Asia’s cities are growing rapidly. By 2030, more than 55% of the population will live in urban areas.\(^1\) With higher population densities and urban expansion, managing the vast amounts of human waste is becoming ever more challenging.

Lack of sanitation can significantly impact city and national economies, affecting public health, productivity, competitiveness, real estate values, and the overall quality of life. The Asian Development Bank (ADB), its clients, and development partners have invested immense resources in urban sanitation programs, but many have failed to deliver change.\(^2\)

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Most investment has been for centralized wastewater treatment and sewerage. Still, such conventional sewer networks often do not serve newer or informal settlements. Extending such sewer systems to low-income and informal settlements can be challenging and costly.

Institutional capacity assessment and investments are inadequate. Cities often lack the human or financial resources to operate and manage conventional sanitation.

Poverty targeting is weak. Poor people and most people living in informal settlements use on-site sanitation services. They are often poorly built and managed, and have separate and weaker supporting institutions. In the most impoverished areas, there continues to be no sanitation infrastructure at all. In the current coronavirus disease (COVID-19) crisis, poor sanitation exacerbates the difficulty of quarantining and maintaining social distancing and may contribute to the spread of the virus.

There has been limited involvement of the small-scale private sector, the primary service provider in low-income and non-sewered areas.

The track record for long-term operation and maintenance of sewers and wastewater treatment plants is abysmal. Only a tiny fraction of wastewater gets treated or reused, leading to continued health and economic impacts.

Governments and their development partners need to radically rethink their approach and investment priorities for sanitation. All people need to have access to adequate and reliable sanitation infrastructure. And they need to use it to achieve maximum economic returns on sanitation project investments.

Sanitation services also need to be sustained—financially, environmentally, and technically. Therefore, city and national sanitation policies, strategies, and investments need to address the entire sanitation service chain (Figure 1), from the toilet to treatment and reuse or disposal.

Institutions may need restructuring to accommodate a Citywide Inclusive Sanitation (CWIS)—driven strategy. Systems and incentives are required to monitor sanitation service performance and allow evidence-based strategic and tactical changes to optimize performance and service delivery.
Citywide Inclusive Sanitation

CWIS is an evolving concept to meet the sanitation challenges in the world’s growing urban areas more effectively. It builds on current sanitation technologies and practices to achieve more comprehensive, effective, and sustainable sanitation services.

The outcome of a CWIS approach is that everyone in an urban area has access to and benefits from adequate and sustainable sanitation services. And all human waste is managed safely along the whole sanitation service chain.

CWIS comprises four elements—capable institutions, safety and reliability, equity and inclusion, and sustainability—with associated actions to achieve the desired outcome (Figure 2).
CWIS programs have the following characteristics:

- They are evidence-based; health, social, economic outcomes drive the design and implementation approach.
- Institutional arrangements, regulations, and accountability are backed by incentives and established for the management, operation, and maintenance of the sanitation service chain.
- They include a mix of diverse technical solutions that build on existing sewered and non-sewered sanitation systems and incorporate resource recovery and reuse where feasible.
- City leaders demonstrate the political will to prioritize investment in sanitation, technical and managerial leadership, and arrange long-term funding for sustainability.
- Non-infrastructure service delivery components are funded, including essential capacity building, household outreach and engagement, and sanitation marketing.
- Complementary essential urban services are integrated with sanitation planning. These include water supply, drainage, gray water management, and solid waste management.
- Activities and funding target unserved and underserved groups, including women, minorities, informal settlements, and persons with disabilities.

About the Asian Development Bank

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members—49 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

Further Reading

Additional resources, including case studies and training videos, can be found at

- CWIS resources, including video case studies on CWIS, World Bank.
- Massive Open Online Courses series on Sanitation, Water and Solid Waste for Development, Swiss Federal Institute of Aquatic Science and Technology (Eawag). Free online CWIS training.
- City Service Delivery Assessment for Citywide Inclusive Sanitation, Inclusive Sanitation in Practice.