



Governing local sanitation for lasting service

Policy Brief

What governance structures ensure long-term successful delivery of local scale sanitation service?

Effluent management in low-income urban areas in Indonesia is challenging. Local scale systems are an affordable way to manage hazards of untreated wastewater. However, to operate well in the long-term, these systems need effective governance.

A review of local* scale systems in Indonesia found the service does not always last as planned. In response, the Institute for Sustainable Futures at UTS undertook a three-year research project to improve the long-term governance of local scale wastewater services in Indonesia. [*By local scale, we mean decentralised community approaches serving 20-200 households.]

KEY MESSAGES

To ensure successful service, local government (LG) should at a minimum: (1) maintain records of system location, technical performance, and CBO status; (2) fund major costs e.g. effluent monitoring, desludging, rehabilitation, extension and retrofitting (3) formalise tariff setting and fee collection to give CBOs the authority they need.

Government of Indonesia / donors should:

- **Modify program guidelines to (1) include these minimum LG responsibilities and (2) require a post-construction check for all systems, recorded locally and in the national database (NAWASIS).**
- **Embed the cost recovery principle into legislation and programs, e.g., by requiring mayors to set local cost-recovering tariffs.**
- **Prepare a National Expenditure Policy to clarify how LG can financially support O&M, regardless of ownership.**
- **Refine local regulation templates to specify (1) minimum LG responsibilities for all scales of sanitation and required performance of the systems; (2) leave open how other responsibilities are distributed among qualified, registered entities in the future.**

The collective, long-term performance of local scale (decentralised) systems is unknown at local and national levels.

Government of Indonesia (GoI) has built more than 14,000 local scale sanitation systems under a concept called *SANIMAS* – community based sanitation. About 100,000 are needed to meet GoI 2019 targets. However, very little is known about how existing systems are performing:

- The majority of systems (80%) have had no post-construction audit.
- Only 2% of systems have had any effluent quality testing, and for those, it occurred once only.

Analysis of what data is available is concerning:

- Technical performance declines as the rate and speed of implementation increases and depth of capacity building decreases.
- On average, systems are operating at 50% of intended capacity.

This reduces the efficiency and effectiveness of existing and future investments, but also gives clear indications about how to improve the situation.

Communities have operational responsibilities that are beyond their capacity and much more than those with on-site or city-scale sanitation services.

The local scale systems are gifted to the community after construction. Community-based organisations (CBOs) are responsible for operation. Most CBOs do not have the financial or technical capacity to undertake major operational tasks, rehabilitation, or optimisation.

Tariffs collected for sanitation services seldom cover operational costs. Almost all CBOs struggle to collect enough revenue to cover the costs of maintaining the system.

Local government is legally responsible for sanitation service delivery.

National legislation makes clear that local government (LG) has legal responsibility for sanitation because it is a basic, concurrent, mandatory affair. LG has limited paths to support operation and maintenance of assets it does not own. However, within local governments there is confusion and misunderstanding about responsibility, ownership, financing, and therefore local governments are

unsure about whether they can or should support the operation of local scale systems, and how to do so.

A few local governments are starting to provide limited support through finances, technology, regulation, capacity building, and NGO partnerships.

There are important drivers for local governments to more actively support local scale services.

In addition to legal responsibility and the failure of many CBOs, there are important drivers for LG to accept responsibility for local scale sanitation:

Equity: The SANIMAS concept asks poorer communities who receive local scale systems to contribute more in construction and operation than those receiving centralised services. Where as LG fills the cost-revenue gap for centralised services, poorer communities must fill this gap for local scale. This inequity has implications:

“...the people who are involved [in the operation and management of community-based sanitation] are not always people who are fully concerned about this issue. They cannot be focused on this, they have children, life, if they take care of this then they cannot eat.” (LG Official, South Sulawesi)

Changing the community norm: The community empowerment notion, which underpinned the first decade of community-based sanitation, assumed these systems were moving people away from open defecation and required communities to provide land as proof of commitment to accepting a local scale system. Neither of these is relevant now because most new installations are simplified sewer systems, where underground infrastructure connects households with existing toilets. The land requirement has been removed and LG can provide public land. These communities could equally be served by centralised or local scale systems, so requiring communities to accept ownership and maintenance of one but not the other no longer has a rationale.

The next evolution of local scale sanitation should have successful service provision as the goal.

In the next evolution, LG should take ultimate responsibility for ensuring successful local scale sanitation service delivery, instead of the community. National government should set clear minimum requirements for local government in this role. Each LG should discern its own path beyond these minimum requirements, finding the optimal local balance between available options: community-based organisations, co-management with bridging organisations, and leadership from public institutions, as detailed in Ross et al., (2016) *Governance of local scale sanitation: How to design governance for lasting service?*

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METHODOLOGY

The project was:

Transdisciplinary: The research drew on science, engineering, economics, politics, governance, social science, humanities, business, education.

Action research: Our lines of enquiry were developed iteratively and collaboratively, based on insights gained as the project progressed.

Participatory: At the national level, a Project Advisory Group (with members from six Ministries and five international donors) provided guidance and validation for the research. At the local level, 10 local governments, 30 sites and over 100 participants engaged. A further 40 local governments and 180 local level participants, plus about 80 national policy and program specialists took part in 5 interactive dissemination workshops and briefings.

Mixed methods: Both qualitative and quantitative data and analyses were used.

There were four key lines of enquiry:

Performance monitoring: What is the volume and quality of data for local scale system performance?

Legal arrangements: What are the formal and informal institutional arrangements for local scale system governance, and what are the implications for operation and maintenance?

Scale and distribution of costs: For a range of sanitation models, what are the scale and distributions of costs; and what are the implications?

Management partnerships: What are the range of structures and institutional arrangements that could deliver the responsibilities for managing local scale systems?

Investment should occur where it is most needed

Protecting people from exposure to faecal contamination means paying attention to the flow of pathogens in sanitation systems. Liquid effluents/leakage from septic tanks and community systems may pose a significant health hazard. A new heuristic for local pathogen hazard assessment (Mitchell et al., *Waterlines* 35(2):163-181) developed through this project has been positively received by World Bank and WHO staff. This prototype should be further developed and embedded in local delivery programs to help identify where to invest.

Further reading and resources

Comprehensive and practical tools, guidance materials, reports, and materials referenced in this Policy Briefing are all available in English and Bahasa Indonesia on the project website:

<http://communitysanitationgovernance.info>