

To tackle urban sanitation challenges, the World Bank's Water Global Practice and partners have jointly advanced **Citywide Inclusive Sanitation (CWIS)** and put it into action.



## Sample Indicators for use in Urban Sanitation Projects

*Note: The following indicators are indicative and not intended to be exhaustive; they may require modification to match the context of a particular project. Additionally, it is recommended that teams limit the number of indicators to those that are most relevant and realistically measurable under their projects.*

*Indicators in italics taken from recent example projects*

### Service Coverage

*\*\*\*Note: Wherever possible, please disaggregate the indicators by gender*

- People provided with access to “improved sanitation<sup>1</sup>” (*number*) – Corporate Indicator\*
  - *People in urban areas whose excreta are safely managed under the project (number)*
  - *Number of people gaining access to safely managed sanitation<sup>2</sup> services as a result of the project*
    - *Of which 50% are women*
    - *Of which 40% are from the poorest two quintiles*
    - *Of which XX% are from an identified subgroup (gender, religion, disability status etc.)*
- People using improved sanitation services (at least a year after the intervention is implemented) (*number*)
- People provided with access to sanitation through sewers (*number*)
- People provided with access to new or rehabilitated community/shared sanitation facilities (*number*)
- People provided with access to a functioning Fecal Sludge Management (FSM)<sup>3</sup> system, which provides safe emptying and conveyance to a site for treatment (*number*)
- Improved containment facilities constructed under the project (*number*) [E.g.: a properly designed and constructed septic tank]
  - *Improved containment facilities constructed under the project (number)*
    - *Of which in households/rental accommodation (number)*
    - *Of which in schools, markets, workplaces, public spaces and health centers (number)*
- Improved containment facilities constructed under the project (*number*)
  - *Improved containment facilities constructed under the project (number)*
    - *Of which in households/rental accommodation (number)*
    - *Of which in schools, markets, workplaces, public spaces and health centers (number)*
- Improved shared sanitation facilities (public, community and household shared) constructed or rehabilitated under the project (*number*)
- Number of public latrines/toilets<sup>4</sup> constructed/rehabilitated under the project (*number*)
  - *Number of public latrines/toilets and communal latrines/toilets<sup>5</sup> constructed under the project and providing service (number)*

<sup>1</sup> *Improved sanitation facilities* are those designed to hygienically separate excreta from human contact, and include flush/pour flush to piped sewer system, septic tanks or pit latrines; ventilated improved pit latrines, composting toilets or pit latrines with slabs

<sup>2</sup> *Safely managed sanitation* consists of use of improved facilities which are not shared with other households and where excreta are safely disposed in situ or transported and treated off-site

<sup>3</sup> *Fecal sludge management (FSM)* is the collection, transport, and treatment of fecal sludge from pit latrines, septic tanks or other onsite sanitation systems.

<sup>4</sup> *Public toilets/latrines* refer to facilities open to all users who are in transit or otherwise away from home

<sup>5</sup> Toilet blocks that serve many households in a residential area (as the main sanitation facility), and that may offer shower and laundry facilities, are referred to as *community toilets/latrines*

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- Percent of households in the sewerage network catchment area/at a certain distance from the sewer (*meters*) which are connected to the network (%)
- Number of latrines/septic tanks emptied under the project (*number*)
- Volume of sludge delivered to treatment facility (*tonnes/day or tonnes /month*)
- Percentage reduction in open defecation (%)
- Number of containment facilities that specifically meet the needs of women and girls (i.e. availability of menstrual hygiene management (MHM)<sup>6</sup> product disposal, availability of water and soap nearby, internally lockable door, distance from household) (*number*)

#### Quality of Service

- Time taken to address sewer blockages (*number of hours*)
- Time taken for household latrine/septic tank to be emptied after calling for services (*number of hours or number of days*)
- Complaints addressed within the stipulated time standards (%)

#### Operating Efficiency

- Sewer system blockages (*blockages/km/year*)
- Energy efficiency at the wastewater/septage/fecal sludge treatment plant (*kWh/m<sup>3</sup> treated*)
- Energy production at wastewater/septage/fecal sludge treatment plant (*kWh/day*)
- Operating costs (*US\$/m<sup>3</sup> safely managed waste*)
- Staffing ratio (*staff/1000 wastewater connections; staff/1000 households served by FSM system*)
- Gender ratio of staff (*staff/gender; staff grade/gender*)
- Staff costs (*% of total operating costs*)
- Energy costs (*% of total operating costs*)
- Number of households per available septage/fecal sludge vacuum tanker (*number*)
- Number of failed attempts to use vacuum tanker to empty household containment facility (*number/day or number/month*)

#### Financial Sustainability

- Operating cost recovery (*% of total costs*)
- Total cost recovery (*% of total costs*)
- Debt service coverage ratio (%)
- Debt equity ratio (%)
- Average annual revenue (*US\$/m<sup>3</sup> safely managed wastewater/septage/fecal sludge; US\$/sewer connection/year*)
- Average annual revenue (*% residential; % commercial; % industrial*)
- Average annual revenue from sale of treated effluent/sludge (*US\$/year*)
- Communities contributing to capital costs of sanitation facilities (%)
- Local governments making required financial contribution (%)
- Ratio of industrial to residential tariff (%)

<sup>6</sup> Menstrual Hygiene Management (MHM) is defined as “women and adolescent girls are using clean menstrual management materials to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period, using soap and water for washing the body as required, and having access to facilities to dispose of used menstrual management materials” (JMP 2012)



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- Connection charge (*US\$/connection*)
- Average tariff; pit emptying fee; fecal sludge/septage tipping fee at treatment site (*US\$*)
- Collection efficiency (*% cash income/billing*)
- Collection period (*days after billing*)

#### Environmental Sustainability

- Proportion of collected wastewater/septage/fecal sludge that receives at least primary treatment (%)
- Proportion of collected wastewater/septage/fecal sludge that receives at least secondary treatment (%)
- WWTPs upgraded based on class of effluent emitted (*number*)
- Sludge/effluent treated that meet discharge/end use standards (%)
  - *% of functioning wastewater treatment plants in governorate operating to Egyptian standard (Percentage)*
- Volume or percent of treated wastewater/septage/fecal sludge that is safely reused (*m<sup>3</sup>/month; %*)
- Volume (mass) of BOD pollution loads removed by the treatment plants (*tonnes/year*)
  - *BOD5 removed by the treatment plant as a result of project interventions (tonnes/year)*

#### Sector Structure, Policy, Regulatory Framework, and Institutions

- Policy, strategy, regulations, for sanitation developed and/or operationalized (*yes/no*)
- Policy, regulations on wastewater/septage/fecal sludge reuse in place (*yes/no*)
- Policy, strategy, regulations that incorporates poor-inclusive (or gender-aware) sanitation approaches in place (*yes/no*)
- Independent regulator established and operationalized (structure, staffing, budget, work plan, rules and regulations) (*yes/no*)
- Performance agreement between service providers and government (*yes/no; number*)
- Performance agreement targets met (%)
- Independent audits conducted annually (*yes/no*)
- Community sub-projects developed, approved, and/or financed (*number*)
- Private operator in place (Concession/PSP agreement signed) and functioning (delivering services) (*yes/no*)
- Regulation of local private sector service providers (e.g., pit/tank emptiers) via contractual arrangements or other regulatory mechanisms (*yes/no; number*)
- Required functions (operating/financial powers) delegated from government to sanitation authority/service provider (*number*)
- Sanitation management schemes/systems maintained (by service provider; by communities) (*number*)
- Number of private fecal sludge/septage emptying companies strengthened under the project to provide improved sanitation services (*number*)

#### Planning



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- Asset management plans in place/operationalized (yes/no; number)
- Completed strategic sanitation planning exercises (yes/no; number)
- Completed feasibility studies/investment plans (yes/no; number)
- Sanitation investment, O&M, and/or community action plans developed/operationalized (yes/no; number)
  - O&M Manual for FSM developed and in use (yes/no)
- Communication strategy developed/implemented (yes/no; number)
- Participating cities that have prepared and implemented an integrated urban sanitation management plan under the project. (number)

#### **Inclusion and Citizen Engagement**

- Share of sanitation facilities which are accessible to persons with disabilities (%)
- Indigenous people/persons with disabilities/ethnic minorities/other excluded groups involved in decision-making related to construction and maintenance of sanitation facilities (number)
- Share of community members/facility users/citizens who are satisfied with participatory process of designing and operating sanitation facilities (%)
- Grievances registered related to delivery of project benefits that are satisfactorily addressed within agreed time (%)

#### **Sanitation Workers**

- Number of Sanitation Workers (responsible for cleaning, maintaining, operating, or emptying a sanitation technology at any step of the sanitation service chain) following Standard Operating Procedures (SOPs) (number; %)
- Workers who manage public sanitation facilities who are female (or persons with disabilities/other group identified as excluded by the project) (%)
- Creation of Standard Operation Procedures for Sanitation Workers (yes/no)
- Number of Sanitation Workers provided with Operational Health & Safety (OHS) training (number; %)
- Number of Sanitation Workers provided with Personal Protective Equipment (PPE) (e.g. protective gloves (waterproof and abrasion resistant), protective clothing, safety boots, masks, face shields, etc.). (number; %)
- System in place to report loss, destruction or fault with PPE) (yes/no;)
- Grievance Redress Mechanism set up and used by Sanitation workers (yes/no)
- Labor legislation created for Sanitation Workers (yes/no)
- Equipment available for safe conveyance/transport/treatment/disposal of fecal waste/septage (yes/no).

