

SECTOR ASSESSMENT (SUMMARY): WATER AND OTHER URBAN INFRASTRUCTURE AND SERVICES¹

Sector Road Map

1. Sector Performance, Problems, and Opportunities

1. **Sector performance and key achievements.** Cambodia's population was estimated at about 15.2 million in 2016, spread across 25 provinces, 26 cities, and numerous district towns.² The rural population comprises almost 80% of the total population. Although the urbanization rate in Cambodia is substantially lower than the worldwide figure of 50%, rural–urban migration has accelerated noticeably, posing significant challenges to the government. The rate of growth of the urban population (2.6% per year during 2004–2013) far exceeds rural population growth, and 50% of the nation's gross domestic product is produced in urban areas. While urban development and urbanization can be viewed as an indicator of development progress, the implications of higher density and spatial concentration—traffic congestion, air and water pollution, social and environmental problems associated with dense living, increased income disparities, land degradation, and depletion of natural resources—need to be addressed urgently.

2. With an increasingly urban economy, urban services contribute to environmentally sustainable and inclusive growth by providing basic infrastructure for businesses and households, creating jobs, safeguarding the surrounding environment and ecosystem, and reducing exposure to flooding and other extreme events. They also contribute to the health and welfare of Cambodia's people. Strong urban–rural linkages mean that developments in the towns have significant spillover effects on surrounding peri-urban and rural areas where poverty is more acute.

3. Urban environmental infrastructure and services are significantly underdeveloped in Cambodia. More than 75% of households in Cambodia's urban areas (excluding Phnom Penh) do not have access to solid waste services. Combined drainage and sewer networks with wastewater management are partially in place in Phnom Penh, Siemreap, Battambang, and Preah Sihanouk, but coverage remains low. Where no sanitation networks exist, wastewater is discharged directly to the subsoil or via open drainage channels to surface water drains. Most urban areas are poorly equipped to deal with flooding, which occurs frequently and is likely to worsen with climate change. Catastrophic flooding in 2011, and again in 2013, was linked to high intensity and prolonged rainfall.

4. **Core problem and key issues.** The core problem in the sector is inadequate delivery of urban environmental services. This results in inadequate access to urban services, damage and loss of natural resources, and low resilience of urban areas to climate change and related disasters.

5. Limited financial resources and revenue streams for urban infrastructure and services are a key constraint, affecting capital investment and operation and maintenance of assets. Private sector investment in these urban services is unlikely, given the public nature of the assets, their limited revenue potential, and limited capacity of the private sector. Raising debt to finance urban infrastructure by subnational administrations is not feasible because of lack of creditworthiness, onerous lending terms, and lack of local revenue streams to service the debt. Public sector spending is often constrained by budgetary limits. In most municipalities, cost recovery through user charges, fees, and taxes is very low, resulting in inadequate operations and poor delivery of

¹ This summary assessment focuses on urban environmental infrastructure, which broadly includes urban roads and drainage, wastewater collection and treatment, flood protection, and solid waste management.

² Government of Cambodia. 2014. *Cambodia Socio-Economic Survey 2014*. Phnom Penh.

urban services. Rapid urbanization and migration to urban areas will widen the supply–demand gap for urban services.

6. Inadequate management of public investments is also a key constraint. This is partly related to limited financial resources and revenue streams, but also to lack of capacity (particularly of qualified staff) for strategic and investment planning, operations and maintenance, and project management, especially at the provincial and sub-provincial levels.

7. Cambodia does not have a holistic strategy for integrated urban development. Lack of convergence between government agencies, resulting from limited coordination and in some cases overlapping responsibilities, mean that land-use planning is the exception rather than the rule. With the exception of Battambang, where the preparation and approval of the master plan took 11 years, none of Cambodia's towns have a master plan or a land use plan. Outside Phnom Penh, technical capacity for urban planning is generally low.

8. **Opportunities for further development for urban infrastructure and services.** The challenges are immense, given the accelerating rate of urbanization in Cambodia, requiring holistic interventions. Three crosscutting themes from the country partnership strategy for Cambodia, 2014–2018 are mainstreamed as part of the Asian Development Bank (ADB) projects: (i) strengthening rural–urban–regional links, (ii) climate change, and (iii) inclusive development.³ By strengthening urban–rural–regional links, urban development can promote greater agricultural productivity through improved connectivity and access to markets and services. Climate change adaption and mitigation measures are increasingly mainstreamed across projects, while inclusive development is promoted by providing access to basic urban services, and in some cases targeted subsidies, to poor and vulnerable groups.

2. Government's Sector Strategy

9. Phase III of Cambodia's Rectangular Strategy on Growth, Employment, Equity and Efficiency provides the overall framework for the policies to guide long-term sustainable development with a focus on good governance, peace, political stability, social order, macroeconomic stability, environmental sustainability, partnership, and regional integration.⁴ The National Strategic Development Plan, 2014–2018 further details the rectangular strategy.⁵ For the urban sector, key priorities identified in the plan include (i) the preparation of a master plan for urban infrastructure development; (ii) ensuring environmental sustainability through consistency across land management, urban planning, housing and construction policy, and legal frameworks; (iii) laws related to land management, urbanization, and construction; (iv) developing a national strategy on the development of municipal and urban areas; (v) the installation of solid and liquid waste management systems; and (vi) fire prevention and firefighting systems.

10. Key legislation on urban development includes (i) the Organic Law, 2008, which provides direction for decentralized service delivery at the subnational level; (ii) the 2009 Policy on Sub-National Decentralization and De-concentration, which recognizes 26 municipalities as the backbone for future urban management; and (iii) the Law on Administrative Management of the Capital, Provinces, Municipalities, Districts and Khans, 2011. The 2003 National Policy on Water Supply and Sanitation calls for greater private sector participation, improved cost recovery, cross subsidies where necessary, autonomy of public utilities, and the establishment of a regulatory

³ ADB. 2014. *Country Partnership Strategy: Cambodia, 2014–2018*. Manila

⁴ Government of Cambodia. 2013. *"Rectangular Strategy" for Growth, Employment, Equity and Efficiency Phase III*. Phnom Penh.

⁵ Government of Cambodia. 2013. *"Rectangular Strategy" for Growth, Employment, Equity and Efficiency Phase III*. Phnom Penh; Government of Cambodia. 2014. *National Strategic Development Plan, 2014–2018*. Phnom Penh.

body. The 2011 National Policy on Spatial Planning sets out the degree of planning to be undertaken at different levels and identifies the importance of establishing a land law. The Industrial Development Policy (2015–2025) highlights the preparation of urban development plans for industrial centers in Preah Sihanouk, Koh Kong, Bavet, and Poipet; and a land use plan for Phnom Penh and surrounding areas. The need to develop opportunities for decent and productive jobs, in light of rapid urbanization and migration from the countryside to urban areas, is also recognized in the National Economic Policy (2015–2025).

3. ADB Sector Experience and Assistance Program

11. **Sector experience.** The strategic thrust of ADB's urban operations have been aligned with the government strategy and ADB's country partnership strategy, 2014–2018; Urban Development Sector Assessment, Strategy, and Road Map for Cambodia; and Urban Operational Plan (2012–2020).⁶ ADB's recent investments in urban infrastructure and services have been positioned to (i) improve connectivity and establish markets for agricultural production, and (ii) support the development of strategic economic development corridors, to enhance rural–urban–regional links in line with the first strategic pillar of the CPS, 2014–2018. ADB has also supported the development of urban management capacity to improve human development, in line with the second strategic pillar. As of April 2018, the Asian Development Bank (ADB) had approved 11 loans and grant projects amounting to \$305 million of loan grant investment in 12 provinces.

12. ADB's engagement in the urban sector has been focused on urban areas in the Tonle Sap basin and towns along strategic Greater Mekong Subregion (GMS) economic corridors. The projects in the Tonle Sap basin have been in line with ADB's broader strategic focus on the basin since 1998 because of its population, poverty, ecological, and environmental importance. Most of ADB's interventions in the Tonle Sap basin have focused on agriculture (livelihoods, food security, agricultural production); natural resources (biodiversity conservation); and rural development (rural roads, irrigation). Urban projects in the GMS economic corridors aim to maximize the benefits of increased trade and traffic flows to support wider economic growth in the region. The first (approved in 2012) and second (approved in 2015) GMS corridors towns projects focus on six towns (Battambang, Bavet, Neak Loeung, Poipet, Kampot, and Preah Sihanouk) in the GMS southern economic corridor.

13. Priority urban infrastructure investments have included wastewater treatment and management, flood protection, solid waste management, urban roads and drainage, public markets, and transport logistics. ADB's engagements to date have also emphasized urban planning and operation and maintenance (O&M) to underpin infrastructure investments. ADB has supported the development of a National Urban Development Strategy Framework and training modules for specific topics in urban management.

14. **Lessons learned.** Key lessons learned from completed or ongoing ADB-financed projects, particularly in the urban sector, are (i) a framework for urban development, combined with strong capacity, is key to improve the management of urban areas and ensure sustainable operations; (ii) political will, leadership, and vision are crucial in facilitating changes and improving the delivery of urban services; (iii) urban development is constrained by a lack of convergence and coordination across agencies and the absence of reliable data; and (iv) community and beneficiary participation greatly facilitates the achievement of project outcomes. At a project level, (i) capacity and start-up assistance for project management and on ADB procedures is crucial for

⁶ ADB. 2014. *Country Partnership Strategy: Cambodia, 2014–2018*. Manila; ADB. 2013. *Urban Operational Plan, 2012–2020*. Manila.

smooth implementation, (ii) financial cost recovery is critical for project sustainability, and (iii) land acquisition and resettlement must be done cautiously.

15. The Ministry of Public Works and Transport (MPWT) is responsible for urban infrastructure development, while service delivery and O&M fall under the provincial governments. While the MPWT is responsible for urban wastewater collection and treatment, the link to water supply is important to enhance long-term sustainability. From 2017, this component is being supported under ADB's urban water supply and sanitation projects, forging improved coordination and cooperation with the Ministry of Industry and Handicraft, which is responsible for urban water supply. This allows ADB's urban development projects to focus assistance to the MPWT on the key areas of urban roads and drainage, flood protection, and solid waste management, providing a greater impact on each of these areas.

16. **Strategic vision and future engagements.** In the near-term (2018–2020), ADB's pipeline of urban projects will continue to support key urban areas in the Tonle Sap basin, GMS economic corridor towns, and other key provincial towns. ADB's engagement in Phnom Penh, where urban environmental services are better financed (including by other development partners), is expected to be limited in the future. Focus on the key urban areas in the Tonle Sap basin and the GMS corridor towns remains relevant in continuing to maximize rural–urban synergies, targeting urban areas with high densities of poor people and low access to urban services, and ensuring environmental protection of the Tonle Sap lake. Focus on the GMS corridor towns agenda also remains important and timely, given the GMS countries' efforts to transform transport corridors into economic corridors to enhance regional economic development, in line with the GMS Strategic Framework (2012–2022).⁷ Synergies and coordination between urban development projects and agriculture and natural resources projects will continue, including on weather monitoring and forecasting initiatives around the lake. Focus on the economic corridor towns, including those in the central and coastal economic corridors, remains relevant.

17. Thematically, ADB's near-term engagement will continue to build on experience from recently concluded and ongoing projects and analytical work in key areas. Climate-resilient land use planning, through high-resolution geospatial data, will build on existing strategic development and medium-term investment plans in several ADB-supported towns. Recognizing the importance of nature-based solutions and building on recent analytical work across the GMS towns, opportunities to integrate green infrastructure aspects to enhance the sustainability of Cambodia's urban areas will be explored and harnessed. Master and land use planning will consider how to rehabilitate, expand, and connect natural areas and green spaces to enhance their flood protection and clean air functions. Crosscutting issues such as governance, climate change, social inclusiveness, and public–private partnerships will become increasingly integral features of the urban development program. Geospatial analysis will inform both programming in the sector and support and support of specific interventions.⁸

18. ADB's support will shift from providing a basic level of infrastructure and services to building institutional capacity and robust revenue streams with an increased focus in areas such as the decentralized delivery of urban services (balancing top–down and bottom–up urban planning); and skills development; and education, including information and communication technology and new technologies (e.g., drones, satellite data, and mobile applications).

⁷ ADB. 2011. *The Greater Mekong Subregion Economic Cooperation Program Strategic Framework 2012–2022*. Manila

⁸ This includes data from government sources such as the raw commune database, provincial gross domestic product profiles, the 2014 socioeconomic survey, inter-estatal population survey, demographic and health survey, and data on official development assistance from the Council for the Development of Cambodia.

Problem Tree for Water and Other Urban Infrastructure and Services

