

SECTOR ASSESSMENT SUMMARY: WATER AND OTHER URBAN INFRASTRUCTURE AND SERVICES

Sector Road Map

1. Sector Performance, Problems, and Opportunities

1. **Urbanization.** Out of the total population of about 150 million, the urban population is growing rapidly, from 20% in 1991 to 28% (42 million) in 2011, with the current annual growth rate of 3.1% being more than double the 1.1% annual growth rate of the entire population. At existing growth rates, the country's urban population will reach 63 million, or 36% of the population, by 2025. Rapid urbanization is widening the deficit in infrastructure and services. Although urban poverty was reduced from 28.4% in 2005 to 21.3% in 2010, many of the urban poor live in substandard housing conditions with poor infrastructure, often in disaster-prone areas.

2. **Urban governance.** In the past *pourashavas* (municipalities) were characterized by inadequate governance and lack of community participation in the planning, implementation, and management of projects and programs. There were limited incentives to improve the performance in areas such as accountability and transparency, promotion of gender equity, poverty reduction, and financial management and sustainability. However, with the introduction of a performance-based fund allocation strategy through the urban governance improvement action program in the Urban Governance and Infrastructure Improvement (Sector) Project (UGIIP) funded by the Asian Development Bank (ADB),¹ *pourashavas* supported under the UGIIP significantly improved their governance. Major achievements under the UGIIP made by all project *pourashavas* include (i) establishment of town-level and ward-level coordination committees, which are key vehicles for ensuring citizens' participation including representation of women and the poor; (ii) development and implementation of *pourashava*-level gender action plans (GAPs); (iii) computerization of tax and accounting records; and (iv) an increase in the average collection of holding tax.² The approach adopted in the UGIIP has become well known in the country, but many *pourashavas* are yet to benefit from the scheme. Governance reform needs to be further advanced in areas such as urban planning and financial sustainability to facilitate more controlled urban development and sustainable delivery of basic services.

3. **Urban infrastructure.** *Pourashavas* are struggling to provide their citizens with key services including drinking water supply and sanitation, roads, solid waste management, drainage systems, and other municipal services such as kitchen markets, street lights, and bus terminals. Although coverage of drinking water supply reached 86% in urban areas in 2012 (85% for the whole country), access to piped water supply in household premises is provided to only 32% of the urban population, requiring significant improvement in service levels.³ Only 55% of the urban population had access to improved sanitation facilities in 2012 (57% for the whole country), which is lower than the average for South Asia. The situation is even more serious in slums, as access to sanitation is highly correlated with wealth. Solid waste management is not

¹ ADB. 2002. *Report and Recommendation of the President on a Proposed Loan and Technical Assistance Grant to the People's Republic of Bangladesh for the Urban Governance and Infrastructure Improvement (Sector) Project*. Manila; ADB. 2008. *Report and Recommendation of the President on a Proposed Loan to the People's Republic of Bangladesh for the Second Urban Governance and Infrastructure Improvement (Sector) Project*. Manila.

² ADB. 2012. *Completion Report. Bangladesh: Urban Governance and Infrastructure Improvement (Sector) Project*. Manila.

³ World Health Organization and United Nations Children's Fund. 2012. *Progress on Drinking Water and Sanitation: 2014 Update*. New York.

systematic, and waste is often dumped in open areas, creating public health risks. Although improvements have been made through earlier projects, including the UGIIP, most *pourashavas* still need significant investment support to improve their service delivery.

4. **Urban roads and drainage.** Urban roads, except the national highways going through the towns, are the responsibility of *pourashavas*. Many are dilapidated because of increasing traffic and lack of maintenance by *pourashavas*. Drainage is underdeveloped and poorly maintained, resulting in frequent waterlogging, which contributes to road damage every year. *Pourashavas* usually lack resources for operation and maintenance of roads and drainage. Increasing road length due to rapid urbanization requires additional resources. Improving road conditions is generally the most popular demand of *pourashava* citizens.

5. **Water supply.** The coverage of piped water supply systems remains incomplete because of insufficient investment funds, coupled with systemic constraints such as lack of local capacity and political control of water tariffs. Because of inadequate water tariff, revenue generation remains low and water utilities are unable to carry out adequate repair and maintenance work and invest in improvement. Most sources of water supply are tube wells with hand pumps, sunk by private households, water utilities, and local governments. Drawing water from this source has led to a worrying lowering of local groundwater tables. Water quality is also an issue; many of the wells are contaminated with arsenic and bacteria. In practice, ground water provides the major source of drinking water and is tapped by both shallow and deep wells.

6. **Sanitation.** Sanitation coverage is high when basic sanitation is considered, but it declines when more stringent requirements for improved sanitation or hygienic sanitation are considered. The National Campaign for Sanitation, started in 2005, contributed towards a drastic reduction of open defecation and a wider coverage of sanitation facilities. There is a lack of conventional sewer systems in all urban areas except Dhaka, where some 25% of the population is served by a sewer network; the rest have onsite options such as septic tanks, pit latrines, unhygienic latrines, or no facilities at all. The sanitary conditions of urban slums are deplorable and only 8%–12% of households have hygienic latrines.⁴ Open discharge of waste water into drains and open fields and by roadsides or river banks has a significant impact on environmental pollution and creates a health hazard.

7. **Solid waste management.** Collection, transportation, and disposal of solid waste have not been well managed in Bangladesh. Half of the 30 project towns do not have a designated disposal site, and waste is dumped on roadsides or low-lying areas. Many urban areas do not have comprehensively planned collection systems and suffer from a lack of equipment and resources. Urban local governments are generally unfamiliar with modern solid waste management practice (including composting and sanitary landfills) or the “3Rs” (reduce, reuse, and recycle) principles. Hazardous waste, such as infectious hospital waste, is often mixed with domestic municipal waste. The situation is worse in informal housing areas, which rarely have managed collection and disposal systems, such that households often dump their wastes onto open land, into water courses, and on the streets. Commercial and industrial operators often illegally dump industrial waste.

2. Government’s Urban Sector Strategy

8. **Urban sector.** There is no government urban sector plan and this has inevitably resulted in a disjointed and leaderless approach to sector management. The National Urban Sector

⁴ Government of Bangladesh: *Sector Development Plan 2011–2025: Water Supply and Sanitation Sector*. Dhaka.

Policy is being drafted but is not yet endorsed. The sector is guided through a range of national development policies and strategies, with the overall government development framework set by the Bangladesh Sixth Five-Year Plan (fiscal years [FY] 2011–FY2015). Development resource allocation to the urban sector is Tk507 billion over the five years FY2011–FY2015. The only attributed “urban” outcome, indicator, or target recorded in the plan is “reduced urban poverty and improved living conditions through better city governance and service improvements,” to be measured through (i) the percentage of city corporations’ expenditure raised autonomously, and (ii) the percentage of urban population with regular employment. This emphasizes the importance of a poverty-centric, multidimensional, and multistakeholder approach to sector interventions.

9. There is a wide range of legislation that has a direct and indirect bearing on the sector, though the historical absence of clear, comprehensive, and up-to-date laws has likely compounded poor urban sector performance. The primary legal framework and mandate for urban local government is set out in the Local Government (City Corporation) Act 2009 and Local Government (*Pourashava*) Act 2009. A new, comprehensive Urban and Regional Planning Act has been drafted but not yet passed. In the absence of the enactment, planning control (including building and environment) is covered by a number of pieces of legislation, the main one being the Building Construction Act (1952). The Environment Conservation Act (1995) and regulation and rules arising from it have a bearing on the urban sector. All legislation faces major obstacles in the capacity and willingness of authorities to enforce rules and regulations. Bangladesh urban local government is systemically weak, including the institutional framework, organizational structure, and staffing numbers and skill sets.

10. **Urban water supply.** The sector has benefited from significant policy development culminating in sequential sector development plans developed by the Local Government Division. The current Sector Development Plan (FY2011–FY2025)–Water Supply and Sanitation Sector in Bangladesh provides a strategic framework for planning, implementing, coordinating, and monitoring all activities in the water supply and sanitation sector, with all national and sector policies, strategies, and international commitments related to water supply and sanitation to be aligned with the Sector Development Plan. The plan sets progressive development targets for water supply and sanitation services during three strategic time frames (short, medium, and long term, each of 5 years duration) and treats rural and urban subsectors as distinct. The total level of investment required for moderate service levels and operating efficiencies is Tk1,465 billion (\$20.9 billion). The Sixth Five-Year Plan reinforces water supply goals through targets for the percentage of population using improved drinking water sources (urban and rural).

11. The outline perspective plan of Bangladesh (2010–2021) includes issues on stabilizing urban concentration, energizing economic and social development, promoting small towns, balanced urbanization and satellite towns, providing housing for the poor, curbing environmental pollution, and devising effective urban governance.

3. ADB Sector Experience and Assistance Program

12. **Urban sector.** The sector has experienced a steady increase in the level of assistance from ADB and other development partners. Since 2000 there have been increasing efforts to address weaknesses in the investment environment in secondary towns. A core lesson from previous project implementation was that whilst municipal performance was sufficient to utilize investment funds, it was insufficient to generate sufficient revenues, secure human resources to ensure proper operation and maintenance of infrastructure and services, or sustain good urban management practices. The first and second ADB-financed Urban Governance and

Infrastructure Improvement (Sector) Projects (UGIIPs) have spearheaded these efforts, with an emphasis on good governance and incentive-based performance systems. A UGIIP innovation was the requirement that town-level and ward-level coordination committees be established, which led to a requirement under the Local Government (*Pourashava*) Act (2009), and the requirement to develop a *Pourashava* Development Plan. The UGIIP is regarded as a milestone in strengthening the governance and capacity of *pourashavas*, and the approach has shaped other projects supported by ADB—the Secondary Towns Water Supply and Sanitation Sector Project, the Urban Public and Environmental Health Sector Development Program, and the City Region Development Project.⁵ KfW and GIZ are cofinancing the second UGIIP while the OPEC Fund for International Development (OFID) is cofinancing the Secondary Towns Water Supply and Sanitation Sector Project with a similar approach. Other major development partners, i.e., the World Bank and Japan International Cooperation Agency, have adopted such approaches in their recent municipal projects.

13. Lessons from similar projects suggest that (i) governance-led infrastructure improvement is indeed possible and desirable, (ii) use of the sector-lending modality is highly appropriate for performance-based fund allocation adopted in the project, and (iii) good-quality and front-loading capacity building support is required for *pourashavas*.⁶ Thus, the project adopts the sector-lending modality, and capacity building support has been provided during project preparation and will be continued during implementation. In earlier projects, even though performance-based fund allocation was highly effective in improving governance, the allocation of less than \$3 million to each *pourashava* for infrastructure improvement was grossly inadequate to meet the demand for improved services, including for water supply and sanitation. The proposed project will be targeting improved governance, further improvement in municipal financing (own-source revenue generation), and local area development plans.

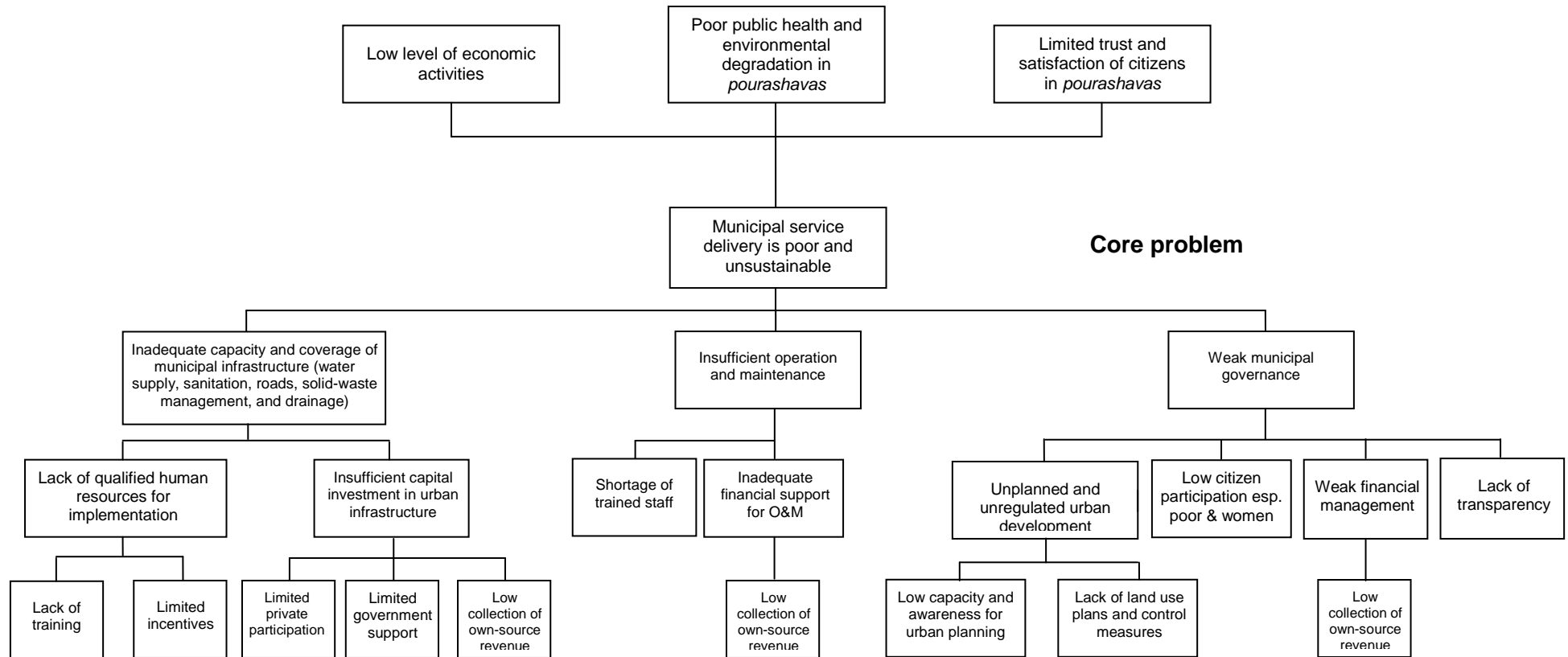
4. Sector Results Framework

14. The Sector Results Framework of Municipal Infrastructure (2014–2016) covering country sector outcomes, country sector outputs, and ADB sector operation is given at the end of this linked document.

⁵ ADB. 2006. *Report and Recommendation of the President on a Proposed Loan to the People's Republic of Bangladesh for the Secondary Towns Water Supply and Sanitation Sector Project*. Manila; ADB. 2009. *Report and Recommendation of the President on Proposed Sector Development Program Loans and Technical Assistance Grant to the People's Republic of Bangladesh for the Urban Public and Environmental Health Sector Development Program*. Manila; ADB. 2010. *Report and Recommendation of the President on a Proposed Loan and Technical Assistance Grants to the People's Republic of Bangladesh for the City Region Development Project*. Manila.

⁶ ADB. 2012. *The Urban Governance and Infrastructure Improvement Project in Bangladesh: Sharing Knowledge on Community-Driven Development*. Manila.

PROBLEM TREE



Core problem

Interventions

Financing support from ADB, JICA, World Bank

Governance improvement is supported through UGIIP and second UGIIP; JICA and World Bank are following the same approach.

ADB = Asian Development Bank, JICA = Japan International Cooperation Agency, O&M = operation and maintenance, UGIIP = Urban Governance and Infrastructure Improvement (Sector) Project.

Sector Results Framework: Water and Other Urban Infrastructure and Services

Country Sector Outcomes		Country Sector Outputs		ADB Sector Operations	
Outcomes with ADB Contribution	Indicators with Targets and Baselines	Outputs with ADB Contribution	Indicators with Incremental Targets	Planned and Ongoing ADB Interventions	Main Outputs Expected from ADB Interventions
Better access to municipal infrastructure and services in city corporations and <i>pourashavas</i> (municipalities)	Incidence of serious waterlogging, length of road upgraded, urban population using municipal solid-waste collection and treatment	Urban environment and municipal infrastructure services expanded, improved, and maintained	Six city corporations and 75 <i>pourashavas</i> with improved urban infrastructure and services through UGIIP 2, UPEHSDP, CRDP, CTEIP and UGIIP 3	Planned key activity areas Municipal infrastructure (88% of funds) Institutional strengthening and policy reform (12% of funds)	Planned key activity areas Improved municipal infrastructure and services (roads, drains, water supply, sanitation, SWM) Improved governance, municipal capacity, and own-source revenue collection
More people enjoying improved water supply and sanitation services, health care	Urban population using improved drinking water sources. Baseline: 85% (2008). Target: 100% in (2020)	Water supply network and sanitation services expanded, improved, and maintained	Disaster warning system improved in 10 <i>pourashavas</i> (CTEIP)	Pipeline projects with estimated amounts UGIIP 3 (\$236 million) CTEIP (\$118 million)	Ongoing projects Water supply system with installed capacity of 110 MLD in Khulna
Reduced urban poverty and improved living conditions through better city governance and service improvements	Urban population using improved sanitation facilities increased. Baseline: 55% (2008) Target: 100% (2020)	Municipal government utilizing new and improved urban governance and management systems	Piped water supply systems installed in 148 <i>pourashavas</i> (target 148 <i>pourashavas</i> , in four phases); and also in Dhaka and Khulna cities	Ongoing projects with project cost CRDP (\$175 million) STWSSSP (\$71 million) UGIIP 2 (\$167.5 million) UPEHSDP (\$80 million) DWSSDP (\$213 million) KWSP (\$365 million) DESWSP (\$670 million)	65,000 households will have piped water supply in 16 <i>pourashavas</i> Expanded access to and usage of urban infrastructure and services, and improvement in urban governance in at least 30 <i>pourashavas</i> Rehabilitation of 3,200 km water supply pipe network and 157,000 house connections in Dhaka Water supply system with installed capacity of 500 MLD in Dhaka
			Number of households with improved sanitation facilities increased by 2015		Projects in the Pipeline Regulatory regime improved including transparent tariff setting by all water utilities Vulnerable coastal towns will have sustainable water supply and improved sanitation facilities
			Local government institutions with performance-based mechanisms including climate monitoring and evaluation system		

ADB = Asian Development Bank, CRDP = City Region Development Project, CTEIP = Coastal Towns Environmental Infrastructure Project, DESWSP = Dhaka Environmentally Sustainable Water Supply Project, DRM = disaster risk management, DWSSDP = Dhaka Water Supply Sector Development Program, km = kilometer, KWSP = Khulna Water Supply Project, MLD = million liters per day, STWSSSP = Secondary Towns Water Supply and Sanitation Sector Project, SWM = solid waste management, UGIIP = Urban Governance and Infrastructure and Improvement (Sector) Project, UPEHSDP = Urban Public and Environmental Health Sector Development Program, WSS = water supply and sanitation.

Source: Asian Development Bank.