

Water Supply in Sri Lanka



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Introduction - Sri Lanka

Area	65,610 sq km
Population	20.27 mn
Population Growth	1%
Population Density	323 per sq.km
GDP (nominal)	US \$ 64.9 bn
GDP per capita	US \$ 3,139
HDI	0.691
Literacy Rate	91.9 %
Safe Water coverage	90 % of households
Houses with Electricity	91%
Life Expectancy	74.9 years

Water

Improved Water Coverage Consists of
(% households by 2011)

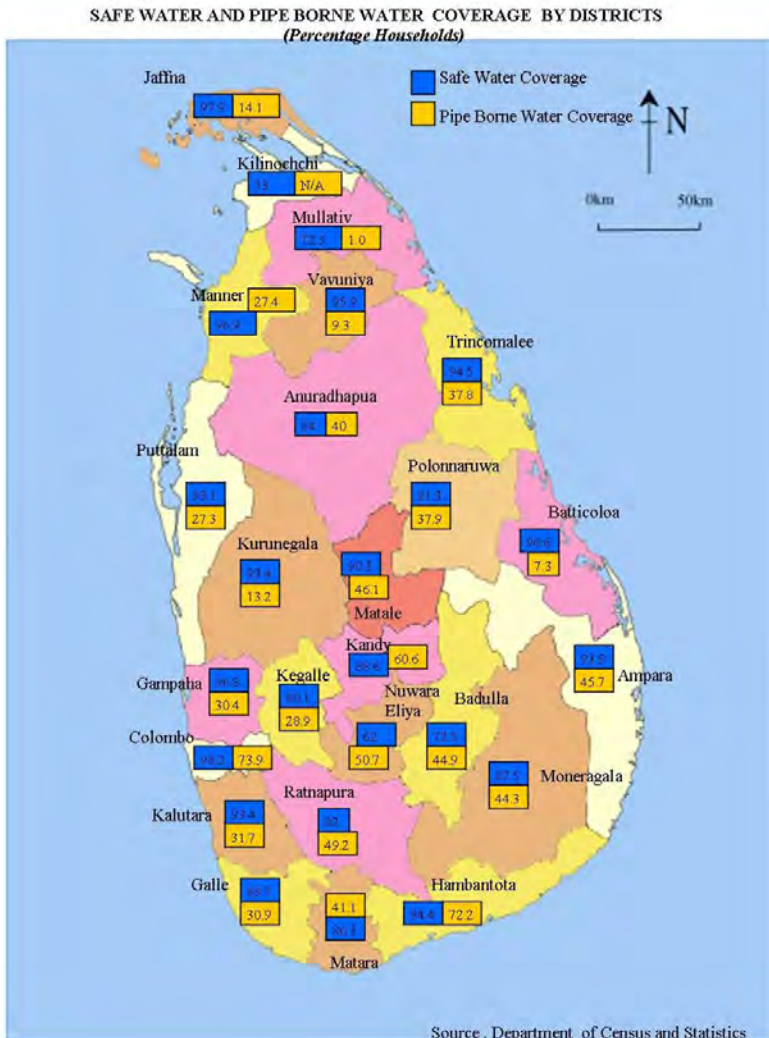
Protected Wells : 49.6 %

Community Water Schemes : 9.5 %

Pipe Borne Water Supply : 30.5 %

Other Sources : 0.6%

Unsafe Sources : 9.8 %



- ❖ **The Main Pipe Borne Water Producer is the National water Supply and Drainage Board (NWSDB)**
- ❖ **NWSDB operates 322 water supply schemes island wide**
- ❖ **NWSDB produces 490 mn of cubic meters of water per annum and it has provided around 1.4 mn water supply connections.**
- ❖ **The Non Revenue Water level (NRW) of NWSDB schemes is around 30 percent. However, in Colombo city it is around 50 percent.**
- ❖ **The existing 3,500 Community managed schemes provide pipe borne water to around 9 percent of households**

Major Challenges in the Sector

❖ Regional disparities in accessing drinking water

Water and Sanitation Coverage in Sri Lanka – by 2010

	Water coverage
Urban	97.4
Rural	87.6
Estate	60.3
Total	87

❖ Providing uninterrupted water supply despite the emerging climatic changes

❖ Depleted quality and quantity of water resources due to the environment pollution, salinity intrusion and reduction of catchment areas. In some areas of the country, kidney disease is prominent

❖ Demand for reliable pipe borne water service growing faster than the capacity of water suppliers – Urbanization, industrialization are the main reasons

for this

NRW in Sri Lanka

❖ High level of NRW

Annual loss due to NRW in Colombo city is around Rs.2,000 mn

	2000	2005	2011
Island wide	35.6%	33.8%	30%
Colombo city	53.7%	50.6%	50%

Major Challenges in the Sector (cont.)

- ❖ High-cost infrastructures – The capital cost per a piped water connection cannot be recovered either from water tariff or connection charges.
- ❖ No private investment in large scale pipe borne water supply development
- ❖ Sustainability of CBO managed schemes – The CBO managed schemes are at a risk due to technical, management and financial problems
- ❖ Project implementation issues- Most of the water supply projects are unable to complete within the initially planned cost and time duration due to increasing of material and labor prices, project management issues (inadequate capacity and commitment of project staff, inefficiency and inadequate capacity of contractors, complicated procedures, lesser co-ordination with other stakeholders) , project planning and design issues (poor demand forecast, water source selection, scope design) and social issues.

GOVERNMENT VISION IN THE SECTOR

- The vision of the government is to provide safe drinking water for entire population at an affordable cost in an equitable, efficient and sustainable manner by 2020
 - ❖ Confronting long term water supply and sewerage service needs in large cities
 - ❖ Tackling needs of small towns
 - ❖ Enhancing rural water supply facilities
 - ❖ Capacity development of water service providers
 - ❖ Introduction of comprehensive asset management aimed at minimizing, total cost of acquiring, operating, maintaining, replacing, and disposing of a utility's assets.
 - ❖ Technology introduction
 - ❖ Water resources mapping and promotion of research and development
 - ❖ Implementation of multi- sectoral programme for pollution prevention of water sources
 - ❖ Improvement of private sector participation through PPP models

Areas for Technology Needs

- **Non Revenue Water Reduction in urbanized areas specially in the Colombo City**
- **Cost effective technology for purification of water provided by CBO managed schemes**
- **Cost effective technology for purification of water obtained from point sources (eg; wells)**
- **Promotion of alternative water sources for non drinking water requirement**
- **Technology for construction activities that can minimize the damages to existing infrastructures and disturbances to people (trenchless technology)**
- **Desalination of sea water and recycle of wastewater**
- **Use of sustainable alternative energy sources for water schemes**
- **Water quality measurement**

Thank you.