

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

Sector Road Map

1. Sector Performance, Problems, and Opportunities

1. Improvement to water supply is a central plank of government policy. The government's development policy framework (2010-2016) states, "access to water supply and sanitation is a prerequisite for achieving the desired economic success of the country. Availability of sustainable and efficient water supply and sanitation services especially in townships of different levels is vital to keep up the pace of development in a strategically driven economic environment in the country".² However, the sector faces key challenges.

2. **Regional disparities in water availability.** Although Sri Lanka has ample rainfall and water resources, there is wide variation in regional availability, which causes water stress especially in the dry zone areas; safe water coverage is currently almost 94%.³ Although over 9 million people (44% of the population) have access to piped water, including 75% of the urban population but only 25% of the rural population,⁴ there are pronounced regional disparities in water availability due to: (i) competition between water users (water conflict);⁵ (ii) poor water resources management; (iii) lack of established processes for real-time water planning, hindering equitable water allocation; (iv) absence of strong legal basis for safeguarding and allocating water rights, which discourages users' commitment to water resource protection and conservation; and (v) river degradation due to sand and/or clay mining, saline intrusion, and waste dumping. The result is a shortage of cost-effective water resources for expanding safe drinking water supply despite significant investments made in the water sector since 1985.

3. **Conflict-affected areas.** The ending of a 30-year civil war in 2009 has generated a need for rapid development of water and sanitation facilities for people located in the north and east of Sri Lanka.⁶ Socioeconomic household surveys conducted in Jaffna (one of the main conflict-affected areas) during preparation of the current project revealed that fewer than 10% of households in Jaffna district had access to pipe-borne systems (household connections or standposts) for drinking water supplies, while in Pachchilai Palai and Poonakarai divisions (Kilinochchi district) this figure is 0%.⁷ Existing water supplies are usually insufficient because Jaffna is situated in the water-stressed dry zone of the country. Jaffna Municipal Council receives water supply for a limited number of people for 2 hours each day through standposts.

¹ This assessment is based on M. Fan. 2015. Sri Lanka's Water Supply and Sanitation Sector: Achievements and a Way Forward. *ADB South Asia Working Paper Series*. No. 35. Manila: Asian Development Bank (ADB); and Independent Evaluation Department. 2016. *Country Assistance Program Evaluation: Sri Lanka*. Manila: ADB.

² Government of Sri Lanka, Ministry of Finance and Planning, Department of National Planning. 2010. *Sri Lanka: The Emerging Wonder of Asia; Mahinda Chintana—Vision for the Future; The Development Policy Framework*. Colombo. p. 61.

³ UN-Water. 2015. Global Analysis and Assessment of Sanitation and Drinking Water- Sri Lanka Demographic and Economic Estimates. http://www.who.int/water_sanitation_health/monitoring/investments/srilanka-10-nov.pdf (accessed 12 September 2017)

⁴ World Health Organization. 2015. Global Health Observatory Data. http://www.who.int/gho/countries/lka/country_profiles/en/ (accessed 28 May 2017 year).

⁵ For example, the Jaffna and Kilinochchi Water Supply and Sanitation Project had to find an alternate source of water supply (seawater desalination plant), as water sharing arrangements from Iranamadu Tank with the agricultural community could not be worked out.

⁶ As of June 2015, the access to safe drinking water in the Northern Province (where Jaffna is located) was 76.9% compared with the national average of 85.2%.

⁷ ADB. 2010. *Report and Recommendation of the President to the Democratic Socialist Republic of Sri Lanka for the Jaffna and Kilinochchi Water Supply and Sanitation Project*. Manila.

For suburban dwellers, water supply is limited to 1 hour per day. The Corporate Planning Division of the National Water Supply and Drainage Board (NWSDB) reports the number of water connections in Jaffna city and surrounding areas, which currently includes about 300 domestic connections and 275 standposts.⁸ Overall, fewer than 15% of the Jaffna Peninsula's inhabitants receive water supply from the NWSDB or other providers. The communities situated near the proposed project do not have access to piped water supply and mainly rely on groundwater (household wells) for their daily needs. In Jaffna district, 82% of households have access to latrines, and more than 90% of these share a latrine with at least one other household. In northern Kilinochchi, only 60% of the households have access to sanitation facilities; of these, more than 95% of the households share their latrines with at least one other family. No sewerage systems exist on the Jaffna Peninsula.

4. **Expansion of networks.** Most towns in Sri Lanka now have piped water supplies. However, there remains a need to expand and upgrade many networks, requiring substantial investment, which the current water tariff rates cannot yet support. The investments required in sanitation are also beyond the capacity of current service providers to meet, as outlined in the NWSDB's 2016–2020 corporate plan.⁹ The NWSDB is still dependent on government subsidy to expand networks.¹⁰ Private investment will be required if sector development objectives are to be met. In May 2017, the cabinet approved the establishment of an independent regulator for the NWSDB, which will facilitate private sector equity investments in the water sector (para. 6).

5. **Lack of clear policy framework.** Sri Lanka is keen to establish policies in the water sector that will improve resource allocation and development. This has been challenging considering the present institutional scenario with over 50 acts and 40 agencies dealing with water. While the government has made significant efforts to introduce national-level water and sanitation policies, little has been achieved due to conflicts among various water users. The NWSDB approved the draft National Drinking Water Policy and draft National Sanitation Policy (originally drafted in 2002 and revised in 2006), with only the former being approved by cabinet in 2010. The two policies were meant to provide guidance to the NWSDB, provincial councils, local authorities, lending institutions, community-based organizations, and nongovernment organizations involved in delivering water supply and sanitation (WSS) services. These included investment strategies to achieve coverage, service quality, and cost-recovery objectives.

6. **Regulation.** In its corporate plan 1999–2005, the NWSDB identified the need to create a regulatory body to help ensure the quality and reliability of services, establish reasonable tariffs for water and sewerage services, and safeguard stakeholder interests. Under the Policy Reform Program assisted by the Asian Development Bank (ADB), the design of such a regulatory body was finalized and a draft statute prepared. In 2003, a water service reform bill was published in the government gazette and presented to Parliament for a vote. This bill sought to regulate water services and empower the regulatory body for the energy sector—the Public Utilities Commission of Sri Lanka—to also regulate the water and sanitation sector and carry out other associated functions. However, concerns that the supply of pipe-borne water should be a function of local authorities and part of the powers vested to provincial councils ultimately

⁸ Established under an act of Parliament in 1975, the NWSDB is the main entity responsible for water supply sector development; development of investment plans for piped water and wastewater systems; design, construction, and management of water supply schemes and sanitation schemes in small towns; and development of water source and catchment protection programs.

⁹ The NWSDB has developed 5-year corporate plans every 5 years since 1996.

¹⁰ As of 2015, the NWSDB was required to meet all costs associated with project development, rather than the previously set 50% proportion for urban water supply projects. However, this requirement was nullified by a cabinet memorandum from the Ministry of Finance of 26 January 2016, which was approved on 9 February 2016.

resulted in a Supreme Court decision not to go ahead with the bill without obtaining the concurrence of each provincial council. Subsequently, amendments were suggested to the NWSDB Act to give powers to the Public Utilities Commission of Sri Lanka (PUCSL) to regulate water service provision by the NWSDB and any private operators.¹¹ These initiatives were also unsuccessful due to objections from the trade unions of the NWSDB. However, a breakthrough was made in May 2017 with the support of ADB technical assistance, when the cabinet approved the proposal for establishing an independent regulator (PUCSL) for the NWSDB.¹² In parallel, the NWSDB has successfully increased tariffs to meet operational requirements - the most recent increase in 2012 resulting in a marginal profit gain.¹³

7. Further institutional and governance reforms are required to help meet the government's objectives and targets for the WSS sector, including: (i) sector-wide governance support, and (ii) organization-specific support entailing asset development and capacity development initiatives.

2. Government's Sector Strategy

8. The government's development policy framework (footnote 2) envisages that emerging urban centers will grow in population and economic activities. It identifies the development of WSS infrastructure to support the long-term demands of these growing urban centers as a key to achieving the desired economic success of the country.

9. The NWSDB's 2015 10-year development plan includes:¹⁴ (i) achieving 60% national piped water supply coverage by 2020 and 70% by 2025, and (ii) increasing networked sewerage coverage to 3.5% by 2025. Strategies to achieve sustainable safe and affordable drinking water for all include: (i) restructuring the NWSDB into a commercially profitable institution by adopting best practice business and operating models;¹⁵ (ii) using new technologies for nonrevenue water (NRW) reduction and real-time water and sewerage systems monitoring and optimization; (iii) adopting suitable tariff structures for cost recovery; (iv) enhancing operational efficiencies and financial performance of provincial and local authorities by strengthening their capacity; (v) adopting innovative financing strategies to reduce reliance on foreign funding for infrastructure; and (vi) undertaking policy reform for WSS to clarify institutional mandates and create a favorable investment climate for the private sector.

10. For asset development, all WSS organizations are presently undertaking significant levels of investment to meet the sector goals. Two of the larger investment programs are being undertaken in Colombo by the Colombo Municipal Council (sewerage network expansion and rehabilitation in greater Colombo) and the NWSDB (reduction of NRW in Colombo city) through ADB support (para 11). For sanitation, a program to install piped sewerage in 16 major urban areas across the country is identified in the 2014–2016 Public Investment Strategy.¹⁶

¹¹ The NWSDB was established as a unique entity (with a Board) through an Act of Parliament in January 1975.

¹² ADB. 2014. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for Institutional Development of National Water Supply and Drainage Board*. Manila; and Government of Sri Lanka, Office of the Cabinet of Ministers. 2017. Regulations for the Water Services Industry in Sri Lanka. Press briefing. 2 May.

¹³ The scheduled tariff increase in 2015 never materialized. The NWSDB is planning the next tariff increase in 2017.

¹⁴ NWSDB. 2015. *Draft 10-Year Development Plan, 2016–2025 for Water Supplies and Sewerage Facilities*. Colombo

¹⁵ ADB supported technical assistance on the decentralization of the NWSDB, which resulted in the creation of nine regional service centers. ADB. 2008. *Technical Assistance to the Democratic Socialist Republic of Sri Lanka for Institutional Strengthening for Decentralized Service Delivery in the Water Sector*. Manila. ADB is currently supporting technical assistance to improve institutional development of the NWSDB (footnote 11).

¹⁶ The Government of Sri Lanka, Ministry of Finance and Planning, Department of National Planning. 2013. *Unstoppable Sri Lanka 2020: Public Investment Strategy, 2014-2016*. Colombo.

3. ADB Sector Experience and Assistance Program

11. ADB's presence in the sector has evolved based on the country's evolving development priorities. While ADB initially positioned itself in secondary towns and rural areas, the introduction of national water tariffs and the withdrawal of other development partners from the water supply subsector in 1991 presented new opportunities for ADB to deepen its involvement. Since 1998, ADB's WSS strategy has aimed to improve service coverage, enhance cost recovery, and promote self-financing among public agencies. ADB has also continued to focus to some degree on local needs in secondary urban centers and rural areas. ADB loan projects in the WSS sector that were approved or completed between 2007-2017 were consistent with sector strategies and development objectives. During 2006–2015, approved lending to the WSS sector totaled \$682 million, covering eight projects. As of March 2016, only two of the projects had been completed, with two due to be completed by 2020. Two ongoing projects (the Dry Zone Urban Water and Sanitation Project,¹⁷ and the current project) are addressing water supply issues in lagging and conflict areas. The current program focuses on Colombo through two ongoing loans: The Greater Colombo Wastewater Management Project,¹⁸ and the Greater Colombo Water and Wastewater Management Improvement Investment Program (GCWWMIIP).¹⁹ The GCWWMIIP is being implemented during 2012–2020 under three tranches.²⁰ The support also aims to enhance the institutional and operational capacity of the WSS service providers in Colombo.

12. The primary lessons learned from ADB's operations in Sri Lanka in the urban WSS sector include: (i) lending programs should be complemented by public awareness campaigns to educate consumers on their rights and responsibilities, highlighting water as a scarce good; (ii) importance of working closely with communities to ensure operational sustainability of community-based systems; (iii) importance of introducing new technologies for NRW reduction and improved construction (e.g., trenchless pipe laying); (iv) need for more careful risk assessment including implications of policy reform; (v) need for greater understanding of political sensitivities that may inhibit reform; (vi) need to undertake wider consultations to ensure stakeholder acceptance before progressing further on policy reforms; (vii) policy reform must be viewed as a long-term outcome supported through longer-term engagements like cluster technical assistance; and (viii) criticality of future policy leaders' support for ushering reforms.

13. Looking forward, there is a need to (i) develop water legislation defining priorities for water allocation; (ii) introduce integrated water resource management principles; (iii) enhance independent regulation of both water supply and sanitation services, including tariff setting and definition of service rights and responsibilities for suppliers and customers;²¹ (iv) encourage private sector participation in funding and operating services; (v) reduce NRW; and (vi) make continued efforts to improve the self-financing performance of operating entities through sector reforms covering regulation, cost recovery, commercial discipline of service agencies, and domestic resource mobilization.

¹⁷ADB. 2008. Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for Dry Zone Urban Water and Sanitation Project. Manila

¹⁸ADB. 2009. Report and Recommendation of the President to the Board of Directors: Proposed Loans to the Democratic Socialist Republic of Sri Lanka for the Greater Colombo Wastewater Management Project. Manila.

¹⁹ADB.2012. Report and Recommendation of the President to the Board of Directors: Proposed Multitranchise Financing Facility to the Democratic Socialist Republic of Sri Lanka for the Greater Colombo Water and Wastewater Management Improvement Investment Program. Manila.

²⁰ Two tranches are for water supply (with the NWSDB) and one is for sewerage (with Colombo Municipal Council).

²¹ Currently, the water services provided by the institutions of provincial councils and community-based organizations do not come under the purview of the PUCSL (the independent water services regulator).

PROBLEM TREE (Water and Other Urban Infrastructure and Services)

