership strategy, CRF = corporate results framework, DMF= design and monitoring framework, OP4 = operational priority 4.

Source: Asian Development Bank (Independent Evaluation Department).

- 58. Strategy 2030 OP4 results are monitored by three CRF level 2 indicators, with one for each of the three pillars: (i) number of people benefiting from improved services in urban areas, (ii) number of entities with improved urban planning and financial sustainability, and (iii) number of zones with improved urban environment, climate resilience, and disaster risk management. Under each pillar, there are two sub-pillars with supporting tracking indicators: (i) improved performance of service providers; (ii) urban infrastructure assets developed and services improved; (iii) measures to improve the regulatory, legal, and institutional environment for better planning supported; (iv) measures to improve financial sustainability implemented; (v) solutions to enhance urban environments improved; and (vi) capacity development initiatives implemented in urban climate and disaster resilience.
- 59. While the coverage of the three outcome indicators and six output indicators is broad, ADB's greater engagement with urban interventions in the water and urban development (WUD) sector office implies that indicators need to be added to the CRF if performance is to be adequately assessed. As outlined in the urban sector directional guide (2022), given the multisectoral nature of urban interventions, CRF indicators and those under other operational priorities²¹ are needed to assess performance, particularly under OP4 pillar 3.
- Other operational priority indicators were included in project DMFs, for example, those for 60. gender (OP2, women represented in decision-making processes and increased time savings); environment (OP3, GHG emissions, number of people with improved climate and disaster resilience, and number of people benefiting from improved environmental sustainability); and governance and institutional capacity (OP6, improved management function and financial stability, and improved service delivery). ADB project DMF are mapped to multiple operational priorities and thematic areas, reflecting the multidimensional nature of urban interventions. The tagging and reporting of results indicators follow corporate guidance. This ensures consistency across DMFs and alignment with CRF definitions with varying degrees of alignment to different priorities that are a function of project context and design. However, ADB has found it difficult to ensure uniform and consistent tagging in project DMFs. The responsibility for project tagging is not clearly defined, and neither is the associated reporting of the CRF and tracking indicators in the annual Development Effectiveness Review report. OP4 tagging has been applied inconsistently across ADB operations, with limited oversight and monitoring, and this has led to a lack of uniformity in implementation.
- 61. Despite some efforts to integrate cross-sectoral approaches in ADB's projects that aim to enhance the livability of cities, ADB's monitoring processes remain inadequate for validating whether or not desired livable city outcomes are being achieved. The generic output indicators that are used often fail to capture long-term impacts, planning-related indicators lack specificity, and the validation of financial sustainability outcomes was limited.²² Of the projects with at least one output indicator related to pillar 1, only 29% had a measurable outcome indicator. The corresponding percentages for the other two pillars were 19% for pillar 2 and 35% for pillar 3.

²¹ ADB. Strategy 2030. OPs 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 6.1, and 6.2.

Regarding financial sustainability, the emphasis in CPSs improved marginally from the pre-OP4 to the post-OP4 periods. At the project level, 58 of the 334 projects had at least one output indicator relating to financial sustainability. There was a slight increase between the pre-OP4 period (26) and the post-OP4 period (32). Thirty projects specified intermediate outcome indicators, such as water loss reduction, cost recovery improvements for service delivery, operation and maintenance (O&M), and tariff billing and collection. However, both water and energy utilities lacked indicators to track their longer term financial viability.

ADB Ways of Working to Support Livable Cities

62. While ADB supported projects and programs in making cities more livable were not based on one concrete definition of livability, they shared some key common attributes, such as the need for: cross-sectoral approaches, engagement with different levels of government, direct financial support to cities, and broad stakeholder consultation. This chapter examines ADB's approach to supporting livable cities. Sections A and B focus on the institutional arrangements for thematic and cross-sectoral operations, staff skills and capacity, and incentives for implementing integrated solutions. Sections C, D, and E discuss ADB's engagement with the different levels of government and external stakeholders, including through national and subnational governments and stakeholder partners.

A. ADB's Institutional Arrangements for Cross-Sectoral and Thematic Operations are Still Evolving

- 63. Achieving urban livability requires coordinated efforts across the water, energy, transport, solid waste, health, education, and housing sectors, among others. These interact in complex ways: urban water reuse affects health and the environment, while mobility planning impacts emissions and inclusivity. Cross-sectoral collaboration and integrated solutions are needed. Cities must improve their urban environments and climate resilience and incorporate nature-based solutions and principles of the circular economy in project designs. If ADB is to be a part of this process, it must engage with different ministries and agencies at various levels of government.
- 64. Internally, ADB needs to strengthen its cross-sectoral operations, with different sector teams collaborating to achieve shared objectives. Integrated approaches aim to design and implement projects that are holistic, multi-thematic, and optimized across different systems and policy domains. This requires an outcome that can be measured by appropriate indicators. Examples of such operations include urban mobility projects that simultaneously address emissions, land use, and social inclusion, and climate resilience projects that incorporate land use, and sponge city designs while addressing urban vulnerability issues. ²³
- 65. ADB's support was internally coherent during the evaluation period since it fostered long-term sectoral engagements, sequential investments, and knowledge support through technical assistance (TA). For some projects, upstream TA supported integrated planning to achieve desired water, air, and food security outcomes. For example, Uzbekistan implemented integrated urban planning, which included environmental pollution diagnostics and the adoption of circular economy frameworks. Other examples included the integration of renewable energy solutions (e.g., solar panels in wastewater plants); promotion of nature-based solutions, such as green roofs and wetlands to mitigate urban heat and flooding; circular economy principles applied

²³ A sponge city is an urban design approach that treats cities like sponges—able to absorb, store, and purify rainwater naturally rather than letting it run off impermeable surfaces, which often results in flooding.

to solid waste and wastewater systems; and TA-supported analysis, such as green city action plans that informed the development of multisectoral investment pipelines.

- 66. Despite some individual project successes, most project designs during the evaluation period were prepared within sectoral silos and featured only limited integration with other sectors. Outcome indicators were sector-specific and did not reflect broader livability metrics. Weak sovereign and NSO coordination underutilized the potential of the One ADB approach and resulted in low NSO engagement in municipal projects. Coordinating sovereign and NSO interventions was difficult for ADB to achieve. ADB sovereign operations supported some upstream activities, such as building the capacity of municipalities and creating enabling environments for private sector operations (PSO) under the One ADB approach. However, these initiatives vielded a limited number of NSO operations involving local governments. An example where ADB coordinated advisory and NSO financing with country office teams to model cross departmental coordination was a waste-to-energy plant in Can Tho, Viet Nam. This project was the first municipal level PPP project in Viet Nam, which can serve as a model for future project design. Regardless, ADB departments are still mostly driven by sectoral mandates, and a formal credit-sharing mechanism that adequately rewards collaborative work is lacking. Many staff lack the multidisciplinary skills required for integrated planning.
- 67. ADB's operations addressed many topics within the livable cities' agenda. Where internal coherence was achieved, this was mostly through integrated approaches within sector-specific projects and a few solution-oriented interventions aimed at improving the urban environment. ADB needs to blend rigorous urban diagnostics with sector and subsector analysis, with each being equally important for program design and delivery. Examples of cross-sectoral collaboration are shown in Box 2. Such collaboration has to improve significantly in the post-OP4 period.
- ADB's TA operations have supported national urban assessments (NUAs), green city 68. action plans, integrated urban action plans, and livable city action plans. They have also financed urban profiling and analysis to help identify priority investments and have provided knowledge and capacity support. TA played an important role in supporting the internal coherence of ADB's OP4 operations for promoting low-carbon urbanization and urban climate resilience, and conducting country diagnostics studies, sector assessments, and policy development (Box 3). However, further upstream collaboration among ADB sector groups is needed. For example, the Public Financial Management Sector Group, leveraging expertise from departments such as Private Sector Operations Department (PSOD) and Office of Risk Management (ORM), can explore ways to strengthen municipal finances; the Environment Thematic Group can move environmental sustainability in project designs beyond simple safeguard compliance; and the PSOD can work with the private entities on PPPs. Existing NUAs, green city action plans (GCAPs), and livable city action plans all need updating since they were prepared several years ago, and approaches and priorities have subsequently changed in ADB.
- 69. The Climate Change and Sustainable Development Department (CCSD) has mobilized external funds to finance TA to encourage client countries to recognize the importance of thematic and sectoral integration. However, ADB faces capacity constraints that limit the number of TA projects it can undertake, as the sector divisions prefer to work on investment projects.
- 70. Project teams need broader representation from other sections of ADB. At present, during the feasibility stage, team members from other ADB departments are usually from the fiduciary and safeguard groups. More sectors need to be represented among the core members of multisectoral livable cities teams.

Box 2: Case Studies of Cross-Sector Integration in Livable Cities Operations

Bangladesh. Asian Development Bank's (ADB) support focused on improving physical infrastructure. Some OP4-classified projects adopted a comprehensive approach to urban development that included improving governance, capacity development, institutional strengthening, and encouraging community participation. Bangladesh's Third Urban Governance and Infrastructure Improvement Project is one example of this approach. However, in general, ADB business practices continued to be dominated by a single-sector approach with limited cross-sectoral elements and inadequate attention to long-term sustainable outcomes.

People's Republic of China. Multisectoral collaboration evolved to address complex urban challenges, shifting from single-sector management to integrated strategies. Urbanization has driven a growing need for climate-resilient and competitive cities, requiring cross-sector expertise in energy, transportation, water management, and social infrastructure projects. ADB has played a crucial role in promoting these approaches, assisting provinces to transition toward more integrated and multisectoral development strategies. The State Committee's policy to promote "Good City Models of Ecological Civilization," adopted in 2014, has been instrumental in guiding efforts to enhance urban livability. The national policy framework on livability and climate change is integrated into municipal government projects through revised incentive structures, improved reporting formats, and strengthened oversight support for implementation.

Philippines. Sovereign and nonsovereign collaboration were evident in the Davao Public Transport Modernization Project where the Office of Markets Development and Public-Private Partnership (OMDP) helped design institutional systems for PPP. Integrated approaches were utilized in some projects, although these were not comprehensive. In the South Commuter Railway Project, ADB introduced design elements to meet the needs and improve the safety of elderly people, women, children, and people with disabilities. ADB also helped preserve cultural and heritage structures under its environmental safeguards for this project.

Uzbekistan. ADB's has had a long-term commitment to the water and other urban services sector (WUS), including support for different subsectors. Since 2022, ADB has adopted integrated urban approaches. However, project design and implementation had to respond to government reforms regarding the roles and responsibilities of ministries and national and local agencies in delivering urban services. As a result, projects were adapted and scope changes undertaken.

Viet Nam. The Secondary Cities Development Project significantly enhanced urban livability in Buon Ma Thuot, Ha Tinh, and Tam Ky and adopted a multisectoral integrated approach. The project demonstrated effective coordination and collaboration across different sectors and departments. The multisectoral integrated approach, combining infrastructure development with environmental management and urban planning, helped build resilient and sustainable urban environments. The project also emphasized community engagement and managed to foster a sense of ownership and active participation among local residents. This promoted behavioural changes that led to better waste management, flood preparedness, and environmental stewardship.

Box 3: National Urban Assessments and Green City Action Plans

Georgia. A national urban assessment (NUA) was prepared successfully and resulted in an investment project for ADB. The success factors included the presence of champions supporting the NUA in the government and the use of a participatory process to build ownership through long-term and continuous stakeholder engagement. Through a comprehensive preparatory planning process, under a \$1 million technical assistance (TA) project, ADB worked with the government to convene diverse groups of stakeholders, from senior national government leaders to citizens, in three regions and the capital, Tbilisi. This approach has shown positive results, with the demand for additional financing for livable cities exceeding the designated envelope of \$120 million. A Municipal Development Fund was tasked to support integrated urban development projects, rather than sector ones.

Malaysia. A reimbursable cluster TA project provided support for a green city action plan (GCAP). It was administered by the Regional Cooperation and Operations Coordination Division of the Southeast Asia Department, at the request of the government. The intervention aimed to enhance sustained and inclusive growth in urban centers as proposed in the 12th Malaysia Plan, 2021–2025. These GCAPs helped the government prepare city profiles, and climate change vulnerability and carbon inventory assessments. The GCAPs leveraged ADB's knowledge, finance, partnerships, and One ADB approach to: (i) identify institutional, policy, and sector constraints on inclusive growth; and (ii) develop a pipeline of priority quality infrastructure investments on increased resilience and respond to challenges intensified by the COVID-19 pandemic. For those cities that were selected for a GCAP, the TA also supported developing a capital investment plan, enhancing resource mobilization, increasing private sector participation, and improving capacity. This regional cooperation initiative reflected the recommendations of a recent Independent Evaluation Department evaluation of regional cooperation and integration. This recognized the need to address transboundary issues of water and air quality and to reduce carbon emissions and urban air pollution through the integrated urban development approach.

Viet Nam. The Secondary Green Cities Development Project showed that government ownership and leadership, and the involvement of different stakeholders, including the private sector and non-government organizations, are critical to achieving successful outcomes.

- 71. The seven operational plans that were adopted under Strategy 2030 provided a framework for ADB to transition from sector to thematic approaches. However, ADB and many of its client governments are organized along sector lines, while promoting livable cities requires working across sectoral boundaries. ADB is attempting to move from sector- and region-focused silos, and the separation of sovereign and NSO, to adopt integrated cross-sectoral innovative approaches. This was a focus under OP4 pillar 3, which emphasises improving urban environments and climate resilience, and support for a nature-based economy.
- 72. ADB has been paying more attention to cross-sectoral collaboration, particularly through TA-supported action plans and integrated project designs. However, its focus usually remains on achieving defined project outputs, such as refurbishing a road, constructing a water distribution system, or expanding electricity access, rather than on outcomes with specific indicators. Projects have rarely included a multi-dimensional livable city outcome. The evaluation's review of project output and outcome indicators found little evidence of efforts to achieve low-carbon outcomes or to promote circularity in water usage. The lack of indicators to report on progress toward livable cities outcomes in OP4 projects suggests that the design and implementation process continues work within sectoral silos.

- 73. ADB's new operating model (NOM) provides a framework for greater cross-sectoral engagement that can be used to support progress toward sustainable livable cities. NOM supports four important changes that are relevant to multisectoral integrated urban development: (i) addressing climate change, which includes making cities more livable by reducing pollution and emissions and increasing adaptation and nature-based solutions; (ii) facilitating greater private sector development at upstream, mid-stream and downstream levels; (iii) developing innovative solutions using proactive One ADB teams; and (iv) new ways of working. However, Independent Evaluation Department's (IED) recent evaluation of NOM indicated that, while NOM has promoted cross-regional collaboration within sectors, it has also unintentionally reinforced sector silos. NOM's tendency toward centralization has narrowed the focus of staff to sectorspecific operations and deliverables. Interviews with sector staff for the NOM evaluation pointed to inconsistencies in internal procedures, limited clarity on joint roles and credit-sharing, and increased transaction costs for cross-sectoral work.²⁴
- 74. These problems can be addressed by realigning ADB's operations for achieving integrated urban livable city outcomes through a combination of: (i) upstream TA and analysis, including TA supporting pre-feasibility studies that jointly assess climate, water, and transport needs; (ii) creditsharing mechanisms that reward collaboration across sector and regional teams; (iii) TA support for strengthening municipal finance frameworks and collaboration with PSOD to support subnational financing (e.g., municipal bonds); (iv) greater use of nature-based solutions, the circular economy, and smart technologies with capacity support provided from environmental and climate groups; (v) decentralization and skills-mapping, including the deployment of more staff with broader urban expertise to regional offices; (vi) incorporation of health, education, and social protection services into the needs assessment and pre-feasibility studies to increase investment in these sectors; and (vii) clear recommendations to incentivize cross-sector collaboration and establish accountability mechanisms.

В. Staff Skills, Capacity, and Incentives for Collaboration are Critical

75. Institutional frameworks in client governments for inter-agency and inter-sectoral coordination are usually minimal or non-existent. Planning departments often lack the authority to lead coordination, which results in more sector-focused operations. One ADB teams can help to address this by facilitating, supporting, and strengthening processes for inter-sectoral and inter-agency collaboration. However, ADB operations staff administering project implementation indicated to the evaluation team that more staff time was required to coordinate and manage multiple implementation agencies in integrated projects. In the evaluation's staff survey, 56% of respondents agreed or strongly agreed with the statement that OP4 projects have become more complex and multisectoral to align with more complex DMC needs.

1. **Staff Skills and Capacity Enhancement Needs**

76. ADB's efforts to provide its staff with advanced skills have included e-learning courses; thematic workshops; knowledge-sharing events; sector-specific training weeks; partnerships with universities; youth innovation laboratories, such as "ADB Ideate"; and global forums.²⁵ In 2024. ADB offered courses with a livable city theme aimed at strengthening staff knowledge on emerging cross-sectoral challenges. Several knowledge sharing events were organized for staff to enable them to acquire an understanding of the different dimensions of a livable city. Despite

²⁴ ADB. 2025. Renewing, Revitalizing, and Reforming the Asian Development Bank: An Evaluation of the New Operating Model.

²⁵ The urban sector group community within ADB has 460 members, including 114 urban development staff from regional departments with a diverse range of expertise.

these efforts, only 26% of the survey respondents agreed or strongly agreed that ADB had adequate staff capacity and skills to deliver OP4 operations before the launch of OP4, increasing to 33% for the post-NOM period.

- ADB's capacity building and training opportunities appear to have been limited to 77. supporting staff to acquire the knowledge and skills needed for cross-sectoral thinking and promoting the use of modern technology to enhance efficiency and effectiveness throughout the project cycle to achieve the desired livable city outcomes. However, only 21% of the respondents to the staff survey agreed or strongly agreed that they had received adequate support and training to plan and implement complex, multisectoral, or thematic OP4 projects. ADB needs to strengthen its staff's urban sector skills through training and capacity development in such key areas as the capital investment plans for cities, smart cities, road safety, waste-to-energy programs, elderly care, affordable housing, sustainable tourism, fintech services, waste management, circular economies, climate resilience, and disaster risk management, and subnational nonsovereign financing. Only 32% of the projects in the livable cities portfolio used digital technologies, such as artificial intelligence, internet of things, geographical information systems, or space-based technologies. ADB needs to train its staff to utilize modern technology throughout the project cycle.
- ADB needs to recruit staff who are able to analyse local government payment risk in PPP 78. structures and engage with municipal agencies effectively, or train existing staff to acquire these skills. ADB needs to allocate a TA budget for capacity building activities and to build tolerance for long development cycles. ADB's institutional capacity for upstream activities, such as building the capacity of local government units (LGUs) and establishing enabling environments for PSO, is currently limited.
- 79. ADB must close its internal capacity gaps, particularly in the emerging areas that are critical for integrated urban development, such as climate resilience planning, municipal finance, and digital urban management. For example, a lack of climate modelling skills delayed Jakarta's Sponge City Initiative. Procurement, safeguards, gender, and other skills need to be built up. The staff survey responses and the earlier OP4 midterm review noted a lack of detailed skills mapping for urban development staff that could be used to identify key skills and knowledge gaps and to support the preparation of a targeted human resource recruitment and training plan. To address this, the Budget, People, and Management Systems Department has launched a pilot skills inventory to support skill-based talent management and customized training in 2025.
- At the operations level (both in project teams and in country offices), the approach is still 80. focused on input-output processes. ADB has not devoted enough attention to livability outcomes. Only 21% of staff responded that they agreed or strongly agreed that ADB has adequate organizational arrangements and provides incentives for cross-sectoral and thematic collaboration. This increased to 24% for the post-NOM period.
- The Water and Urban Development (WUD) sector office may provide a model, since it was established to support the development of integrated solutions. One ADB teams prepare projects and programs, involve skilled expertise from other sectors and themes, include both project and knowledge work, and cover sovereign and nonsovereign engagement. WUD sector office aims to enhance staff capacity, promote research, provide advisory services on emerging urban areas, support integrated and innovative approaches, and strengthen cross-sector and

thematic activities to foster the sharing of ideas, knowledge, and approaches.²⁶ An emerging areas team has been established within WUD sector office, with a mandate to address capacity gaps in integrated urban development and advance cross-sectoral approaches. WUD sector office has also been working with other sectors [agriculture, food, nature, and rural development; finance; markets development and PPPs; and PSOI through its seven active communities of practice: affordable housing, municipal finance and governance, sustainable tourism, urban and rural water supply and sanitation, integrated flood management, solid waste management, and urban and regional planning.

2. **Enhance Operational Coordination and Incentives for Collaboration**

- 82. Integrated urban development projects and programs involve many sectoral agencies and require a restructuring of the organizational arrangements in both DMCs and ADB. Such projects often involve a large number of procurement packages. Implementation is more complex than for single-sector projects and requires greater resources and administrative support from ADB. At the country level, an empowered government coordination entity to lead organizational and behavioral changes is needed if projects are to achieve OP4 outcomes. In the absence of such a coordinating agency, ADB staff have to liaise with multiple agencies.
- The evaluation's review of reports and recommendations of the President (RRPs) tagged 83. as supporting livable cities found that 48% of these projects demonstrated collaboration across departments. This included integrated sovereign and nonsovereign solutions, partnerships between operations and other departments in knowledge activities, and teamwork between staff in sector and thematic groups. The percentage of projects featuring such collaboration showed no appreciable change after the adoption of OP4, increasing from 47% in the pre-OP4 period to 49% after OP4.
- Only 26% of respondents to the survey agreed or strongly agreed that there was adequate 84. coordination among sector groups, thematic groups, the PSOD, and regional departments in the design and implementation of ADB's urban projects, although this percentage increased to 31% after the adoption of NOM. Only limited coordination between PSOD and regional departments was apparent in efforts to increase the capacity of local governments to attract private financing for urban development through NSO lending and PPPs. The engagement of sovereign and nonsovereign departments to facilitate private sector investment requires innovative solutions.
- As part of the NOM process, ADB is working to strengthen the expertise and collaboration 85. skills of its staff. Changes in both processes and culture are needed. The decentralization of staff to country offices accelerated in 2024 and is expected to continue in 2025. This will strengthen in-country capacity, improve ADB's analysis of country contexts, and reinforce its engagement with clients. Country management teams will play an enhanced role in the shift toward a more thematic orientation to ADB projects, with pre-CPS upstream work shaping the discussion of themes in the CPS and facilitating cross-sectoral collaboration.
- 86. CPSs are generally solutions-oriented and are used to determine collaborative inputs and requirements for project or program preparation and processing, including which sector group will take the lead. There is no specific mechanism to steer collaboration across sectors. Before NOM,

²⁶ Water and Urban Development (WUD) sector office has been engaging DMC officials, water operators, experts from the other sectors (including the insurance, metro transit, and tourism industries), other bilateral partners, including the UN Refugee Agency (UNHCR), UN Children's Fund (UNICEF) for education and health support, and KfW and International Finance Corporation for blended finance and private sector participation. WUD sector office also supports design training programs and city-to-city twinning arrangements.

it was the responsibility of the regional management team to deal with cross-sectoral work; under NOM, sector expertise is now under one roof and applies across all ADB regions. The seven senior sector directors meet regularly to discuss opportunities for cross-sectoral collaboration. WUD sector office is the relevant and appropriate to lead on urban operations.

- Improving incentive structures for cross-sector collaborative efforts and adopting 87. integrated approaches and cross-sectoral thinking in addressing urban challenges is a work in progress. Collaboration among sector groups within ADB in supporting OP4 projects has improved since the introduction of the One ADB approach and NOM, but ADB still lacks a mechanism for sharing credit for joint efforts among the lead sector, other sectors, and the thematic and regional departments, and between regional departments as well as both the Office of Markets Development and Public-Private Partnership (OMDP) and PSOD.
- 88. The absence of a formal mechanism for sharing credit for joint project work reduces the incentives for collaboration. This was raised in IED's discussions with operations and non-operations departments regarding the lack of adequate recognition for the time, input, and support provided by sector groups in preparing multisectoral projects. Redesigning ADB's incentive structure, forming interdepartmental task forces, and promoting integrated project teams would help to overcome silos and coordination gaps across ADB departments.
- 89. Revisions to the incentive structure could include: (i) establishing formal shared credit systems where cross-departmental or cross-thematic project teams are recognized and rewarded collectively for their contributions to project outcomes; (ii) including explicit cross-sectoral collaboration and knowledge sharing as criteria in staff performance evaluations and promotion tracks; and (iii) introducing collaboration metrics in performance reviews, including feedback and 360-degree assessments from other departments involved in joint projects. ADB should consider establishing temporary or permanent interdepartmental task forces for high-priority thematic areas (e.g., urban resilience, climate adaptation, integrated mobility), composed of sector and thematic specialists, project officers, and PSO staff. Integrated teams at the project or program design stage could draw systematically from sector or thematic groups based on project needs. Staff with multidisciplinary skills could be "integration leads" on multisector projects and ADB should consider investing in targeted training for such staff. ADB should prepare "One ADB" project templates and require explicit documentation of cross-sector team roles in project approval documents.

Limited Engagement with Different Levels of Government C.

90. ADB's principal external clients for engagement on the livable cities' agenda remain the central governments of DMCs. The \$38.8 billion of livable city project financing committed between 2017 and 2024 was channelled through ADB's long-established sovereign lending window. Central governments of DMCs were the co-signatories of loan agreements, thereby providing an explicit or de facto sovereign guarantee. Yet the execution and implementation of the sovereign loan proceeds for ADB's livable cities agenda was mostly at the subnational level through a regional authority, state-owned enterprise, municipality, or other local government entity. Working with municipalities directly at the subnational level on commercial terms without a sovereign guarantee would localize the management of urban development projects, transfer knowledge, and free up central government fiscal resources by decreasing the need to transfer resources from central to local governments. However, most DMCs in Asia and the Pacific prohibit municipalities from borrowing directly from foreign lenders without any recourse to a sovereign quarantee. The technical capacity of municipalities also differs, and many will need TA if they are to borrow from ADB.

- 91. ADB has not developed substantive credit or lending relationships with individual cities and other LGUs. Its sovereign operations provide only limited capacity development TA support to help LGUs to plan, structure, and manage local infrastructure projects. During the evaluation period (2017–2024), TA projects that were tagged as supporting OP4 totaled \$1.05 billion, 53% of which was for capacity development. Of this amount, 97% was for sovereign operations and 3% for NSO. When compared with the other operational priorities, OP4-tagged TA accounted for 32% of all the TA projects. The same trend was found for capacity development TA projects. The low amount of TA resources directed to OP4 may be because mechanisms to strengthen local institutional capacity and prepare the groundwork for innovative financing mechanisms have only recently emerged.
- 92. Among ADB's projects that supported enhancing livability, several demonstrated a close engagement with municipalities for capacity building, planning, and administrative processes. Box 4 provides some of these examples under its sovereign operations. Also, in Indonesia, the Sustainable Infrastructure Assistance Program, supported by funding from Australia, included technical assistance (TA) to help municipalities develop the legal, regulatory, and institutional frameworks necessary for issuing bonds. However, the mid-term review of the program in 2024 noted that, although the framework and TA structures had been established, no municipal bonds had been issued. ADB has also supported a second Sustainable Infrastructure Assistance Program to develop green housing prototypes²⁷ and has promoted the issuance of green, social, and sustainable bonds by municipalities to finance climate-resilient and inclusive infrastructure. Under the Green and Innovative Finance Initiative. ADB conducted workshops, training, and knowledge-sharing events to build local governments' capacity for financial management, assessment of creditworthiness, and bond market operations.
- For ADB to provide broader and more effective support under its livable cities agenda at the LGU level, it needs to engage in policy reform through policy-based lending, sector development programs, financial intermediation loans, or activities within TA using the One ADB approach. If ADB is to lend directly to municipalities, it has to provide support to enhance their institutional and financial readiness. This would include: (i) governance and regulatory reform to clarify mandates and improve coordination; (ii) strengthening municipal financial management capacity, including transparent budgeting, financial reporting, and procurement; (iii) local revenue enhancement and creditworthiness assessments to help cities diversify income streams; (iv) capacity building for digital urban management, capital investment planning and project feasibility, including structuring for PPPs and long-term contracting to strengthen investor confidence; and (v) improving digital systems, including strengthening the integration of digital infrastructure as the backbone for livable cities and to foster inclusion and citizen engagement, financial management information systems, digital twins, dynamic data dashboards and e-governance platforms.

²⁷ The assistance was provided in the context of the Indonesia Green and Affordable Housing Program, which targeted the lower-income segment of the housing market, with an emphasis on the informal sector. ADB also addressed certification issues to ensure the project complied with acceptable green requirements.

Box 4: Examples of ADB Support for Subnational Government or Entities through Sovereign Lending

Public sector management support for subnational government or entities. The Philippines' Local Governance Reform Project provided institutional development and policy support for property valuation to help improve local revenue generation and to support the fiscal autonomy of subnational governments. ADB focused on public financial management reforms at the local level, complementing national efforts supported by the World Bank. ADB also worked on strengthening coordination among local government units (LGUs) in service delivery with Agence Française de Développement (AFD). Also under the Facilitating Youth School-to-Work Transition Program, ADB collaborated with the World Association of Public Employment Services to support capacity development of Public Employment Services Offices, supported by LGUs.

In Mongolia, ADB worked with Japan International Cooperation Agency (JICA) to enhance the air quality monitoring capacity of the municipality as part of the Ulaanbaatar Air Quality Improvement Program. This included support for the installation of monitoring stations and data management systems to improve real-time pollution tracking. The program also helped strengthen coordination among municipal agencies, enabling the more effective implementation of air quality policies and public health interventions.

In Bangladesh, ADB technical assistance (TA) activities under the Climate-Resilient Inclusive Development Program supported climate-smart agriculture, leveraging efforts by the United Kingdom's Foreign, Commonwealth and Development Office and the United States Agency for International Development. At the subnational level, the program promoted institutional and policy reforms that enabled local governments to integrate climate adaptation and mitigation into planning and service delivery, particularly in agriculture, water, and urban sectors.

Other sovereign projects' support for subnational governments or entities. Under Bangladesh's Third Urban Governance and Infrastructure Improvement Project, ADB supported capacity building of pourashavas (municipalities) in urban service delivery, planning, and financial management to enhance municipal service delivery and urban governance in the project towns. Under Bangladesh's Improving Urban Governance and Infrastructure Program, ADB collaborated with the Global Center on Adaptation to provide capacity development for the Local Government Engineering Department and pourashavas regarding climate solutions. Under the Chattogram Hill Tracts Inclusive and Resilient Urban Water Supply and Sanitation Project, ADB targeted strengthening capacity, governance, and awareness of institutions and local communities in climate-resilient, sustainable, and inclusive urban services.

Under India's Sustainable Urban Development and Service Delivery Program, ADB supported (i) national and subnational policies and guidelines for universal and improved water supply and sanitation service delivery; (ii) housing policies and programs to improve access to rental housing for urban migrants and industrial workers, working women, and the poor; and (iii) policies and guidelines for performance-based central fiscal transfers to urban local bodies. The program was implemented jointly with the World Bank, JICA, AFD, and German development cooperation through KfW.

Under the Palau Public Utilities Corporation Reform Program, ADB collaborated with the International Monetary Fund (IMF) on program design and policy reforms for public utilities to make them more efficient and to release resources for other economically productive localities, including job creation and programs to protect the poor and most vulnerable.

In the People's Republic of China (PRC), as part of the Anhui Huangshan Xin'an River Ecological Protection and Green Development Project, ADB established a platform for collaboration with The Nature Conservancy to address agricultural nonpoint source pollution in the Xin'an River Basin. The ultimate aim is to enhance private sector investment and commercial financing for green investments. Knowledge acquired under the project was shared with other municipalities and DMCs through training and workshops.

D. **ADB Nonsovereign Subnational Engagement**

- 94. ADB financing of subnational government projects has been undertaken largely on a sovereign basis; the subsovereign lending business line through ADB's NSO has fallen behind other multilateral development banks (MDBs) starting with upstream activities that support subsovereign lending to livable cities. Between 2017 and 2024, the PSOD indicated that it processed 22 subnational projects across various sectors with subnational commitments, but these represented only 6% of ADB's total NSO volume. Only five of these subnational NSO projects were tagged as having OP4 links (linked document), and only two of these can convincingly be classified as directly related to livable cities. These were the ALES Energy Transition and Modernization Project in Kazakhstan²⁸ and the Bengaluru Smart Energy Efficient Power Distribution project in Karnataka, India. ²⁹ The others were essentially national infrastructure projects that cannot be tagged as city-level transactions.³⁰ To date, only three of these projects have been validated by IED, with two rated less than successful.
- 95. ADB's livable city NSO interventions at the subnational level do not yet have a clear track record of success, although limited engagements to promote subnational borrowing and credit enhancement have stretched back more than two decades. In 2004, PSOD was a shareholder in the Philippines Local Government Unit Guarantee Corporation, which aimed to support a shadow international credit rating. The program was validated successful and appropriately aligned with the development needs of the country, even though the number of local LGUs using its services was small, largely because of its cost and local governments' unfamiliarity with guarantees. A similar project in the PRC. TA support for the Naniing Infrastructure Corporate Utility in 2005, was rated partially successful because the project bond issuance was not awarded an international investment grade rating. In Thailand, a TA grant was provided for Commercial Financing for LGUs in 2005-2006. The project was rated only partially successful, but it provided lessons and recommendations that ADB could use to engage more effectively with local government through capacity building and providing guarantees for longer-term and capital-intensive urban infrastructure financing. The PSOD Operational Plan, 2019–2024 regarded municipal credit risk and off-take credit enhancement as interventions to be pursued on an opportunistic basis.
- 96. Subsovereign lending to local governments requires direct engagement with municipal and subnational borrowers or state-owned enterprises if such lending is to be carried out without recourse to sovereign guarantees. Appropriate regulatory, financial and operational frameworks must be in place for the subsovereign entity to borrow. The borrowers must have the capacity to assess and collect revenues and demonstrable cash flows through cost recovery mechanisms to service repayments. The municipalities and other borrowing agencies must be creditworthy. However, since ADB has not developed substantive credit or lending relationships with individual cities, this has constrained its strategic goal of promoting private sector participation in urban development.

²⁹ The \$90 million Bengaluru project involved the conversion of overhead electric distribution lines to underground cables, with parallel installation of optical fiber cable spanning 52 subdivisions, in Bengaluru city, Karnataka,

²⁸ The Joint Stock Company (JSC) Almaty Electric Stations, Kazakhstan is known as ALES. The \$214 million loan to the ALES project was focused on upgrading Almaty City regional electricity provision by switching to a clean

fuel option to reduce carbon emissions.

³⁰ The remaining three tagged subnational NSO projects were the Viet Nam Micro, Small, and Medium-sized Lending Project, the Georgia Railways Green Bond Project, and the Maldives Dhiraagu Telecommunications Connectivity Project (Linked document).

97. While subnational commitments represented only 6% of ADB's NSO volume in 2017-2024, the European Bank for Reconstruction and Development (EBRD) allocated 18%-24% of its infrastructure sector commitments to subnational projects over 2019-2023. The country context and degree of exposure to upper middle-income countries and subnational borrowers in Eastern Europe in the EBRD portfolio, compared with ADB is clearly different. However, with only two transactions on record in the ADB NSO portfolio classified as directly livable related to cities during the evaluation period, ADB has fallen behind other MDBs on upstream activities to support subsovereign lending to livable cities (Box 5).

Box 5: Subnational Finance at the European Bank for Reconstruction and Development and the International Finance Corporation

The International Finance Corporation (IFC) started working on subnational finance on commercial terms without sovereign guarantees in 2003 with the Subnational Finance Programme. IFC provided multi-project preparation and capacity building at the municipal level well in advance of lending. Where possible, lending was provided in local currencies to match anticipated revenue streams. Credit risk management tools were applied to assess the creditworthiness of local government payment risk, including within subnational public-private partnership (PPP). IFC's municipal lending is typically to large cities and is often carried out through bond issues rather than loans. Under the IFC's Financing Sustainable Cities Initiative, lending was mainly for transport, ports, the power sector, water supply and wastewater treatment facilities.

The European Bank for Reconstruction and Development (EBRD) typically work in partnership with major cities, supporting them through technical assistance (TA) and lending operations, and PPP. It partners with municipalities to mitigate structural risks and encourages the commercialization of services. EBRD uses teams within the same sector division at all project preparation and implementation stages. The continuity of the staff liaising with municipal clients helps EBRD to assess future opportunities for commercialization of services and for subsovereign lending. EBRD limits its sovereign lending as a proportion of its annual investment. It engages not only with municipalities, but also with local banks, with its resident offices playing a key role. Upstream investment planning and policy support is provided, for example, under its Green Cities Program, which operates in over 50 cities. Typically, a "green city action plan" outlines priority investments over the short, medium and long terms. EBRD's annual investment in municipal infrastructure was €946 million in 2019 and €1,328 million in 2024. The proportion of subsovereign financing within the infrastructure sector was 18%-24% in 2019-2023, equivalent to €400 million–€450 million per year for municipalities and state-owned enterprises.

- The IED evaluation of ADB support for PPPs in 2020 noted that ADB was organized to 98. support project development by OMDP and project financing by PSOD, rather than upstream work.31 Advocacy and capacity development are undertaken by the regional departments and OMDP, which also provides advisory assistance on improving the enabling environment for private sector delivery of public services. This has not changed significantly over the past 4-5 years.
- 99. Providing NSO financing to subnational municipal borrowers carries a higher risk than sovereign lending. It is difficult to assess municipal credit risk; unlike EBRD, ADB has no internal precedents, analysis, or guidance to draw on for municipality credit assessment. For a trial credit risk assessment in West Java in Indonesia (a sovereign transaction led by the Southeast Asia Department), an outside consultant was employed on a short-term assignment to map potential credit risks. Discussions with ADB's ORM and OMDP showed that ADB has limited experience in

³¹ ADB. 2020. ADB Support for Public-Private Partnerships, 2009–2019. Manila.

undertaking municipal government credit assessments. Potential transactions have often been discontinued at an early stage when the municipalities did not provide data or credit information that the ORM requested. Municipal clients had a low level of understanding of the role of credit risk and its assessment. PSOD's appetite for subnational finance interventions is not focused on finance outcomes that require long-term client engagement, including skills building and transfer, and dedicated TA resources over many years.

- A pilot for the Creating Investible Cities initiative was launched by OMDP in 2023. This is a broad-ranging support program for selected pilot cities and covers capital budgeting, project preparation and finance, and access to private finance. The objective was to improve the upstream technical, financial, and managerial capacity of cities in DMCs to develop municipal infrastructure, improve their domestic resource mobilization, and enhance their competitiveness and resilience. The initiative began operations with the pilot city of Makassar in Indonesia. While no transactions have been closed to date, the initiative could become an anchor of ADB's livable cities pillars 1 and 2 engagements in conjunction with urban policy work at the national level. subject to successful program outcomes being achieved.
- Although there are significant commercial opportunities for NSO that are focused on municipal finance interventions, ADB needs to develop a strategy to make sufficient staff and tools available and to recognize that the market for interventions in ADB's DMCs is highly differentiated. Each country will need a response tailored to its specific circumstances. ADB will need to combine high-level awareness building with municipality-specific capacity building that focuses on improved governance, financial reporting, procurement standards, and accountability. The experience of the International Finance Corporation and the EBRD with subnational borrowers suggests that successful long-term outcomes require the provision of TA and capital budgeting support to municipalities at an early stage of project design. This must include an understanding of the governance structure of participating countries.

Coordination with Stakeholder Partners on Cross-Sectoral Issues E.

- Coordination with stakeholders and partners is critical because of the complex, multi-dimensional nature of urban development and increasing resource needs in an era of constrained fiscal budgets. If ADB is to respond to diverse stakeholder interests and promote integrated planning across sectors, it needs to coordinate these interests early in the process to make the most efficient use of resources and to ensure sustainable long-term outcomes. No project can be successful without the participation and commitment of the concerned communities and other stakeholders. ADB has recognized this, and the number of other development partners and private sector investors engaged in ADB operations dealing with the provision of urban-related services increased during the evaluation period.
- In many DMCs, the government leads a coordination body that supports strategy development, develops financing options, and carries out planning and coordination. ADB and its development partners collaborate on a bilateral and individual project basis to promote integrated urban services development. In recent years, DMC governments have become more focused on sustainable urban development, green and livable cities, and air, water and soil pollution issues. This aligns them closely with ADB CPSs and with the priority ADB now gives to climate change issues. Planning ministries or commissions and ADB resident missions are well-positioned to coordinate and lead the development of national urban livability frameworks. Strengthening this role would enhance program coherence and leverage synergies across partners and sectors.

- 104. ADB's support for making cities livable is largely consistent with the goals of DMC governments and other development partners. In Georgia, Tajikistan, and Uzbekistan, for example, extensive discussions were held with development partners to ensure national sectoral and livable cities initiatives are aligned with donor coordination platforms. In a number of cases, ADB has led the coordination with other development partners and donors by supporting a partnership framework agreement and providing an effective platform (Box 6).
- Evidence from ADB's project experience demonstrates that urban livability interventions require coordinated engagement across multiple levels of government. While ADB has primarily focused on sovereign lending through national agencies, more nuanced approaches to subnational engagement are now needed, especially in countries where local governments have urban development mandates. However, the evaluation identified several governance barriers affecting project sustainability, including (i) limited fiscal capacity of many local governments; (ii) assignment of responsibilities between national and subnational entities; (iii) delayed asset transfer to operating entities; and (iv) weak regulatory frameworks overseeing the many levels of government involved in municipal service delivery.

Box 6: ADB's Stakeholder Partnership Coordination and Engagement

Armenia. Under Armenia's Seismic Safety Improvement Program, ADB's technical support was aligned with the programs of its development partners, including the United Nations Children's Fund (UNICEF), the United Nations Development Programme, and the World Bank.

Bangladesh. ADB, Japan, and the World Bank have a partnership framework agreement to support water supply projects and local consultative group mechanisms for different sectors.

India. As part of the Sustainable Urban Development and Service Delivery Program, ADB worked with the World Bank, the Japan International Cooperation Agency, the New Development Bank, Agence Française de Développement (AFD), German development cooperation through KfW and other bilateral agencies on national and subnational policies and guidelines for water supply and sanitation, housing policies and programs. ADB worked with the same partners to establish policies and guidelines for performance-based central fiscal transfers to urban local bodies.

Kyrgyz Republic. ADB co-chaired the Development Partners Coordination Council under the Building Resilience with Active Countercyclical Expenditures Program. This has proved an effective platform to provide analysis, financing, and policy advice to Kyrgyz authorities.

Uzbekistan. ADB's operational priority 4 (OP4) investments were largely aligned with the goals of the government and other development partners and coordinated on a sectoral and geographic basis. A donor coordination country platform was established in 2022. The water resource management and water supply and sanitation working group was led by the Ministry of Water Resources and the Ministry of Construction and Services and co-chaired by ADB and Swiss Development Aid.

- 106. Collaboration and cofinancing arrangements with other MDBs, bilateral donors, and commercial banks remained confined within sectoral boundaries and the potential to achieve holistic livable city outcomes through complementary cross-sectoral interventions was largely unrealized. Stakeholder partner coordination was mainly through cofinancing arrangements with other MDB, bilateral donors, and commercial banks.
- ADB has routinely coordinated with cofinancing partners on financing arrangements, project implementation, and complementary activities, but again this has remained largely within sectoral boundaries, even when there may have been scope for jointly pursuing supporting

activities and outcomes at the cross-sectoral level. However, in some cases, and especially in public sector management operations, ADB's partnerships with its stakeholders extended beyond individual projects to cross-sectoral support for broader policy, regulatory, or capacity building.

In the Philippines, the Local Governance Reform Project provided institutional development and policy support for property valuation. 32 ADB coordinated with the World Bank on public financial management reforms and on revenue reforms, including service delivery coordination among LGUs. Also in the Philippines, ADB collaborated with several international organizations while implementing the Facilitating Youth School-to-Work Transition Program.³³ It worked with OECD to develop a youth employment and skills report, with the World Association of Public Employment Services to support capacity development of public employment service offices, and with the International Labour Organization to develop industry road maps. Under Mongolia's Ulaanbaatar Air Quality Improvement Program, ³⁴ ADB enabled many donor initiatives, including support by the Japan International Cooperation Agency to build capacity for air quality monitoring at the municipality of Ulaanbaatar and support by the German development cooperation to the Ministry of Energy for energy planning and efficiency standards for the building industry.

109. The evaluation found that stakeholder engagement practices varied across the portfolio. With some exceptions, including Georgia, 35 engagement in most cases was procedural, and limited mechanisms were put in place to allow for meaningful involvement by vulnerable groups. civil society organizations, and local enterprises in project design and implementation. This was despite the fact that projects with robust participatory mechanisms are usually more aligned with community priorities and more successful in achieving sustained post-implementation outcomes. The Urban Climate Change Resilience Trust Fund's experience with community-led planning processes in secondary cities offers valuable lessons for mainstreaming participatory approaches. These initiatives demonstrated that early and sustained stakeholder engagement, while initially resource-intensive, ended up improving project design, reducing implementation delays, and enhancing community ownership.

Behavioral change is needed if international collaboration among multilateral and bilateral institutions and stakeholder partner coordination are to be strengthened at a cross-sectoral level and if livable cities operations are to be focused on achieving outcomes. TA, funding, and knowledge exchange have to be harmonized if the attention is to be shifted from project outputs to achieving outcomes. Cities will need to adapt global frameworks, including the Sustainable Development Goals, to local contexts through more holistic water, energy, and food systems planning and implementation.

³² ADB. 2020. Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of the Philippines for the Local Governance Reform Project.

³³ ADB, 2017, Report and Recommendation of the President to the Board of Directors: Proposed Programmatic Approach and Policy-Based Loan for Subprogram 1 to the Republic of the Philippines for the Facilitating Youth School-to-Work Transition Program.

³⁴ ADB. 2018. Report and Recommendation of the President to the Board of Directors: Proposed Policy-Based Loan to Mongolia for the Ulaanbaatar Air Quality Improvement Program.

³⁵ A National Urban Assessment was prepared in 2015–2016 in consultation with all stakeholders. A TA project (ADB. 2019. Technical Assistance to Georgia for Preparing Integrated Solutions for Livable Cities) was processed in 2016.

CHAPTER 4

Conclusions and Recommendations

- 111. ADB has tried to incorporate the livable city agenda into its urban operations through various strategic approaches and a portfolio that is generally aligned with DMC needs. This portfolio focused on infrastructure-related, sectoral support and responded to evolving urbanization challenges. The evaluation's review of country partnership strategies (CPSs) found a marked improvement in more recent documents in integrating livable cities objectives, with an increased emphasis on the reliability and sustainability of urban services, but less on quality and affordability. Although CPSs generally supported making cities more livable, they were not informed by rigorous urban sector diagnostics. Overall, ADB investments were aligned with country priorities and reflected the different requirements and needs of DMCs. In DMCs that were finding it difficult to provide basic services and wanted to encourage more access for low-income communities, ADB support focused on infrastructure, the more efficient delivery of services, and improved operation and maintenance (O&M). However, a number of DMCs have found it hard to sustain outcomes after project completion.
- 112. ADB's support was internally coherent in fostering sectoral engagements, sequential investments, and knowledge support through TA. However, ADB faced difficulties in adopting a thematic approach in its urban operations and in collaborating across sector groups, despite the "One ADB" approach and the new operating model (NOM). Staff received few incentives to collaborate beyond their organizational silos and this constrained knowledge sharing across departments and sectors. There are capacity gaps within ADB, particularly in emerging areas critical for integrated urban development, such as capital investment and climate resilience planning, affordable housing, municipal finance and digital urban management.
- 113. ADB's support for livable cities has been unable to maximize the benefits of incorporating cross-sectoral approaches, supporting integrated urban planning, or leveraging sovereign operations to attract increased NSO financial resources. More capacity building and training is needed to strengthen ADB's cross-sectoral expertise, particularly in increasing awareness of the value addition of integrated urban approaches and skills. ADB needs to use good practice cases as learning materials and to improve outreach so ADB can make the case for urban livability.
- 114. ADB's support for the livable cities' agenda is normally provided through central governments, an approach that reflects its customary lending, on-lending, and guarantee arrangements. ADB has engaged with cities and local government, but direct lending to them has not been the norm. ADB financing for livable cities usually takes the form of a loan to the central government with a sovereign guarantee. The proceeds of the loan are then on lent to local authorities or their enterprises with a sovereign counter-guarantee or as a grant or both. If ADB were to lend to and work directly with municipalities, this would localize the management of urban development projects, transfer knowledge, and free up the fiscal resources of the national government. However, many local governments are legally prohibited from foreign borrowing because of their lack of experience in managing foreign currency risk and their variable capacity. Furthermore, frequent changes in municipal leadership and policies can disrupt progress. These

risks must be recognized and resolved by adopting realistic timelines and sequencing that match local conditions. In some cases, ADB's sovereign operations have supported broader policy, regulation, and capacity building at the subnational level, but ADB has not yet developed substantive credit or lending relationships with individual cities. To implement the livable cities agenda more effectively, ADB needs to engage in policy reform that would facilitate direct subsovereign borrowing, including in local currencies, for mature domestic capital markets. This reinforces the need for ADB to support capital market development and to work with DMCs on appropriate risk mitigation measures. Strengthening such upstream activities will require policy-based lending, sector development programs, financial intermediation loans, and TA under the One ADB approach. While ADB will continue to engage through national governments initially, it also needs to move toward developing lending relationships with municipalities wherever feasible.

- 115. Although some ADB operations in support of operational priority 4 (OP4) of Strategy 2030 have involved cofinancing arrangements with development partners and the banking sector, this has usually taken place within sectoral boundaries. Cross-sectoral collaboration has been limited, with engagement often being procedural rather than substantive. But this did not adequately include mechanisms for the meaningful involvement of vulnerable groups, civil society organizations, and local enterprises in project design and implementation, although projects with robust participatory mechanisms are usually better aligned with community priorities and tend to have more sustained post-implementation outcomes. Early stakeholder coordination often leads to more efficient use of resources and results in more sustainable long-term outcomes.
- 116. In the absence of a precise definition and tagging methodology for operations to enhance livable cities, the evaluation reviewed ADB projects that had contributed to OP4, mainly based on the projects tagged as such. The focus was on the adequacy and quality of the indicators used to achieve the objectives of livable cities. The evaluation found that the indicators used in project design and monitoring frameworks (DMF) and CPS results frameworks had evolved as ADB improved its alignment with Strategy 2030, and the operational priorities were progressively approved. CPSs have largely internalized the livable cities objectives in their results frameworks, and these were aligned with the current corporate results framework (CRF). However, many project DMF indicators did not fully capture all OP4 dimensions, particularly for cross-sectoral and outcome-focused results. This reduced their effectiveness, and the indicators were unable to support a convincing assessment of OP4 engagement.
- 117. The evaluation has the following recommendations for ADB.
- Recommendation 1. Undertake stronger diagnostics to clearly prioritize the aspect 118. of livability relevant to the local context to facilitate more targeted and measurable interventions, and combine infrastructure investments with advisory and capacity support at national and subnational levels. Such support should take the form of comprehensive urban assessments and planning, and capital investment programming. This should involve the more explicit incorporation of a systemic approach to climate resilience in developing future project pipelines, supported by robust analysis and early, sustained, and participatory stakeholder engagement practices. ADB will need to improve the preparation of investment programs so they can achieve clearly prioritized livable city outcomes. 36 Capacity building at national and

³⁶ Livable cities outcomes have measurable indicators to track the development of efficient, sustainable, resilient and equitable cities with the livelihoods of citizens improved. Given the scope of urban interventions, these outcomes may involve water supply, air quality, wastewater management, solid waste management, energy supply, public

subnational levels will be essential and this should aim to improve: (i) urban planning systems by building institutional capacity for evidence-based planning and land use regulation; (ii) increased support for stakeholder engagement; and (iii) service delivery systems by strengthening institutional frameworks for the sustainable delivery of water, sanitation, waste, affordable and social housing, improvements to informal settlements, and transport services. The approach should align upstream diagnostics with downstream project and TA pipelines.

- Recommendation 2. Strengthen ADB's monitoring and evaluation systems to track project outcomes that promote livability, closely align project design and monitoring framework with country partnership strategy results frameworks, and support developing member countries to build and strengthen their own monitoring, reporting, and verification systems. ADB will need to: (i) develop outcome-focused indicators that reflect core livability dimensions, e.g., access to services, public space, mobility, safety, climate resilience, and affordability; (ii) align project DMFs more closely with CPS results frameworks; (iii) update project DMF templates to require sector-specific, livability-relevant indicators that are aligned with the CRF; (iv) encourage disaggregated data collection—e.g., by gender, income and location—so inclusive outcomes can be monitored; (v) ensure all indicators are specific, measurable, achievable, reliable and timebound; (vi) use monitoring and evaluation data to support proposals for climate finance and investments that generate regional and global public goods; and (vii) assess economic impact through periodic updates of urban diagnostics, including ex-ante economic assessments of infrastructure projects. ADB should ensure the proper integration of livability priorities into all relevant country strategies, project designs, and monitoring frameworks.
- Recommendation 3. Tailor ADB's organizational arrangements to support the 120. attainment of cross-sectoral priorities and institutionalize incentive mechanisms to facilitate credit sharing, establish interdepartmental project teams, enhance staff capacities through internal capacity development programs and partnership mechanisms, improve learning approaches, and strategically realign the design and deployment of technical assistance. ADB will need to: (i) institutionalize incentive mechanisms to allow credit to be shared between ADB regional departments, sector and thematic groups, and between sovereign and NSO project teams; (ii) encourage the establishment of interdepartmental task forces or integrated project teams; (iii) enhance ADB staff capacities and skills, including in resident missions, and strengthen the capacity of government counterparts to ensure integration across sectors, and fill gaps in integrated cross-sectoral urban planning, capital investment programming, municipal finance, and digital solutions for urban management; (iv) improve learning approaches, including carrying out regular reviews of successful multisectoral projects, preparing knowledge products, and establishing mechanisms for urban innovation and integrated policy frameworks: and (v) strategically realign the design and deployment of TA to foster crosssectoral and thematic integration. These activities will need to be supported by capital resources. sustained strengthening of technical staffing, and iterative learning loops. ADB's institutional arrangements should embed a long-term perspective to ensure that early market-building efforts translate into a robust downstream pipeline and stronger portfolio outcomes.
- Recommendation 4. Scale up ADB's engagement with subnational entities through direct lending to local government units in local currencies, underpinned by robust upstream technical assistance focused on strengthening municipal governance,

transportation, mobility and walkability, green space accessibility, public health and education services, leisure, disaster preparedness and resilience, safety, and the circular economy. These outcomes are tailored to the project scope and local context. It is not necessary for each project to cover all outcomes. Typical outcomes often relate to a high quality of life, a sustainable environment, and a competitive economy.

accelerating regulatory reform, enhancing financial management capacities, and adopting a differentiated approach for each country. ADB needs to recognize the diversity among DMC municipalities in both their size and institutional capacity. ADB will need to support: (i) governance and regulatory reform to clarify mandates and enhance inter-agency coordination, decision-making processes, and accountability at the city level; (ii) improvements to municipal financial management capacity by supporting cities to carry out transparent budgeting, financial reporting, access to capital markets and procurement; (iii) enhancements to local revenue generation and creditworthiness assessments to help cities diversify income streams and increase their ability to incur debt; (iv) capacity building for project identification, capital investment planning, value for money assessments, and structuring for private sector participation, including PPP and long-term contracting to strengthen investor confidence; and (v) digital systems, including financial management information systems and e-governance platforms.

Appendixes

Appendix 1: Theory of Change

- 1. The evaluation was based on an explicit theory of change (TOC), highlighting the major expected outputs and outcomes corresponding to the three strategic pillars of operational priority 4 (OP4). The TOC was based on the framework articulated in the Asian Development Bank (ADB) operational plan for operational priority 4 (OP4) and the urban sector directional guide. The activities (based on differing DMC needs), outputs and intermediate outcomes leading to these major outcomes were derived from the operational approaches of OP4. They are driven by ADB sovereign and nonsovereign financing, and by technical assistance (TA) in the sectors and thematic areas listed in the OP4 operational plan and based on the guiding principles laid down in the urban sector directional guide. The overall impact will be to make Asian cities more livable.
- 2. At the institutional level, the evaluation examined ADB's organizational arrangements for the delivery of ADB support to make cities livable in its developing member countries (DMCs). External drivers, which play a key role in urban development, will provide important context and information on binding constraints, such as climate change, and technological developments. The assumptions behind the TOC include complementarity with development partners, interagency and intergovernmental cooperation and coordination, and a commitment to goals of sustainable and resilient urbanization.
- 3. The evaluation's overarching question was: how well positioned and responsive is ADB in delivering effective support for improving urban livability and resilience in Asia and the Pacific? The evaluation also asked three subsidiary questions. (i) How well were ADB's operational plans and guidance aligned with developing member country (DMC) priorities and to what extent was the design of country partnership strategies (CPSs) influenced by this guidance and the underlying TOC? (ii) How internally and externally coherent were ADB's interventions? (iii) How well organized is ADB in delivering livable-city-related operations and to what extent are the project design and monitoring framework (DMF) indicators and CPS results frameworks adequate in tracking progress towards the objective of making cities livable and resilient? The evaluation focused on issues of relevance and coherence and lessons learned, as it was too early for a comprehensive assessment of effectiveness. It is also too early to see definitive results from ADB's new operating model (NOM).
- 4. One challenge for the evaluation was pinning down ADB's definition of livability. Most of the OP4 investments approved after the approval of OP4 operational plan in 2019 have not yet been completed or validated. Given the limited evaluative evidence from the validation reports published during the evaluation period, the assessment was restricted to the relevance and design aspects of the portfolio, the extent to which the output and outcome indicators were aligned within the TOC, and how they were measured and monitored.

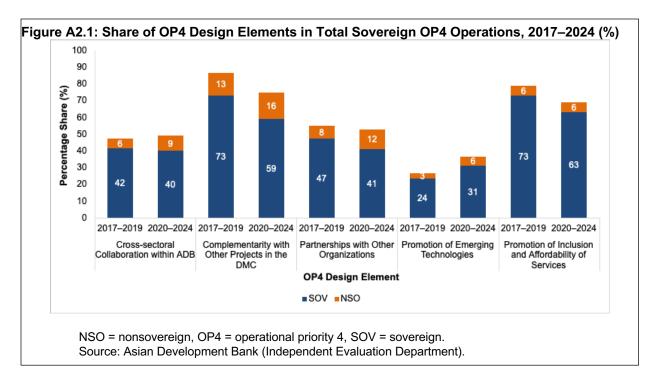
¹ ADB. 2022. Strategy 2030 Urban Sector Directional Guide. Figure 13 (p. 25); ADB. 2019. Strategy 2030 Operational Plan for Priority 4: Making Cities More Livable (2019—2024). p. 8.

Theory of Change of the Operational Plan for Operational Priority 4 Increased livability through improvements in various dimensions of livability in cities in Asia and the Pacific Impact External drivers Outcomes Improved urban services (in terms of Strengthened urban planning and financial Improved urban environment, climate coverage, quality, efficiency and reliability) sustainability of cities; greater private resilience and disaster management of DMC priorities sector participation cities Macroeconomic policies Regulatory, legal, and institutional Outputs Performance of urban and social service Urban environments improved providers improved. environment improved for more inclusive Climate change planning Capacity of cities for climate resilience Provision of urban infrastructure and and disaster risk management improved Disasters from services improved. Reforms and policies implemented for natural hazards improved financial sustainability and pandemics Global agreements Activities Building and strengthening urban Support for inclusive, participatory and Support for environmental improvement FCAS issues (based on differing institutions. integrated urban planning. projects, including promoting energy Support for policy reforms, Capacity Support for cities to mobilize funding for efficiency, adopting nature-based needs in DMCs) Vested interests development, knowledge support and infrastructure and services including solutions, circular economy practices, and piloting of latest technologies. through land-based financing and public risk-sensitive land use management. Technological Support for infrastructure and pro-poor private partnerships Support for resilience of cities, disaster advances inclusive provision of services (water Support for urban governance in DMCs. preparedness and emergency response including institutional adjustments needed plans, Nationally Determined supply, waste management, energy Contributions at the level of cities supply, public mass transport) to address the livable cities agenda Sovereign loans and grants Nonsovereign investments and advisory Technical assistance (TA), financing Inputs services partnerships (cofinancing contributions to projects and trust funds) and knowledge partnerships Sector and thematic groups, PSOD, Mainstreamed processes and practices Organizational ADB corporate and country strategies (OP4 operational plans, CPSs, and other arrangements OMDP, regional departments and resident (e.g., gender, climate, environment) relevant operational priorities). missions collaborating and coordinating Seven guiding principles and 18 with each other development solutions as discussed in **USDG**

ADB=Asian Development Bank, CPS=country partnership strategy, DMC=developing member countries, FCAS=fragile and conflict-affected situations and small island states. OMDP= Markets Development and Public-Private Partnership, PSOD= Private Sector Operations Department, USDG=Urban Sector Directional Guide.

Appendix 2: Portfolio Summary

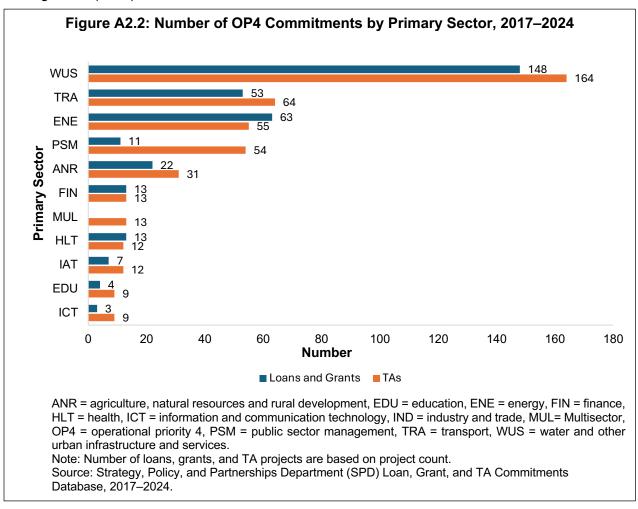
- 1. The operational plan for making cities more livable, operational policy 4 of Strategy 2030 and its theory of change (TOC), were appropriately positioned to address urban challenges in the Asia and Pacific region. The three pillars of the operational plan all play important roles.
- 2. Pillar 1 (improving the coverage, quality, efficiency, and reliability of services in urban areas) predominates in the design of operations and has been the main focus of operational priority 4 (OP4) projects, accounting for 83% of operations during the pre-OP4 period (2017–2019), increasing to 91% in the period after the operational plan for OP4 was adopted (2020–2024). In nonsovereign operations (NSO), pillar 1 operations increased from 10% to 22% over the same time period.
- 3. Pillar 2 (strengthening urban planning and the financial sustainability of cities) is the key to enhanced, efficient, inclusive, and affordable provision of services. It is also essential for sustainable urbanization. Activities under this pillar include helping ensure the policy and regulatory environment is established and implemented effectively in order to improve the urban environment and climate resilience. Better governance and planning have to be in place to enable and encourage private sector participation in urban development and improve livability in cities. In the future, the operational plan could incorporate the elements of climate change and mitigation, private sector participation, regional cooperation and integration, and digitalization to align with the focus areas emphasized in the midterm review of Strategy 2030. The adoption of the OP4 operational plan made no difference to pillar 2 operations, which had a 59% share in both 2017–2019 and 2020–2024.
- 4. Pillar 3 (improving the urban environment, and climate and disaster resilience) operations increased from 66% of OP4 operations in 2017–2019 to 71% in 2020–2024 (a gradual increase that was found in both sovereign and sovereign operations). Of the 337 OP4 projects, 12 had no OP4 pillars.
- 5. In terms of their design elements, most OP4 projects complemented other projects in the developing member countries (DMC), which were funded by either the government or other development partners. The share of such projects reached 87% during 2017–2019 but dropped to 75% in 2020–2024. A similar trend was observed for promotion of inclusion and affordability of services: 79% in 2017–2019 but 69% in 2020–2024. The share of operations that featured partnerships with other organizations decreased slightly over the two periods, from 55% to 53%. The share of NSO increased by 4 percentage points over the two periods, from 8% to 12%. Operations that featured cross-sectoral collaboration within ADB also saw minimal changes within the two periods, from 48% to 49%, and from 6% to 9% in the share of NSO. Although it was coming from a low level, promotion of emerging technologies, such as the internet of things and geographic information systems (GIS), was the only design element with a noticeable increase between the two periods, from 27% to 37%, with an increase of 3 percentage points in the NSO share. However, none of the five design elements appeared in 17 out of the 337 OP4.



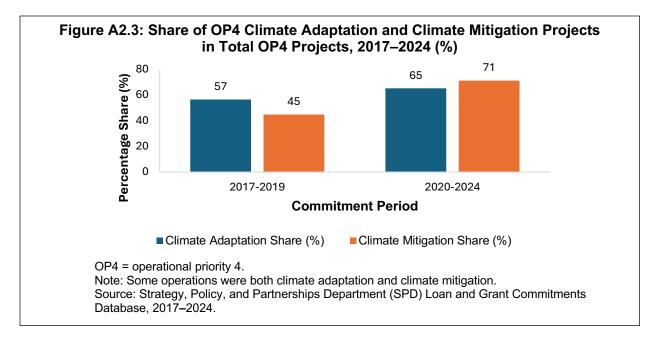
- 6. Commitments in some transport subsectors, such as multimodal logistics and urban public transport were all tagged OP4, much like all the water and other urban infrastructure and services (WUS) commitments. Urban public transport made up more than half of the OP4 financing of the transport sector for the entire evaluation period (\$5.9 billion). Commitments to urban public transport did not change much after the adoption of the OP4 plan. By contrast, the average financial commitments for some subsectors in the transport and WUS sectors was notably higher after adoption of the OP4 plan. Although commitments to urban housing were low, they increased by more than five times since the adoption of the OP4 plan. The average amount of urban policy, institutional, and capacity development commitments in the last 5 years was almost four times more than the average in the pre-OP4 years, a trend that appears to be continuing. Multimodal logistics averaged \$65 million in the pre-OP4 period, an amount that almost tripled after the adoption of the OP4 plan. Urban sanitation commitments averaged about \$97 million a year during 2017-2019, and this doubled to \$193 million during 2020-2024. While commitments for urban sewerage dipped between the two periods, they have gradually been picking up in recent vears.
- 7. Sustainable urbanization requires that the growing energy needs of cities are met with minimal impact on the environment. Energy strategies to ensure this include integration of renewable energy into the electricity infrastructure, improving energy efficiency by adopting efficient district heating and cooling systems through use of renewable energy or waste heat, construction of new buildings that are energy-efficient through green building standards or by upgrading existing buildings with energy-efficient technologies, and promoting efficient public transit and non-motorized transport. Implementation of such strategies will require enabling policy and regulatory frameworks, urban planning for compact mixed-use development, reductions in long commutes, and incorporating green spaces to reduce the urban heat island effect. Financial incentives or subsidies from the government will be needed to produce renewable energy and to carry energy-efficiency improvement measures. ADB commitments over the evaluation period were in line with these strategies, since 75% of ADB energy commitments and almost 40% of ADB's total energy sector amount were devoted to energy efficiency and conservation, renewable

energy generation, energy sector development and institutional reform.

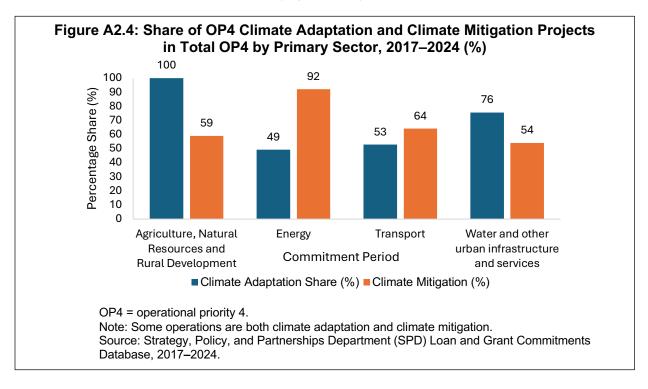
Technical assistance (TA) is an important part of ADB's support to its DMCs, contributing to project preparatory work, capacity development of DMC institutions to ensure efficient service delivery, and promotion of low-carbon urbanization and urban climate resilience. TA also provides knowledge support by supporting country studies, sector assessments, and policy development. In line with the ADB-wide trend, the TA allocation for policy advisory and research and development support for OP4 operations was small (Figure A2). The decrease in the funding for project preparation is likely to be compensated for by the introduction of newer modalities such as the project readiness facility. The adoption of the OP4 plan does not appear to have had a positive impact on the TA provided to OP4 operations. The allocation of TA to particular sectors was in line with the financial commitments in the form of loans and grants to those sectors (Figure A2). TA operations were concentrated in four sectors: WUS, transport, energy, and public sector management (PSM).



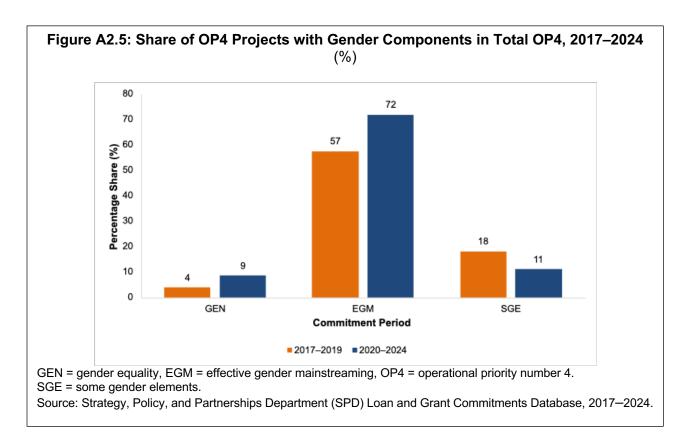
9. Climate adaptation and climate mitigation each accounted for over 60% of the total OP4 portfolio during the period 2017–2024. The share of projects tagged for climate change adaptation and climate mitigation both increased in the period after the adoption of the OP4 operational plan in 2019, from 57% to 65% for climate adaptation and from 45% to 71% for climate mitigation (Figure A2.3).



10. ADB placed more emphasis on climate mitigation than on climate adaptation in energy and transport operations. In agriculture, natural resources and rural development, and WUS operations, the emphasis was reversed. (Figure A2.4).



11. OP4 operations with gender components comprised about 87% of the total OP4 portfolio over the entire evaluation period. The share increased after the adoption of the OP4 plan in 2019, from 80% in 2017–2019 to 91% in 2020–2024. Projects tagged gender equity increased from 4% to 9% and effective gender mainstreaming from 57% to 72%. Some gender elements decreased from 18% to 11% (Figure A2.5).



12. The influence of the operational plan and its TOC was evident in the design of WUS projects in Bangladesh and India where the designs focused not just on building water supply and sanitation infrastructure, but also on capacity development for operation and maintenance (O&M). The projects generally included components for strengthening the capacity of municipal governments in financial and project management and helping improve municipal finances and setting up tariff collection systems, along with tariff and O&M plans. The project design also helped build community awareness and encourage behavior change. This was critical for the sanitation and solid waste management components.

Linked Document

- Staff Survey
 OP4-Tagged Loans and Grants, 2017–2024
 OP4-Tagged Interventions at Nonsovereign State-Owned Enterprises