SECTOR ASSESSMENT (SUMMARY): WATER SUPPLY AND OTHER MUNICIPAL INFRASTRUCTURE AND SERVICES

A. Sector Road Map

1. Sector Performance, Problems, and Opportunities

1. The Government of Sri Lanka identified access to safe drinking water and sanitation as priority objectives for meeting its poverty reduction commitments and the United Nations Millennium Declaration. While recent reports indicate that Sri Lanka will meet Millennium Development Goal target 10 by 2015,[1] the country faces major challenges, such as regional disparities and urban–rural differences. Statistics show that the percentage of the population with access to improved water sources increased from 91% to 98% during 1990–2004 in urban areas, and from 62% to 74% during the same period in rural areas. While 75% of the urban population has access to piped water, only about 14% of the rural population has access to piped water. About 65% of rural households with access to piped water rely on water from protected wells.[2] Differences among provinces are even more pronounced.[3]

2. Socioeconomic household surveys conducted during project preparation reveal that less than 10% of households in the Jaffna District have 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%. Water supplies that do exist are usually insufficient. Jaffna Municipal Council receives water supply for a limited number of people for 2 hours each day through standposts. For suburban dwellers, water supply is limited to 1 hour. According to the Corporate Planning Division of the National Water Supply and Drainage Board (NWSDB), the number of water connections in Jaffna Municipal Council and surrounding areas is currently about 300 domestic connections and 275 standposts. Overall, less than 15% of the peninsula's inhabitants receive water supply from the NWSDB or other providers. 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 peninsula. The government has a three-phase plan to provide water for the entire Jaffna Peninsula. The three-phase plan will be funded by the government and development partners. Stage 1 of the first phase, which includes water supply and sanitation, is in various stages of preparation and implementation. Several development partners are preparing to implement stage 1 of the first phase, which includes water supply and sanitation components.

3. Policy gaps and weaknesses. Progress with policy reform has been modest since reform discussions began in the early 1990s. Progress has been influenced by changes of government and concomitant changes in the policy stance of each new government. Major policy areas include (i) rationalizing water tariffs and establishing an independent authority to regulate water tariffs; (ii) strengthening the capacity of local authorities to delivery water supply and sanitation services; (iii) establishing policies and procedures for allocating water rights; and (iv) encouraging private participation in providing and managing water supply and sanitation services.

4. With respect to the development of a regulatory body for water supply, Parliament formed the Public Utilities Commission, a multisector regulator for electricity, petroleum, and water, in 2003. However, the commission has yet to put water regulations in place. The Water Services Reform Bill was an initial attempt to institute a coherent policy for regulating water service provision. It set tariffs and instituted measures to protect consumers, maintain water

[1] MDG Target 10 aims to halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation.

[2] World Health Organization. 2007. *Country Health System Profile: Sri Lanka.* Available: www.searo.who.int/en/Section313/Section1524_10884.htm

[3] This summary is based on a literature review of Asian Development Bank (ADB). 2008. *Country Partnership Strategy, 2009–2011*. Manila; ADB. 2007. *Sri Lanka Country Assistance Program Evaluation: Water Supply and Sanitation Sector.* Manila; and government reports.

quality standards, and encourage private participation in water services. The Cabinet ministers approved the Water Services Reform Bill in mid-2003 and submitted it to Parliament in October 2003.

5. However, the bill was challenged on the grounds that it did not reflect the mandates and roles of local authorities. The Supreme Court ruled that the bill should be discussed further with provincial councils and local authorities. The bill was redrafted in December 2003, but its approval was further delayed and it was subsequently abandoned for political reasons. Instead of pursuing comprehensive water services reform that would allow regulation by the Project Utilities Commission of Sri Lanka, the NWSDB moved forward to amend the NWSDB Act of 1974.[4] The NWSDB demonstrated its commitment to regulatory reform by submitting amendments to the Ministry of Water Supply and Drainage in 2008, but the process was stalled again because of a policy preference by the government for internal regulation. While there is still no independent water regulatory body, the NWSDB has nonetheless increased tariffs to meet operational requirements, with the most recent increase in 2009 resulting in a marginal profit gain (see the Financial Analysis, accessible from the list of linked documents in Appendix 2).

2. Government's Sector Strategy

6. The objectives of the government's 10-Year Development Framework, 2006−2016 include (i) increasing the population's access to improved water supply facilities with sufficient water supplies, and achieving national standards for service and quality; and (ii) improving sanitation facilities, increasing the population's access to those facilities, and setting high national standards for service and quality of (discharge) waters. In addition, the NWSDB is set to achieve (i) piped water supply coverage of 40% of the total population by 2011; (ii) access to water supply for 85% of the population by 2015 (at the same time ensuring a high degree of water security and quality); and (iii) piped sewerage coverage of 3% of the population by 2011.

7. The government's water and sanitation strategy and associated investment program focus on (i) rural and more deprived areas; (ii) investing through all three tiers of government mandated to provide water and sanitation (central government, provincial councils, and local authorities); (iii) establishing solid regulatory and institutional frameworks; (iv) improving service delivery and management performance and reducing nonrevenue water; (v) pursuing community-driven schemes in rural areas, paying special attention to women's participation; (vi) promoting integrated urban water supply and management principles; and (vii) ensuring environmental integrity. In addition, the government's strategy lays out the importance of sustainability and the need to secure adequate (yet socially acceptable) tariffs for water supply and sewerage schemes.

8. In general, the NWSDB is responsible for planning, designing, constructing, and managing large urban water supply and sanitation schemes. While it supports the development of rural schemes, rural areas fall within the purview of local governments or community-based organizations. Capacity varies throughout the water supply and sanitation subsector. While NWSDB's capacity is generally adequate, it needs support to implement its vision of gradually decentralizing its operations, capital planning, and administrative and financial functions. In addition, autonomous regulation will help the NWSDB achieve its goals of improving operating efficiency, increasing customer satisfaction, and becoming more commercially viable.

9. The NWSDB has developed 5-year corporate plans every 5 years since 1996. The latest plan (2007–2011) clearly identifies commercial viability and greater accountability and transparency as key goals. The plan sets forth specific objectives and countrywide targets. However, shortcomings of the latest plan include (i) a failure to link to a business plan (and

[4] ADB. 2008. *Technical Assistance Completion Report on Strengthening the Regulatory Framework for Water Supply and Sanitation in Sri Lanka.* Manila (TA 4049-SRI). The TA (i) assisted the NWSDB in developing legislation and guidelines to regulate the water sector, and (ii) strengthened the capacity of the NWSDB to write legislation and guidelines. Tangible deliverables included (i) amendments to the NWSDB Act; (ii) a new tariff methodology, (iii) a customer code, (iv) technical standards, (v) technical training (local and international), and (vi) an awareness program for Regional Support Center staff. The TA was rated successful.

supporting financial projections) that translates action plans into financial terms, and key result areas into tangible financial targets or performance indicators that can be monitored; and (ii) a failure to derive national water supply goals and targets from regional information and develop mechanisms to monitor progress toward those goals and targets. The corporate plan identifies corporate investment and asset management as key focus areas; these need to be linked to a realistic financial program. Moreover, the two components on which the NWSDB's tariff methodology is based—recurrent operating expenditures, and business and asset management plans that define the cost of operations and maintenance—need to be better defined. See the Financial Analysis for more on NWSDB's financial performance.

10. The NWSDB's effort to reduce nonrevenue water (NRW) remains inadequate and generally underfunded. Improving NRW remains the single largest contributor to increasing NWSDB's performance and revenue. Indicators show that NRW has remained constant in relative terms since 2002 (about 34%), but has increased in absolute terms. In Colombo, NRW is estimated at 52%, contributing significantly to reducing the overall performance of the institution. Table 1 shows NRW performance over the years.

Table 1: Nonrevenue Water in NWSDB System, 2001–2009

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
NRW	35.83	34.16	34.86	33.61	33.83	34.37	33.09	32.13	31.07

NRW = nonrevenue water.
Source: NWSDB

11. Draft National Drinking Water Policy and draft National Sanitation Policy. The government remains committed to policy changes, as evidenced by the updated draft National Drinking Water Policy and draft National Sanitation Policy (originally drafted in 2002 and revised in 2006), which were approved by the NWSDB and due for Cabinet approval in 2010.[5] The two policies provide guidance to the NWSDB, provincial councils, local authorities, lending institutions, community-based organizations, and nongovernment organizations involved in delivering water supply and sanitation services. It covers investment strategies to achieve coverage, service quality, and cost-recovery objectives.

12. **Draft National Water Resources Act and Policy**. Prepared in 2003, the draft National Water Resources Act and Policy was never enacted, largely because of a lack of political support. The act would have provided mechanisms to (i) establish regional water resources councils and river basin management organizations to ensure adequate quantity and quality of water; (ii) adopt a comprehensive integrated water resources management program based on seasonal, regional, and demographic considerations, including water allocation mechanisms among competing users; (iii) vest communities with powers to allocate water and preserve ecosystems; and (iv) promote stakeholder participation in the management and development of water resources. As the policy was never enacted, no legal framework or single administrative body regulates and coordinates water resources management at the national level. As a gap-filling measure, the government established an interagency committee to address procedures for dealing with competing water uses between sectors. Despite the lack of an apex national authority, the government demonstrated its commitment to addressing water supply issues—albeit at a reduced scale—by approving the draft National Drinking Water Policy. The policy prioritizes drinking water over other competing demands (e.g., irrigation), and gives consideration and recognition without prejudice to downstream and other users. At the local level is the Jaffna Water and Sanitation Sectoral Committee, which is chaired by a government agent and district secretary. The committee meets regularly to discuss water and sanitation issues in Jaffna District.

13. Private participation. A shift away from private participation occurred with the change in government in 2002, resulting in slow progress in establishing an independent regulatory body to oversee water and sanitation. The new draft National Drinking Water Policy encourages

[5] The draft national drinking water policy was published for public comments and is expected for cabinet approval in 2010. The National Sanitation Policy was also published for public comments and the revised version is currently being reviewed by UNICEF before submission to cabinet for approval in 2010.

partnerships to attract investment in water and sanitation, but does not clearly define the role of the private sector. The private sector has successfully participated in activities such as metering, billing, and collection in Greater Colombo and large regional centers. But in general private participation in water and sanitation remains meager, partly because regulatory reforms and initiatives remain linked to the political process. To encourage private investment, tariffs should fully reflect production and enterprise costs and be regulated by a functional public utility commission tasked with ensuring adequate return on capital for investments in water systems.

3. ADB Sector Experience and Assistance Program

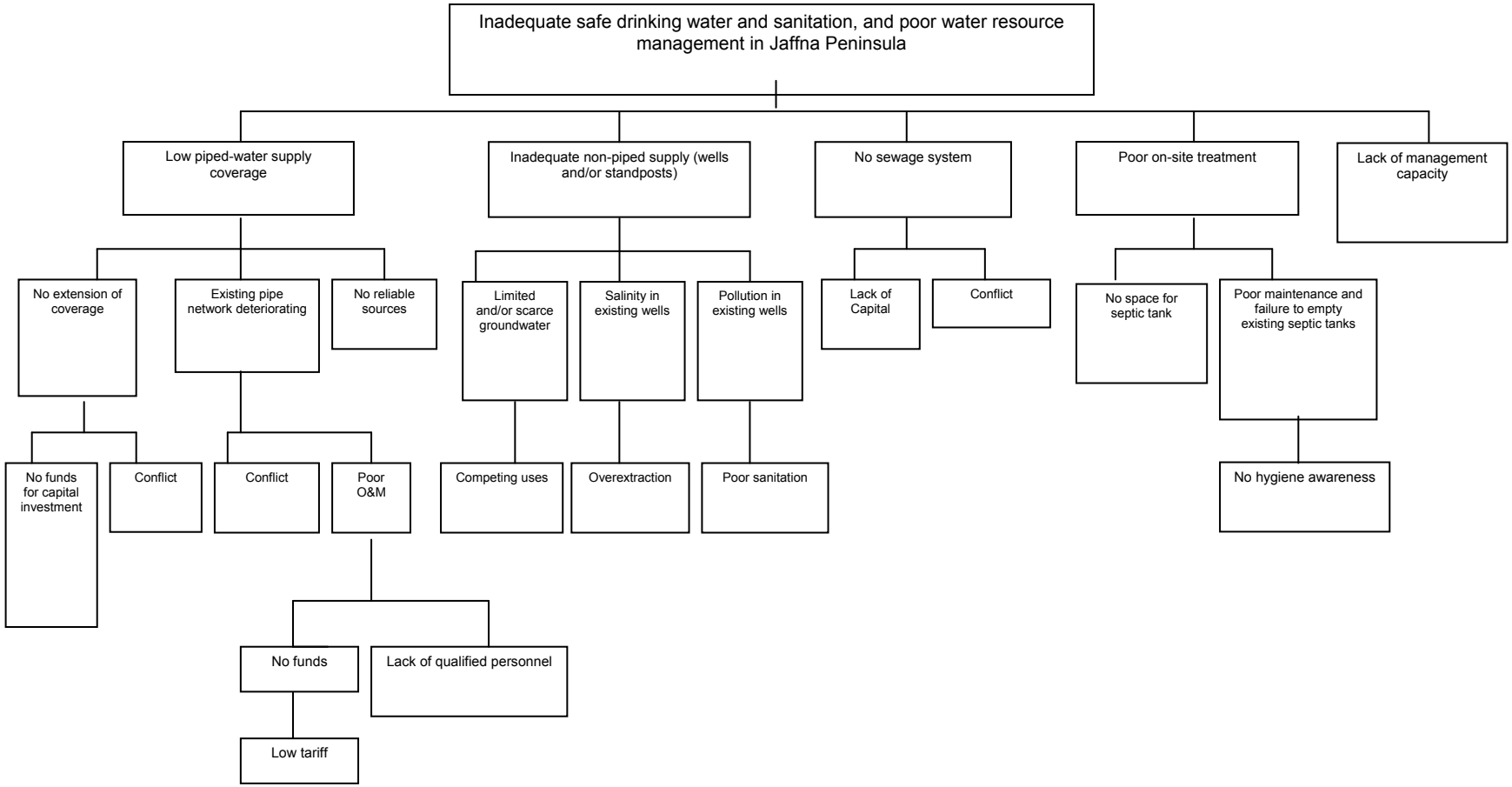
14. The evolution of ADB's presence in the water supply and sanitation subsector has been guided by the country's evolving development priorities While ADB initially positioned itself in secondary towns and rural areas, the introduction of national water tariffs and the withdrawal of other development partners from the subsector in 1991 presented new opportunities for ADB to deepen its involvement. Since 1998, ADB's water and sanitation 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.

15. The primary lessons learned from ADB's operations in Sri Lanka in water and sanitation include the following: (i) projects should incorporate more local government involvement and consultation and participatory processes; (ii) water and sanitation interventions should avoid creating conflicts among water users, and should ensure that adequate water rights amongst various users are secured; (iii) adequate costing should be performed and inaccuracies in costing estimates should be minimized to avoid large cost overruns; (iv) water and sewerage tariffs should be increased by NWSDB annually, taking inflation and tariff objectives into consideration; (v) sustainable water resource development should be promoted by the government and frameworks for water resource management established; and (vi) capacity development should target all levels of government. Other lessons learned include: (i) the handover of management of water schemes to local authorities and community-based organizations requires continued support during the transition and follow-up periods to ensure the sustainability of the schemes; (ii) while tariff adjustments have been effective in recovering large portions of operation and maintenance costs, they are generally insufficient for reinvesting and replacing assets; (iii) benchmarking by setting operational performance targets should be streamlined; and (iv) sanitation, hygiene, and health promotion programs should be incorporated in project design to support positive health outcomes.

16. Looking forward, planned ADB support in water and sanitation includes a project to improve local water supply and sanitation services in lagging local authorities of the country.[6] This is in alignment with the government's devolved structure, where local authorities contribute more to the costs of delivering services, thereby increasing ownership. Sanitation services are generally still underdeveloped in Sri Lanka. In 2009, ADB approved the Greater Colombo Wastewater Management Project.[7] The expected impact of the project is an improved urban environment and better public health for 1.5 million urban and suburban residents in Greater Colombo through improved marine and inland water quality, and a resulting improvement in hygiene and sanitary conditions. The expected outcome of the project is improved wastewater management services provided to about 645,000 residents within the project area through upgraded sewerage infrastructure and enhanced institutional and operational capacity of the service provider.

[6] SRI: Lagging Local Authorities Infrastructure Development Project (proposed for Board Approval in 2011).
[7] ADB. 2009. *Greater Colombo Wastewater Management Project*. Manila.

Problem Tree for Water Supply and Sanitation



O&M = operation and maintenance.

Sector Results Framework (Water Supply and Sanitation, 2010–2012)

Country Sector Outcome		Country Sector Outputs		ADB Sector Operations	
Outcomes with ADB Contributions	**Indicators with Targets**	**Outputs with ADB Contributions**	**Indicators with Incremental Targets (Baselines Zero)**	**Planned and Ongoing ADB Interventions**	**Main Outputs Expected from ADB Contributions**
Bridging the rural–urban gap with regard to access to water supply and sanitation .	Service delivery coverage increased by 2011 measured by the population served by water supply and sanitation services	New water and sanitation systems provided, improved, and maintained Sanitation provided for more people; and pro-poor, gender-inclusive and community-based schemes launched	New water connections provided, of which (i) about 40,000 are to poor households, and (ii) about 60,000 are in the east, by 2011 Pro-poor and gender inclusive sanitation strategy implemented	**Pipeline projects with estimated amounts** Jaffna and Kilinochchi Water Supply and Sanitation Project ($190 million) Lagging Local Authorities Infrastructure Development Project ($66.5 million) **Ongoing projects with approved amounts** Greater Colombo Wastewater Management Project ($116.6 million) Secondary Towns and Rural Community-Based Water Supply and Sanitation Project ($96.3 million)	**Pipeline projects** See design and monitoring framework. Water supply pipes installed or upgraded and length of network extended **Ongoing projects** 17 pumping stations and four connection pumping mains fully refurbished and functional by 2014 10 km of gravity sewers newly constructed by 2014 200,000 new water connections provided, of which (i) about 40,000 are to poor households, and (ii) about 60,000 are in the east, by 2011

ADB = Asian Development Bank, km = kilometers
Sources: ADB *Sri Lanka: Country Operations Business Plan, 2010–2012*; ADB *Sri Lanka Country Partnership Strategy, 2009–2011*.