

### A Call to Action: Urban Sanitation in Asia and Africa

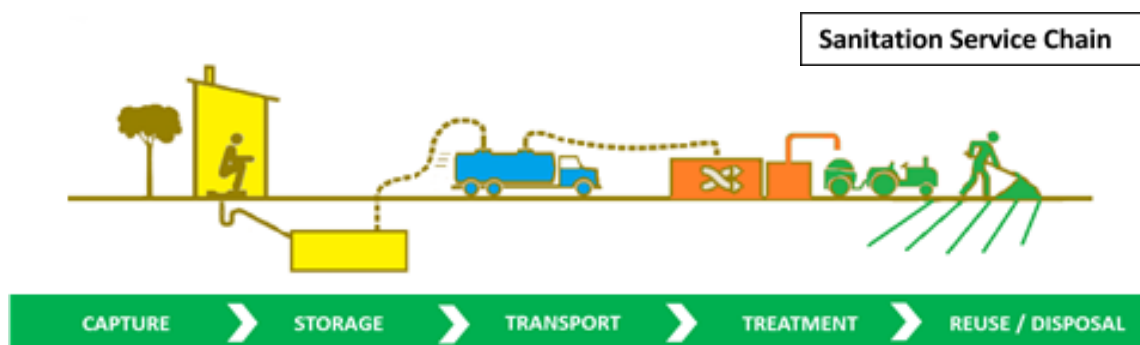
More than half the world's population (54 percent) lives in urban areas. Population growth and urbanization are projected to add 2.5 billion people to the world's urban areas by 2050, with nearly 90 percent of the increase concentrated in Asia and Africa. Medium-sized cities and cities with less than 1 million inhabitants on both continents are the fastest growing urban areas in the world.

Despite many comparative advantages of cities, urban areas are characterized by significant inequality, and hundreds of millions of the world's urban poor live in sub-standard conditions (UN, 2014). While access to latrines or other "improved sanitation facilities" is generally greater in urban areas compared to rural areas, population density and space limitations pose specific challenges to ensuring sanitary conditions in the urban environment. Globally, 756 million urban dwellers lack access to improved sanitation; 100 million of these practice open defecation (WHO/UNICEF, 2014). Further, the rate of urbanization currently outpaces that of latrine provision, meaning the percentage of the urban population receiving sanitation services is decreasing. Another complicating factor is that access to improved latrines does not necessarily translate into consistent use or hygienic practices, and even appropriately captured waste is often improperly stored, transported, or disposed.

Sanitation coverage in urban informal settlements, where many migrants reside, is complicated by legal and institutional ambiguities, including issues related to land rights, responsibilities of service providers, and uncoordinated municipal planning and development. The characteristics of poverty in urban areas add another dimension to the problem. The poor in urban areas are often transient, without the same community organization found in rural areas. They also face higher security risks, as well as limited access to employment opportunities and financial resources. Despite these challenges, an effective sanitation system is crucial for health and child development, environmental sustainability, community economic development, and personal security and safety -- yet progress toward meeting the sanitation 2015 Millennium Development Goal has been slow.

#### Key Challenges

The provision of sustainable sanitation services requires that each step of the sanitation service chain is operational. While there has been promising work in commercializing some steps of the sanitation service chain (primarily capture, emptying and reuse), a number of institutional, financial and technical challenges remain, often resulting in a failed sanitation system.



Across the chain, one of the major barriers is the lack of a clear overarching management structure, including defined public and private sector roles, responsibilities, funding sources and technical capacity to properly build,

maintain and oversee a functional sanitation system. In addition, several specific interrelated challenges and barriers to sustained impact exist across the sanitation service chain, including:

- Capture
  - Limited access to sanitary latrine facilities, especially for the poor
  - Poorly managed or abandoned facilities
  - Land use rights, or lack thereof, that prevent construction of sanitation facilities
  - Social norms and safety risks (e.g., gender-based violence) that interfere with latrine use
- Storage and emptying
  - Waste leakage and groundwater contamination, due to flooding, poor containment, or location
  - Access difficulties due to narrow roads, settlement density, and poor container construction
  - Expense of emptying services for low-income households/communities
- Transport
  - Payments from households or municipal service providers do not cover transport to distant processing facilities
  - High costs of transport vehicles and associated expenses (e.g., fuel, repair)
  - Few to no appropriate destinations for treatment or disposal
- Treatment
  - Few operational treatment facilities near urban centers
  - Existing treatment systems and facilities not prepared to process fecal sludge (e.g., varying quantity and quality, inclusion of foreign objects, separate treatment of wastewater)
  - Limited cost/profit margins using current technologies
- Reuse and/or disposal
  - Few existing markets interested in waste products
  - Inconsistent or unknown quality of waste products
  - Cost incentives and lack of enforced regulations promote inappropriate disposal

#### *Potential Opportunities*

Sustainable sanitation service delivery requires commitments from both the public and private sectors, and **it is in improving the nexus between commercial and municipal sectors where the greatest opportunities to strengthen the overall chain lie**. Several potential ways that innovative work might be utilized to improve this nexus include:

- Strengthening the enabling environment
  - Support regulatory development and enforcement that promotes responsible entrepreneurship
  - Build institutional capacity to help governments incentivize businesses to properly transport and treat fecal sludge
  - Modernize municipal financing approaches and strategies
  - Improve understanding of and responsiveness to local population needs and behaviors
- Strengthening the commercial sector
  - Connect promising sanitation businesses to technical assistance and business incubator or accelerator services, including financial resources and planning
  - Promote connections between businesses operating at different steps in the service chain
  - Align technologies and delivery models with consumer demand and practices
- Advancing the state of learning and evidence
  - Develop tools to better match local needs to available technologies and services

- o Identify common and unique characteristics of urban sanitation needs across geographies
- o Catalogue, consolidate, and disseminate information about barriers to uptake and growth opportunities for specific technologies or solutions
- o Support development of more efficient treatment and reuse solutions

### **Transforming the Urban Sanitation Landscape**

USAID has designated Urban Sanitation as a pilot “Problem Set.” A Problem Set is a significant challenge in development for which there is not yet a viable solution that shows clear promise for scaling, typically because of its complexity and the need to solve several underlying problems at once. The core objective of the work on the Urban Sanitation Problem Set is to address significant barriers to solving the problem and to identify and prove the efficacy of new solutions that can then be taken to scale.

USAID and partners aim to develop a joint **Urban Sanitation Initiative** focused on applying existing technology, finance, and governance models in novel ways for immediate, real-world solutions that produce catalytic - not merely incremental - change. The Urban Sanitation Initiative will identify solutions that can strengthen the sanitation service chain in urban systems at scale, prioritizing the needs of low-income populations. We plan to address the nexus between commercial and municipal aspects of the service delivery chain, targeting specific region(s) or city(ies) in South/Southeast Asia or Africa, with the intention of testing several potential solutions in order to develop a systems-based approach and capture lessons learned that may be portable to other locations. Acknowledging the rich entrepreneurial space and promising innovations that exist globally in the field of sanitation, we envision building on existing localized successes that show potential for scale through targeted support and shared learning rather than an emphasis on sourcing new technologies.

### References

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**NOTE: This document outlines the current direction of the USAID Urban Sanitation Problem Set team, which is subject to revision. Please do not use or share this document beyond the scope of informing proposals for the PEER program.**