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

Sector Road Map

1. Sector Performance, Problems, and Opportunities

1. Pakistan is the one of the most urbanized countries in central and west Asia, with average urban population growth of 4% per year since 1951, largely reflecting migration from rural areas. By 2030 about 60% of Pakistan’s population will be living in urban areas, with 12 large cities having a population of more than 1 million inhabitants. While economic activities in urban areas now produce 78% of national income (gross domestic product), according to 2005 estimates, 13% of the urban population lives in poverty. The urban infrastructure is aging and has not been expanded at the pace necessary to provide basic services or stimulate economic growth and create jobs. Housing and livability challenges—including lack of water supply and sanitation (WSS), solid waste management (SWM), and increased traffic congestion and air pollution—are key concerns. To become efficient centers for commerce and trade, the country’s metropolitan cities and the mega cities of Karachi and Lahore must significantly increase the quality and coverage of basic services, and ensure that growth provides a better life for residents. These constraints are issues for both large cities and medium-sized towns—Pakistan has 40 medium-sized towns with more than 100,000 people, where growth exceeds that of the 12 large cities. Urban infrastructure and capacity are even more limited in these medium-sized towns.

2. Poor infrastructure. Urban centers are overcrowded, and the lack of investment in infrastructure and management has resulted in low coverage and poor quality of services. During 2007–2013, the use of piped water decreased to 56% from 62%, and use of own-sources increased in urban areas. Non-revenue water ranges from 35% to 45% for most urban utilities. Although in-house sanitation has improved—97% of urban households have flushing latrines (footnote 4)—almost all (99%) of wastewater is still drained untreated into natural water-bodies. Access to SWM services is low; only 44% is collected by municipalities, and 8% privately, while 43% is not collected or selectively picked by scavengers.

3. Weak government capacity. Provision of urban services is spread across multiple agencies, which independently manage interdependent services (water, drainage and solid waste), particularly in large cities. Poor geographic designation of responsibilities has caused overlap of functions. Financial resources, managerial capacity, and incentives for sustainable service delivery are weak. Urban agencies rely on provincial transfers to meet financing needs. Service delivery is also hampered by mismatches between assigned functions and the fiscal and technical capacity of local agencies (city, districts, and tehsil administrations).

4. Lack of strategic planning. Service and manufacturing activities are concentrated in cities. A lack of strategic planning, combined with inappropriate regulation, weak planning standards and inefficient allocation has resulted in land shortages, haphazard growth, poor

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6 A tehsil is an administrative unit similar to a sub-district.
housing, a gap in services, pollution, proliferation of slums, and traffic congestion. Plans, where they exist, focus on investments, with limited attention to spatial planning and interaction with plans for other sectors that are crucial for sustainable growth of cities.

2. Government’s Sector Strategy

5. Pakistan’s Vision 2025 aims for higher growth in urban areas through adoption of new approaches to integrated urban planning, efficient provision of basic services and urban transport, and improved urban market operations and logistical facilities. The strategy envisages cities with upgraded infrastructure and connectivity for faster national growth and higher productivity. The government plans to make cities more efficient and competitive through urban infrastructure renewal, strengthening of the government’s policy making role, independent regulation of services, and enhancement of the private sector’s role in development of infrastructure and service provision.

6. Historically the private sector has had a limited role in providing urban municipal services, especially in major cities such as Karachi and Lahore. Municipalities are exploring using the private sector for SWM, and outsourcing various operation and maintenance components. Key constraints include inadequate contract design, a lack of private sector management capacity, and limited capacity of local government to manage contracts and regulate services. In addition, there are limited incentives in policies and regulations to encourage private sector investment. City and municipal authorities are seeking investment and technical support to address critical constraints, which requires improved legal and regulatory frameworks, stronger stakeholder involvement, incentives for private sector participation, institutional reforms for financial sustainability, public sector capacity development, and commercialization of services. Investment must be prioritized and integrated within an inclusive urban planning framework that benefits the entire urban population, including women and vulnerable groups living in slums.

3. ADB Sector Experience and Assistance Program

7. The Asian Development Bank (ADB) has financed 15 projects in the urban sector in Pakistan, totaling $628 million, specifically involving WSS and SWM. The only ongoing engagement is the Sindh Cities Improvement Investment Program. The country assistance program evaluation (CAPE) for Pakistan reviewed ADB urban investments and concluded that a major cause of weak performance in the sector was (i) inadequate assessment of risk (political, economic, and institutional); (ii) low capacity of urban agencies; and (iii) weak safeguard compliance. The CAPE emphasized the need for institutional policy reforms for devolution; revenue improvements; mobilization of additional financial resources in municipalities; and more innovative mechanisms for community engagement in project design, planning and implementation. Review of projects completed during 2004 and 2014 indicate that there were gaps in project designs, including: absence of staff incentives for professional management of urban services, weak capacity of devolved staff, lack of autonomy and overlapping responsibilities for city management, poor regulatory environment for service standards, limited private sector participation (PSP), and lack of planning to guide investments. A key recommendation from the strategic Pakistan urban assessment in 2011 and water sector task force report (footnote 5), is the need to place urban investments in a medium-term growth.

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context, with support from the government’s growth strategy. Limited fiscal space and budget constraints mean that expansion of investments will require PSP, including public–private partnerships (PPPs).

8. **Ongoing and planned ADB engagement in the urban sector supports the government’s priority for urban renewal, improved livelihoods and economic growth. With urban development decentralized, ADB will increase its national, provincial and city-level policy and planning work. This is necessary to diversify and expand the urban portfolio, which currently has a narrow geographic focus. ADB’s framework for engagement in the sector will be guided by ADB’s sectoral experience, the urban operational plan, water operational plan, and the sustainable transport initiative (STI) operational plan.**

9. **ADB investment is based on institutional, policy and regulatory reforms to ensure efficient water use and investment and financially sustainable delivery of urban services. Investments in water, sanitation and wastewater are expected to increase to 25% of the overall portfolio in 2020. The investments would be designed to promote green, competitive and inclusive city development as highlighted in the urban operational plan, supported by PPP and PSP. Climate and disaster resilience would be integrated in project designs. This will be achieved through integrated city development strategies that will guide urban investments. Plans for a Punjab Intermediate Cities Investment Improvement Project are ongoing and reflect these requirements, including a thorough assessment of sector institutions and the external economic and political risks that impact their performance. The Sindh Cities Improvement Investment Program focuses on improved service provision in 20 secondary cities of Sindh, in WSS, sewerage and SWM. This is being achieved in north Sindh using a corporate utility company, a prioritized investment program, and market-based delivery. These alternate delivery models are the only options for improving water governance given the absence of elected city governments, delayed decentralization of powers, and high staff turnover in local governments. Urban planning and the regulatory environment are also key elements. Financial sustainability is being addressed through business planning, tariff reforms, and performance benchmarking. The utility model will be expanded to other areas based on experiences in Sindh. Special attention will be paid to increasing climate change resilience in urban slums using trust fund resources and addressing safeguard issues before initiating any investment.**

10. **The World Bank has supported projects in small cities in Punjab through the Punjab Municipal Development Fund. It is also implementing a performance-based loan for governance improvement in the water and sanitation agencies of five major cities of Punjab. The Government of Japan has prepared master plans for transport and the water and sanitation sectors for Karachi and Lahore, and is supporting investments in Faisalabad. The United State Agency for International Development is supporting urban planning and water and sanitation infrastructure in selected cities of Khyber Pakhtunkhwa, Sindh and Federally Administered Tribal Areas.**

11. **Key sector activities.**

   i) **Urban planning, policies, and reforms.** ADB will support national, provincial and municipal governments to develop and implement urban policy and planning, including city development strategies and plans that incorporate economic growth, skill enhancement and

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13 ADB. 2010. *Sustainable Transport Initiative Operational Plan*. Manila
14 The utility model allows outsourcing of urban services as a self-sustaining business model; services are outsourced to an autonomous company guided by an independent board, and run by a professional management, with strong client orientation.
increased opportunities.

ii) **New institutional structures.** Introduction of new models for service delivery will address clarification of roles and responsibilities, financial management, skill development and corporate governance. Introduction of urban services corporations that are jointly owned by local governments is ongoing in Sindh, and will be followed by similar interventions in Punjab and Khyber Pakhtunkhwa.

iii) **Climate resilient infrastructure.** ADB will support climate resilient infrastructure investment in WSS and SWM in intermediate cities that benefits all genders. Integrated and consultative planning and design processes will ensure priority investments assist vulnerable populations, the poor and women. Options for efficient use of energy and environmentally sustainable development will be explored. Climate resilience will be built into the design of all investments;

iv) **Private sector participation.** ADB will support greater private sector participation through investment in infrastructure and as service operators. The initial focus will be on outsourcing, and introduction of design-build-operate contracts, and management contracts;

v) **Inclusive investments.** ADB will proactively consult with women and vulnerable groups to ensure they are not adversely affected by projects, and to address their concerns in design and operations. Projects will include features to increase participation by women, and including in services through incentive programs. Targeted subsidies will be introduced in tariffs for poor and slum areas of the city, with pilot programs to test the models in low income areas.

vi) **Urban transport.** ADB will support sustainable urban transport projects— including mass transit systems such as bus rapid transit—in Sindh, Punjab, and Khyber Pakhtunkhwa.\(^\text{15}\) Sustainable transport initiatives will support: (a) urban planning and policies through integration of urban transport and land use for transit-oriented development; (b) institutional and organizational reforms in urban transport authorities to improve management; (c) improved safety, speed and quality of transport service; (d) PPPs for mass transit operations; and (e) universal accessibility and affordability of mass transit.\(^\text{16}\) ADB will also consider developing selected wholesale market infrastructure with the support of private sector, in cities to improve market efficiency, price discovery, trade, and product quality. This will increase competition, reduce prices for consumers, and enable better returns and product value addition for producers.

12. **Intended sector outcomes.** ADB-supported sector outcomes will include improvements in urban infrastructure service delivery, urban planning, and municipal and financial resource management. Over the long term, the strategy envisages municipalities with well managed utilities providing cost-effective, quality, and continuous service for all segments of the society, including women and slum dwellers. Outcomes during 2015–2019 will focus on regulatory, management, and operational improvements for cost recovery. Balanced urban development will improve the living and business environment in larger and intermediate cities. ADB will draw on its capacity in infrastructure development and in catalyzing PPPs in service delivery. Multi-tranche financing facilities will be used where there is scope (including policies and commitment) supporting a long-term approach to urban revitalization and reform.

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\(^{15}\) The government has recently requested ADB to consider supporting mass transits projects in Lahore.

\(^{16}\) More details on ADB’s assistance in the urban transport sector are provided in paras. 6 and 17 of the Sector Assessment (Summary): Transport Sector (accessible from the list of linked documents in Appendix 2 of the CPS main text).
Problem Tree for Water and Other Urban Infrastructure and Services

**EFFECTS**

- Low Productivity/ Limited Economic Growth
- Urban Poverty
- Degraded Urban Environment (pollution, flooding, congestion)
- Poor Urban Living Conditions (water–borne diseases, poor public safety)
- Unequal Opportunities (unattractive urban landscape, slums, poorly-serviced housing, land shortage)

**PROBLEM**

- Poor Urban Infrastructure and Services
- Unmanaged Urbanization

**CAUSES**

- O&M financing gap
- Infrastructure financing gap
- Wasteful use of financial and natural resources
- Limited municipal tax base and revenue collection
- No performance based allocation for the cities
- Irregular provincial allocation
- No public accountability
- Limited private sector participation
- No strategic vision or plan at the city level
- Isolated and weak subsector planning and coordination
- Ineffective city governance
- Politicians unwilling to raise tariffs and decentralize control of revenue sources
- PPP regulation and frameworks with lots of gaps and applied in inappropriate ways
- Weak business process
- Non-transparent outsourcing
- No benchmarks for performance
- Short-term engineering solutions
- Unmaintained assets and inefficient and poor service in cities
- Data on urban indicators is not collected and monitored
- Overlapping mandates and unclear roles and responsibilities of institutions in cities and provinces
- Unqualified human resource
- Lack of a transport authority to organize, plan and manage many competing modes
- Lack of traffic demand management and parking policy
- No incentive policy to promote green public transport in cities, limit vehicle emissions and congestion

O&M = operation and maintenance, PPP = public-private partnership
## Sector Results Framework (Water and Other Urban Infrastructure and Services, 2015–2019)

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<thead>
<tr>
<th>Country Sector Outcomes</th>
<th>Country Sector Outputs</th>
<th>ADB Sector Operations</th>
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<tr>
<td>Outcomes with ADB Contribution</td>
<td>Indicators with Targets and Baselines</td>
<td>Outputs with ADB Contribution</td>
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<tr>
<td>Higher quality of life of urban residents</td>
<td>Proportion of children under five suffering from diarrhea reduced to 8% by 2019 from the current 9% (2013)</td>
<td>Water, solid waste, and sanitation infrastructure provided</td>
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<td>Under-5 mortality reduced to 72 per 1000 live births in 2019 from the current 89 (2013)</td>
<td>Urban infrastructure with improved quality of service</td>
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<td>Proportion of urban population with sustainable access to an improved drinking water source increased from 89% (2013) to 92% (2019)</td>
<td>Women provided equal access to improved water and sanitation services</td>
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<td>Proportion of urban population with access to improved sanitation facility increases from 72% (2013) to 80% (2019)</td>
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**ADB** = Asian Development Bank, **KP** = Khyber Pakhtunkhwa, **MFF** = multitranche financing facility.

Source: Asian Development Bank