

Step 1

Identify local strengths



Begin the process of preparing a scheduled desludging scheme by identifying things that can make the process simpler and faster. In the process, obstacles may be encountered that can slow down or even halt the process. Assess the current conditions of the seven scheduled desludging aspects against the conditions required. At the end of this step, we must decide whether preparation of scheduled desludging is feasible to continue and determine what measures are needed to close the gap.

1.1 ANALYZE THE GAP

Initiate the development of a scheduled desludging scheme by finding answers to the following questions: what is currently owned by a city that can accelerate the preparation process of the scheme? What will halt or slow down the preparation of the scheme? To answer these questions, the team of course needs to understand what aspects of the scheduled desludging scheme are needed so it can be implemented properly and sustainably (see [Figure 1.1](#)). Not only the technical aspects, but also the institutional, regulatory and financial aspects. The team will later compare what the city already has with what is needed for a scheduled desludging scheme, also called a gap analysis. Local strengths should be identified as well as the bottlenecks.

1.2 RELY ON AVAILABLE DATA

In this step, the team can utilize existing secondary information or data available at municipal agencies related to urban planning, infrastructure provision, building control, housing and settlements, public health and sanitation services. This step does not include going to the field to get primary data and information. Information to be collected includes:

- the total population and buildings,
- the use of septic tanks and their general conditions,

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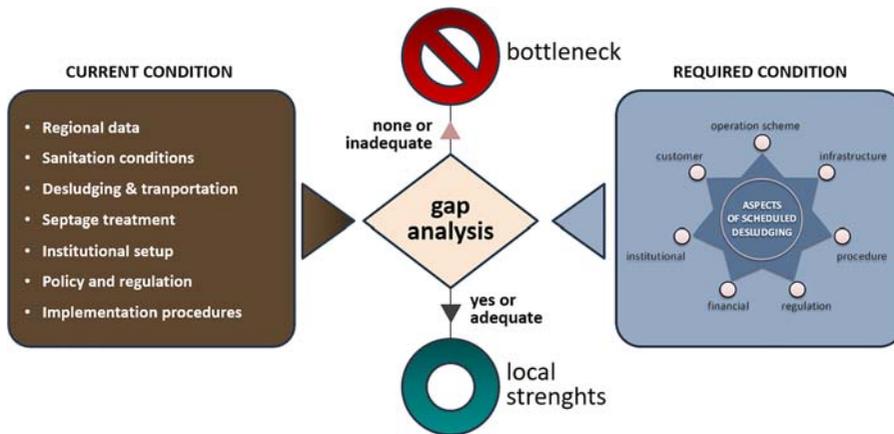


Figure 1.1 The local strengths or bottlenecks for preparing a scheduled desludging scheme are identified after we compare the current conditions with the required conditions of a proper and sustainable scheduled desludging scheme. At the beginning of the preparation process for scheduled desludging, gap analysis can be done using only secondary information.

- the availability and coverage of wastewater sewerage system,
- the availability of desludging services,
- the number of trucks or other desludging units,
- the availability, capacity, and condition of septage treatment and other wastewater treatment facilities,
- the institutions related to wastewater and septage managements, as well as to water supply, cleansing, and drainage,
- the regulations related to wastewater, septage, buildings, and environmental managements

As much as possible, any information obtained should include its source along with year and location. It is helpful to use a questionnaire or checklist to guide us in gathering information (see [Figure 1.2](#) and [Annex A](#) for the questionnaire).

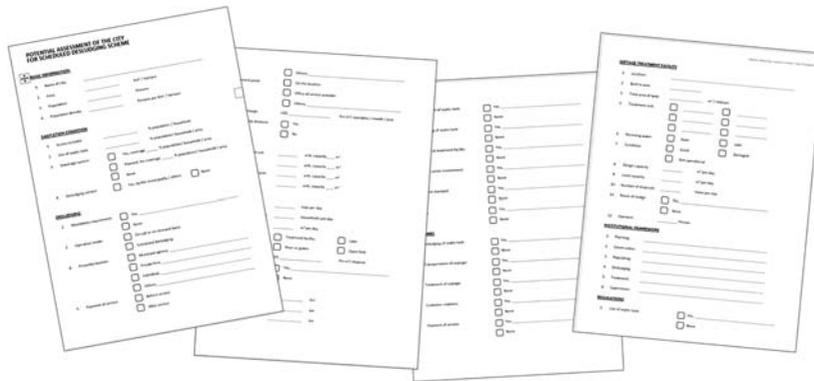


Figure 1.2 The Assessment Form of City Strengths for Scheduled Desludging used by IUWASH PLUS program officers and their counterparts when assessing the conditions of the city where they work to develop scheduled sludge removal services.

1.3 'GO' OR 'NO GO'

The team should evaluate whether a city is ready to develop scheduled desludging scheme based on information collected. There is a possibility that at the end of this step the team concludes the city is not ready for a scheduled desludging scheme. Reasons may include the small number of households that use septic tanks or due to the absence of septage treatment facility in the city (see Figure 1.3). If these two problems are not found, the city can be considered feasible to immediately start the development of a scheduled desludging scheme.

A key issue that prevents a city from having a scheduled desludging scheme is a small number of septic tanks within its area due to the restricted capability of the scheme becoming financially independent. The lower the number of septic tanks, the lower the economic scale of the scheduled desludging scheme. It is a fact that many cities still have low levels of access to improved sanitation, which means the toilets do not connect to a septic tank or to a sewerage system network. Some cities even still have high open defecation rates. In such cities, it is far better for the municipalities to optimize on-demand desludging services while also promoting the proper use of septic tanks or sewer connection.

Another main issue is the existence and capacity of a septage treatment facility (see Figure 1.4). Many cities do not have such treatment facilities, or even access to a treatment facility in the nearest city. Meanwhile some other cities may have septage treatment facilities, but these facilities may not be in good condition or even really damaged. A city must at least be able to show plans to develop their septage treatment facility in order to be deemed feasible to start preparing the scheduled desludging scheme.

Another issue is the domestic wastewater management regulation which many cities do not have. Cities may have regulations regarding buildings, environment management or public health which contain a number of provisions regarding wastewater management. However, these regulations rarely contain detailed provisions to support an effective scheduled desludging scheme; for example, the requirements

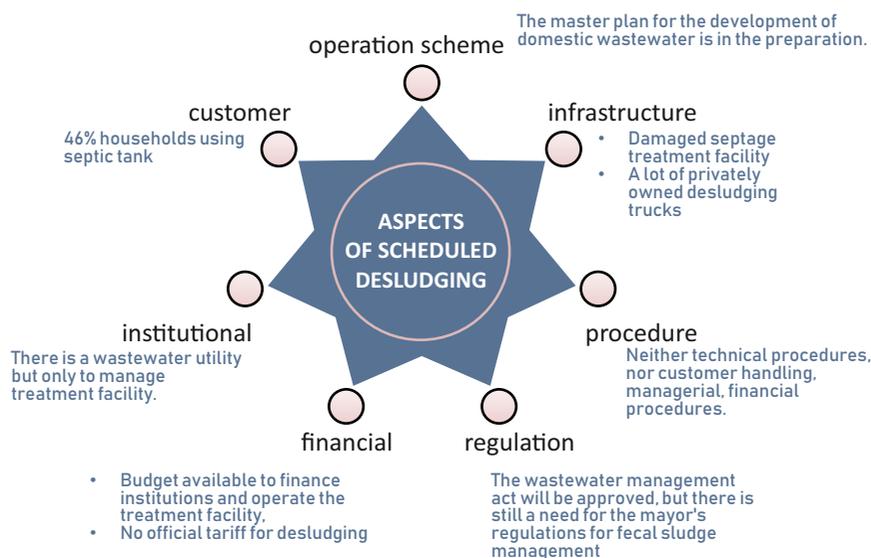


Figure 1.3 A brief note of the result of the gap analysis of city potential carried out by IUWASH team in an Indonesia city. At the end of the analysis, the city was deemed fit to start preparing a scheduled desludging scheme provided they had a plan to rehabilitate their treatment facility and improve the regulations.



Figure 1.4 Septage treatment facility is an important component of scheduled desludging schemes. Their capacity often becomes the limiting factor that determines the coverage of septage desludging scheme in the early years.

to have database on septic tanks, 3-year desludging time, monitored desludging and transportation, safety gears, monthly tariff payment and others may not be provided in detail. A specific septage management regulation is a must for a city to implement a scheduled desludging scheme.

The team can make a list of all the follow-up measures necessary to develop a scheduled desludging scheme in the city. Arrange the steps in sequence in a diagram to make it easier for others to understand (see Figure 1.5). Enter the estimated completion time for each measure so we can calculate the total time needed to prepare a complete scheduled desludging scheme in the city.

The preparation of a scheduled desludging scheme for some cities could be their first attempt in preparing an institutionalized citywide sanitation service. A lot of resources, energy and time will be spent by the municipalities to set up the supporting components of the scheduled desludging scheme. These components will also be needed if the city wants to develop a sewerage system service in the future.

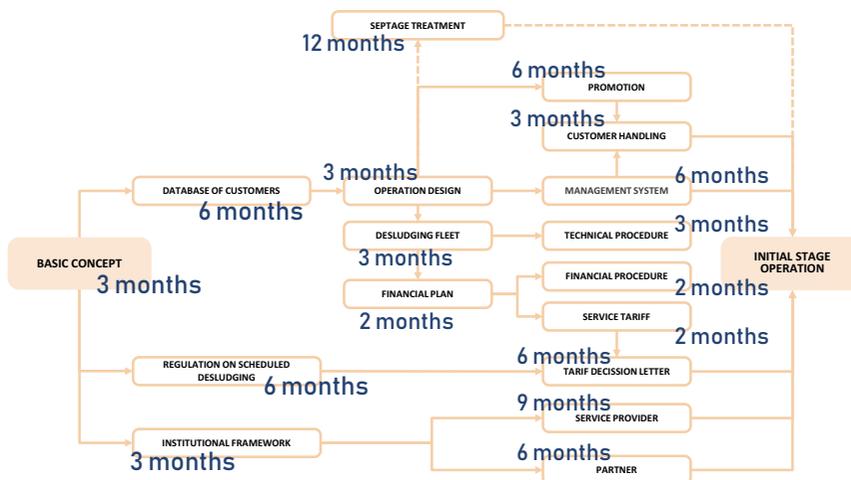


Figure 1.5 Flow chart of measures for developing a scheduled sludge desludging scheme in the city as a result of an assessment of the city's potential. The duration for carrying out each measure needs to be specified so the team can estimate the total time needed to prepare a scheduled sludge removal scheme in the city.