

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

### Sector Road Map

#### 1. Sector Performance, Problems, and Opportunities

1. **Urbanization.** Bangladesh is rapidly urbanizing. In 2011, 42 million people, or 28% of the population, lived in urban areas, compared with 31 million, or 24% of population, in 2001.<sup>1</sup> From July 2012 to July 2014, the urban population growth rate (3.5%) was more than double the national population growth rate (1.4%).<sup>2</sup> If this continues, the country's urban population will reach 74 million by 2025, or 41.6% of the total population.<sup>3</sup> However, Bangladesh's rapid growth in economic activities has centered in Dhaka and its peripheries, resulting in uneven development across the country.

2. **Urban governance.** In the past, *pourashavas* (municipalities) were characterized by inadequate governance and lack of community participation in planning, implementing, and managing projects, with limited incentives to improve performance. 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),<sup>4</sup> significantly improved *pourashavas'* governance. Major achievements have included (i) the establishment of town coordination and ward committees, which promote citizens' participation including women and the poor; (ii) the development and implementation of *pourashava*-level gender action plans; (iii) the computerization of tax and accounting records; and (iv) an increase in the average collection of holding tax. More governance reforms are needed in 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 key services including drinking water supply and sanitation, roads, solid waste management, drainage systems, and other municipal services. Piped water is available in only one-third of municipalities. A piped sewer network is available only in 25% of Dhaka, but not in any other cities. In 2015, only 58% of the urban population had access to improved sanitation facilities, and fecal sludge management remains a major challenge.<sup>5</sup> Drainage is underdeveloped and poorly maintained. During monsoon rains, roads and pathways become flooded, causing traffic congestion and public health risks. The road network is underdeveloped with insufficient capacity. Poor traffic management, weak public transport, and the absence of a strategic vision for integrated land use planning and effective urban development coordination among agencies cause traffic jams. These, in turn, add to pollution, increase transport and logistics costs, and limit access to economic opportunities and social services. Solid waste management is not systematic; waste is often dumped in open areas, creating public health risks.

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<sup>1</sup> United Nations Population Fund. 2016. *Urbanization and Migration in Bangladesh*. Dhaka.

<sup>2</sup> Government of Bangladesh, Bureau of Statistics. 2016. *Statistical Packet Book Bangladesh 2015*. Dhaka.

<sup>3</sup> United Nations. 2015. *World Urbanization Prospects: The 2014 Revision*. New York.

<sup>4</sup> ADB. 2002. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the People's Republic of Bangladesh for the Urban Governance and Infrastructure Improvement (Sector) Project*. Manila; and ADB. 2008. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the People's Republic of Bangladesh for the Second Urban Governance and Infrastructure Improvement (Sector) Project*. Manila.

<sup>5</sup> World Health Organization. 2015. *Progress on Drinking Water and Sanitation: 2015 Update*. New York.

4. **Climate change.** Natural disasters induced by climate change and riverbank erosion, loss of rural livelihoods, widening of rural–urban income gaps, and other push factors cause migration from the countryside into urban areas. Drainage and storm water management, already a major issue because of unplanned urbanization and exacerbated by waste water and solid waste, will become more serious with climate change. Encroachment on canals and rivers leaves many cities flooded in the rainy season. Heavier rainfall increases the frequency and intensity of flooding. Larger cities may also have to face the urban heat island effect.<sup>6</sup>

5. **Urban poverty and health status.** About one-third of the urban population lives in slums and has limited access to quality basic health services. Although urban health indicators are improving, half of the slum children under the age of 5 remain stunted (an indicator of malnutrition), compared with about a third of children in non-slum areas.<sup>7</sup> The urban poor's detrimental state of health is because of their impoverished physical living conditions and limited access to primary health care and health promotion services. Public investment in pro-poor urban health services needs to increase, along with improved local government capacity to provide primary health care in urban areas.

6. **Interagency coordination.** Many government entities are involved in urban sector development, making coordination difficult. The Local Government Division of the Ministry of Local Government, Rural Development and Cooperatives oversees policy guidance but lacks staff, financial resources, and skills. City corporations and municipalities are responsible for urban infrastructure and services, except for water supply and sewerage in Dhaka, Chittagong, Khulna, and Rajshahi, where it is managed by their respective water supply and sewerage authorities. The Department of Public Health Engineering provides technical support for water supply and sanitation in municipalities, and the Local Government Engineering Department supports general urban infrastructure. Development authority agencies under the Ministry of Housing and Public Works carry out urban planning and land development. Municipalities lack full autonomy and suffer shortages of human and financial resources.

## 2. Government's Urban Sector Strategy

7. Although the government has not approved its draft urban development policy, strengthening local governments to improve transparency, accountability, and service delivery is one of the priorities of the Seventh Five-Year Plan.<sup>8</sup> The first improvements were made in 2009 with the Pourashava Act and the City Corporations Act for strengthening accountability and citizen participation, including the poor and women.

8. Urban water supply and sanitation targets under seventh plan are to provide full access, half of which by piped systems, by 2020. The government intends to implement sector reforms to improve financial sustainability and autonomy of urban water entities. The National Sanitation Strategy and Pro-Poor Strategy, 2005 completes the National Policy for Safe Water Supply and Sanitation, 1998.<sup>9</sup> In 2011, the Water and Sanitation Sector Development Plan, 2011–2025 was approved followed by the National Strategy for Water Supply and Sanitation in 2014.

9. The seventh plan's overarching health goal is achieving universal health coverage. Key strategies include (i) extending health and nutrition services to urban dwellers, especially those living in slums and other vulnerable communities; (ii) improving collaboration and cooperation

<sup>6</sup> An urban heat island is an urban area that is significantly warmer than its surrounding rural areas due to human activities. The main cause of the urban heat island effect is from the modification of land surfaces.

<sup>7</sup> MEASURE Evaluation. 2013. *Bangladesh Urban Health Survey 2013*. Dhaka.

<sup>8</sup> Government of Bangladesh, Planning Commission. 2015. *Seventh Five Year Plan, FY2016–FY2020*. Dhaka.

<sup>9</sup> Related national policies: National Policy of Arsenic Mitigation, 2004; National Water Management Plan, 2004.

among relevant actors; (iii) enhancing institutional arrangements to address wider determinants of health; (iv) increasing financial risk protection; and (v) strengthening referral systems.

### **3. ADB Urban Sector Experience and Assistance Program**

10. The Asian Development Bank (ADB) is a major development partner in urban development and water supply and sanitation improvement in Bangladesh. ADB has supported the development of urban infrastructure, especially for water supply, sanitation, and solid waste management, producing significant positive impacts on the health of urban residents. The ADB has supported (i) developing water supply and other urban infrastructure and services in city corporations and municipalities, (ii) rehabilitating and improving the water supply systems in Dhaka and Khulna, and (iii) reforming municipal governance. Considering the high vulnerability of the country to the impacts of climate change, ADB's interventions are increasingly incorporating climate risk assessment in the project design.

11. ADB will continue to support strengthening access to urban primary health care, especially for the poor. It will build on past assistance with innovative service delivery models and strengthened institutional capacity of local governments. ADB will shift towards a more programmatic approach to sustain and enhance improvements in the delivery of urban health services. Appropriate reforms will support (i) the government's implementation of the Urban Health Strategy, 2014 and related action plan; (ii) institutionalization of primary health care delivery mechanisms through partnerships; (iii) institutional coordination between the Ministry of Health and Family Welfare and the Local Government Division, and with local governments; and (iv) policy guidance and capacity development in key areas, such as monitoring and evaluation.

12. ADB will continue to support government efforts to improve municipal infrastructure and access to services, as well as municipal governance. Support will be provided to improve urban policy and planning, build capacity at various levels, and finance innovative investments that demonstrably improve urban governance and service delivery. ADB will support improvements in urban transport, including interventions fostering a shift from private to public and nonmotorized transport. ADB's urban support will continue to focus on helping vulnerable areas adapt to climate change and disaster risks.

13. ADB will continue to assist Dhaka with water supply systems improvements, which will expand access and shift away from tube wells to surface water supply, as well as improve service efficiency by reducing nonrevenue water. ADB will continue to support city corporations and municipalities in improving urban governance, urban planning, and infrastructure and services. Capacity development of relevant agencies will be an integral part of the interventions.

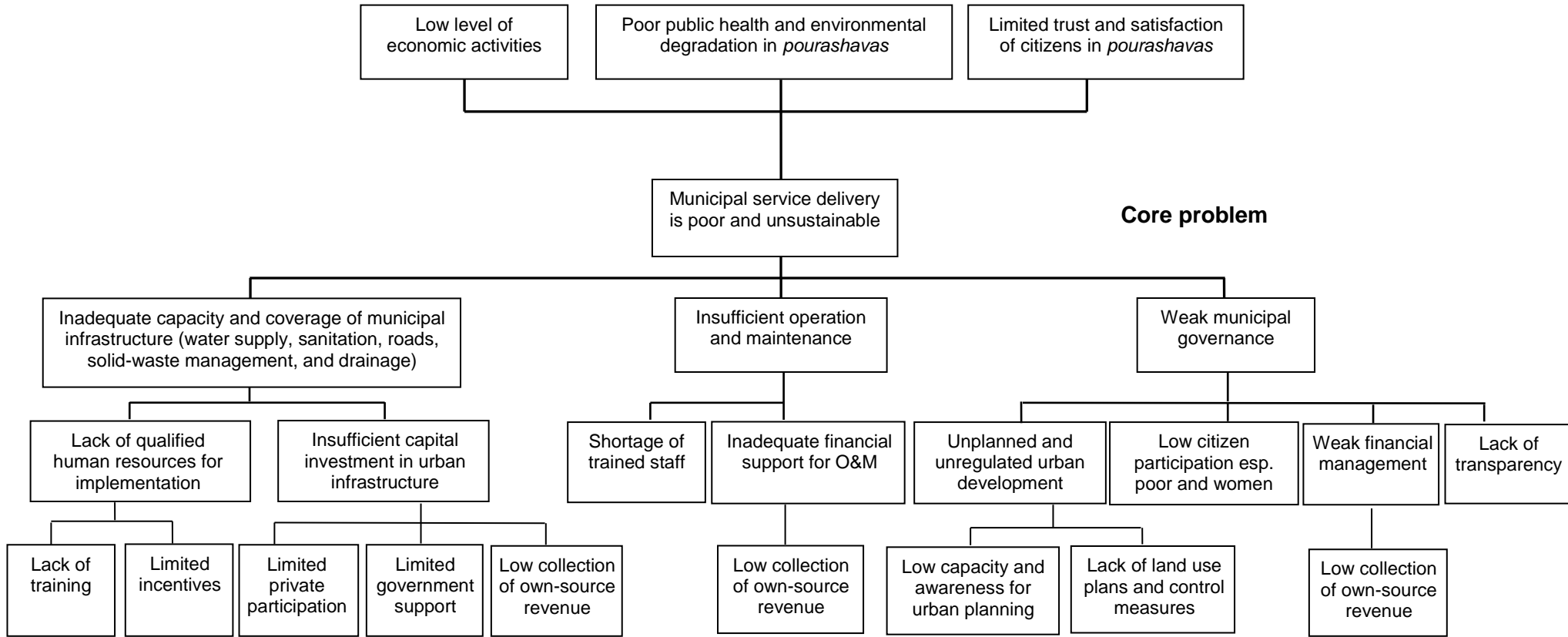
14. ADB will also support the establishment of a national urban sector development plan following the approval of the national urban sector policy. ADB will also engage the government on improving policy, regulatory, and institutional issues of the sector.

15. Synergies between public and private sector operations will be encouraged. ADB's private sector operations will focus on identifying innovative projects and companies meriting support in water supply, public transport, and delivery of other urban infrastructure and services.

### **4. Sector Results Framework**

16. The sector results framework, 2016–2020, covering country sector outcomes, country sector outputs, and ADB sector operation is provided at the end of this document.

**Problem Tree**



**Interventions**

Financing support from ADB, JICA, World Bank

Governance improvement is supported through earlier and current 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 Supply and Other Urban Infrastructure and Services

Country Sector Outcome		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 Contributions
More people enjoying improved water supply, sanitation services, and health care	<p>Urban population using improved drinking water sources increased to 100.0% in 2020 (2013 baseline: 99.4%)</p> <p>Urban population using improved sanitary facilities increased to 100.0% in 2020 (2013 baseline: 59.7%)</p> <p>Contraceptive prevalence rate in urban areas increased to 80% in 2021 (2014 baseline: 65.9%)</p>	Water supply, sanitation, and other urban infrastructure in Dhaka, Khulna, and other municipalities expanded, improved, and well managed	<p>Coverage in Khulna increased by 40% by 2020</p> <p>Nonrevenue water reduced to 20% or less in Dhaka</p> <p>50 additional municipalities improving urban infrastructure and governance with better planning by 2020.</p>	<p><b>(i) Planned Key Activity Areas</b> Integrated urban infrastructure in municipalities, water supply infrastructure in large cities, urban primary health care</p> <p><b>(ii) Projects in the Pipeline</b> City Region Development Investment Program (\$140 million) Coastal Towns Environmental Infrastructure-Additional Financing (\$6 million) UGIIP-III-Additional financing (\$200 million) Dhaka Metro Project (TA loan: \$10 million; MFF)</p> <p><b>(iii) Ongoing Projects with Approved Amounts</b> Dhaka Water Supply Network Improvement (\$250 million) Dhaka Water Supply Sector Development Program (\$200 million) Second Urban Primary Health Care (\$70 million) Urban Public and Environmental Health Sector Development (\$120 million) Khulna Water Supply (\$75 million) UGIIP-III (\$125 million) Sustainable Urban Primary Health Care Sector Development Program (\$40 million) Dhaka Environmentally Sustainable Water Supply (\$250 million) Greater Dhaka Sustainable Urban Transport Corridor (\$145 million) Coastal Towns Environmental Infrastructure (\$94 million) City Region Development (\$120 million)</p>	<p><b>(i) Planned Key Activity Areas</b> Urban governance and infrastructure improved in municipalities Water supply system improved with better management system in two megacities Urban public health services improved</p> <p><b>(ii) Projects in the Pipeline</b> Key infrastructure improved Additional municipalities covered for improvement of governance and infrastructure Expanded primary health care through public-private partnership</p> <p><b>(iii) Ongoing Projects</b> Water supply system with installed capacity of 500 MLD in Dhaka and 160 MLD in Khulna 2,000 kilometers of distribution network rehabilitated in Dhaka, and 750 kilometers of distribution network installed or rehabilitated in Khulna 50 municipalities implementing governance and infrastructure improvement program Improved environmental health through better water supply, sanitation, and solid waste management in targeted cities and municipalities</p>

MLD = million liters per day, UGIIP = Urban Governance and Infrastructure Improvement Project.

Source: Asian Development Bank.