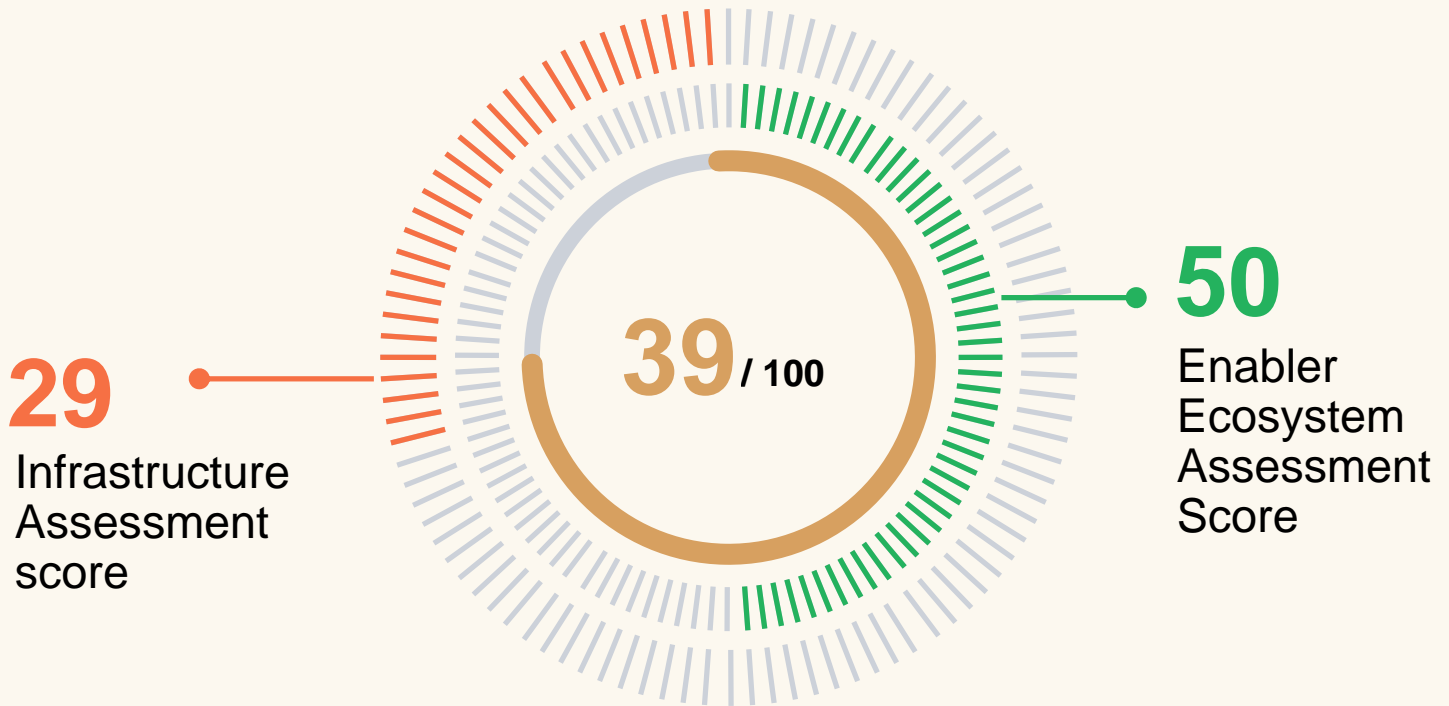


Vellore

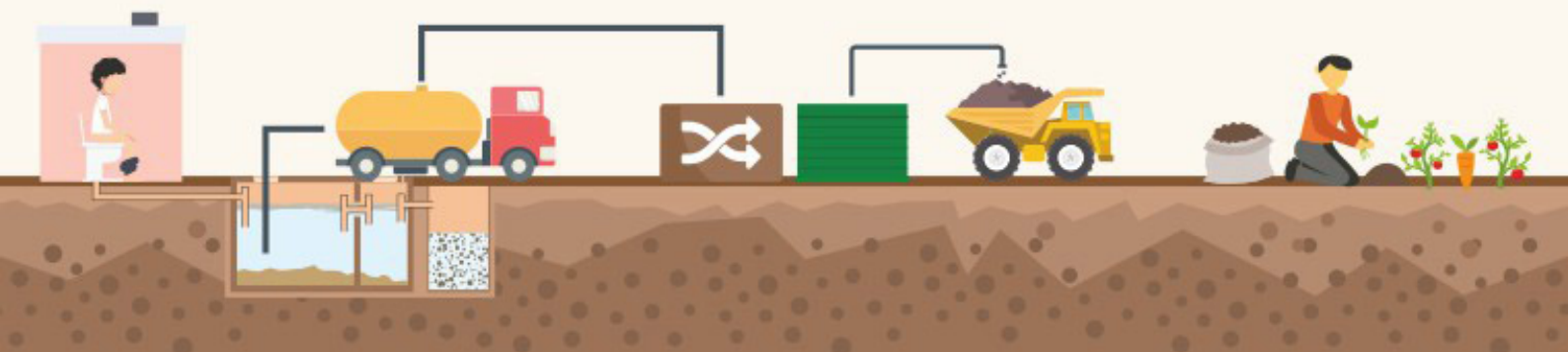


The FSM Index score indicates that the Overall FSM performance of the city is

Developing

Scale: Poor 0-33% | Developing 33-66% | Good 67-100%.

The FSM infrastructure of the city requires improvement with a focus on - containment systems, desludging and transportation services in the city. The enabler ecosystem assessment score indicates need for improvement in aspects of - defining service targets, public finance commitments, quality of FSM services, demand generation, programmes for sector development and overall quantity of FS safely managed across the value chain.



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City Assessment Report: Vellore

February 21, 2019

Produced By: Kowshik, Athena Infonomics, Vellore, Tamil Nadu, India.

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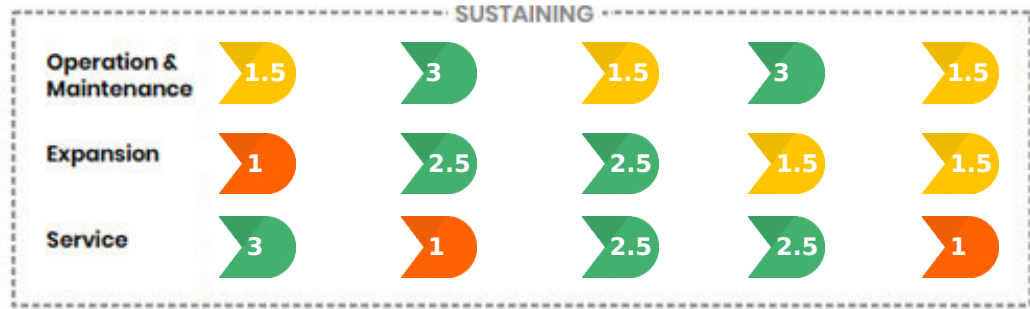
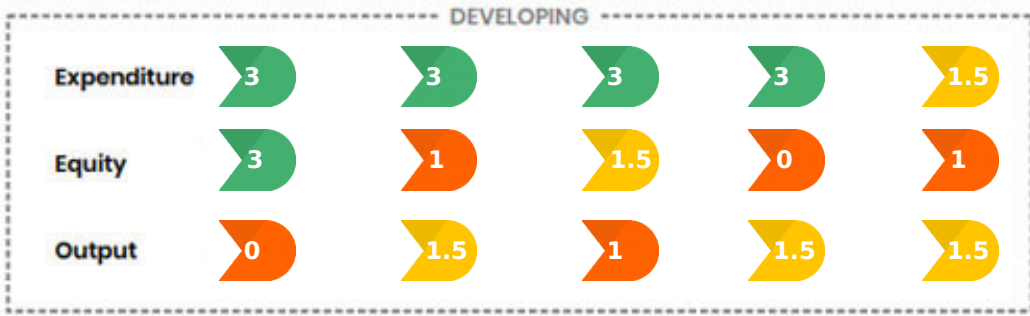
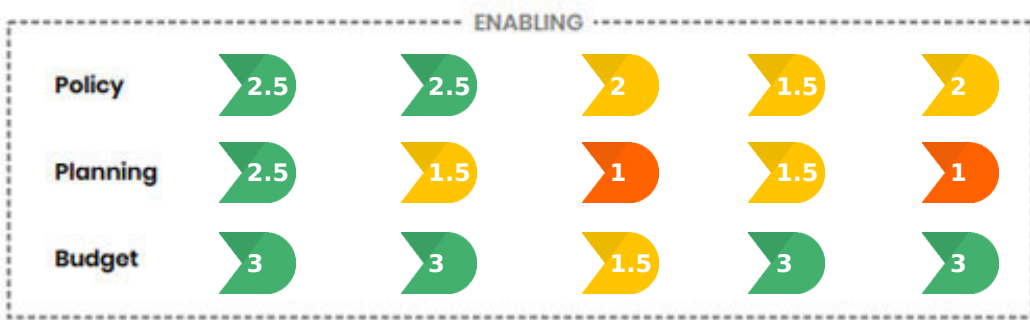
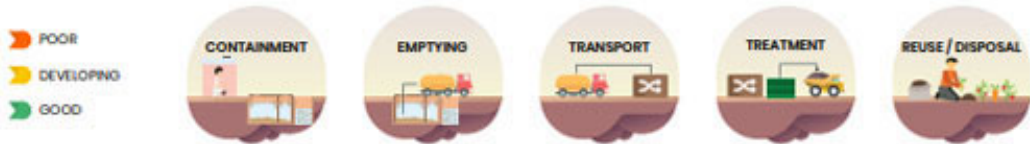
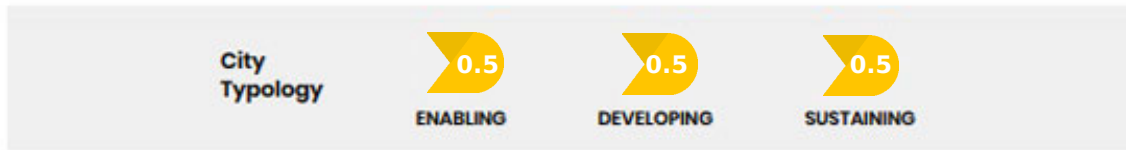
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www.fsmttoolbox.com

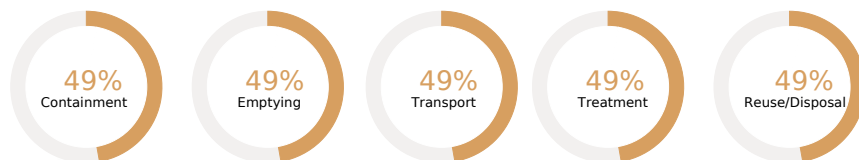


Overall Assessment Output

Enabler Ecosystem Assessment



Infrastructure Assessment



Enabler Ecosystem Assessment



City Typology



- POOR
- DEVELOPING
- GOOD



----- ENABLING -----

Policy



- Great to learn that the city has an appropriate and approved policy document acknowledged by all the stakeholders in the city.
- Encourage/enforce stakeholders to operationalize defined institutional roles.
- Though legal and regulatory mechanisms exist in your city, it is important to operationalize them effectively, through a combination of sanctions/penalties, incentives and greater sensitization

----- ENABLING -----

Planning



- There are no service levels or targets defined at the city level, which makes it hard to track if the city is making progress on improving service delivery outcomes. Please adopt service delivery levels and set annual targets for your city, given your current baseline for each service.
- Even though an FSM investment plan exists, it does not cover your city's human resource needs and capacity gaps.



----- ENABLING -----



- The city must operationalize and strengthen the process for coordinating investments from domestic and international donors, national grants, state budgets, donor loans, grants and others.

----- DEVELOPING -----



- The annual public financial commitments for FSM is insufficient to meet the service levels and needs of the city. The existing financial commitment meets less than 50% of the overall FSM requirement of the city. The city must take concerted efforts to mobilize funds from national grants, state budgets, donor loans, grants or engage the private sector through PPP models

----- DEVELOPING -----



Containment | End-use / disposal

- The city’s technology options are insufficient to meet the needs of the poor. The city needs to encourage investments in research and development of context specific technologies that meet the needs of the urban poor.
- Limited efforts have been made to raise funds for the city to reduce inequalities. The city first must map the needs and priorities of the low-income consumers and formulate a plan to mobilize and then put to use these funds to meet the needs and bridge the equality gap.

Emptying | Conveyance | Treatment

- Great to learn that the city has sufficient technology options, especially to meet the needs of the urban poor.
- While efforts have been made to mobilize funds, the utilization of these funds to reduce inequality remains low. Efforts must be taken to identify reasons for low utilization and find ways to use the funds to reduce inequalities in the city.



----- DEVELOPING -----



- The capacity of the FSM players/infrastructure is growing at a decent pace (just over 50% growth) to meet the needs, demands and targets to protect the overall public and environmental health.
- Just over 50% of services are of an adequate public health standard and the current situation poses a serious public health and environmental risk.

----- SUSTAINING -----



Entire value chain

- The city is yet to put in place a mechanism to monitor norms and standards.

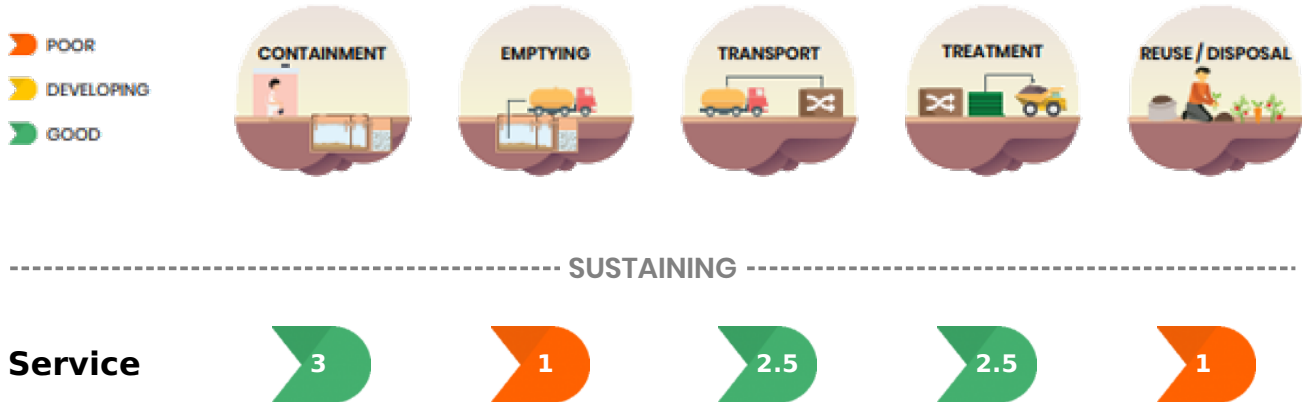
Treatment | Re-use

- The city has a set of norms and standards and monitors them. However, there are no mechanisms disincentivize non-compliance with the norms through penalties/sanctions

----- SUSTAINING -----



- The city has been implementing demand generation policies, procedures or programs, but the resulting demand is not fully addressed
- While a few measures and programs to strengthen and expand the network are underway : the majority of service providers remain largely disorganized and the FSM services they provide are not expanding at an appropriate rate.

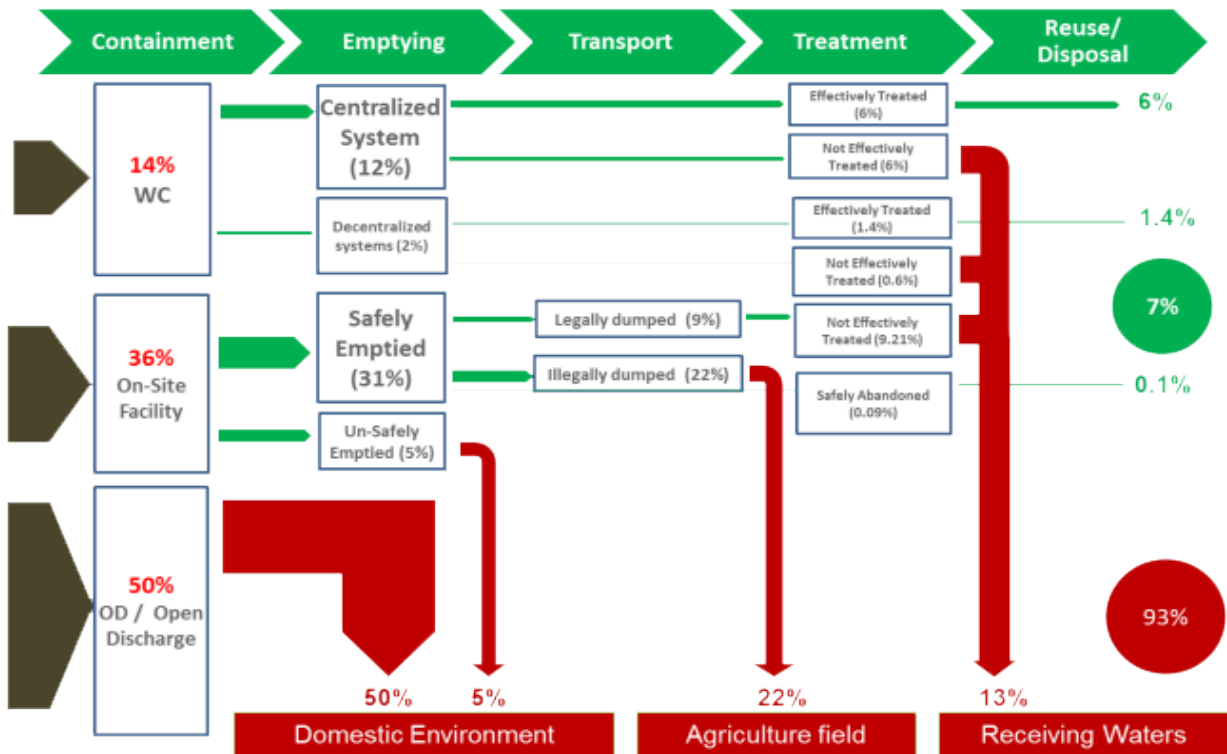


Hygienic FSM systems and services are available on a partial / piecemeal basis in low-income communities (or in some)

and the table as below

<p>Just over 50% of FS generated in the city is safely managed at the containment stage. The city should encourage households to improve the overall quality of containment systems in the city to meet environmental safety standards.</p>	<p>Less than 50% of FS generated in the city is safely managed at the emptying stage. The city should enforce the desludging operators to adhere to global safety standards and educate them about personal health and hygiene.</p>	<p>Less than 50% of FS generated in the city is safely managed at the conveyance stage. The city should enforce the desludging operators to strictly adhere to conveyance and disposal standards.</p>	<p>Less than 50% of FS generated in the city is safely managed at the treatment stage. The city should ensure adherence of safe treatment standards in all treatment units installed in and around the city</p>	<p>Less than 50% of FS generated in the city is safely managed at the re-use/disposal stage. The city should educate/ensure safe disposal/re-use of treated by-products from the treatment plants operating in and around the city.</p>
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Shit Flow Diagram



Infrastructure Assessment



530,000 Households

30,140 Commercial

7,230 Institutional

784 Industrial

1,200 Community Toilets

145 Public Toilets

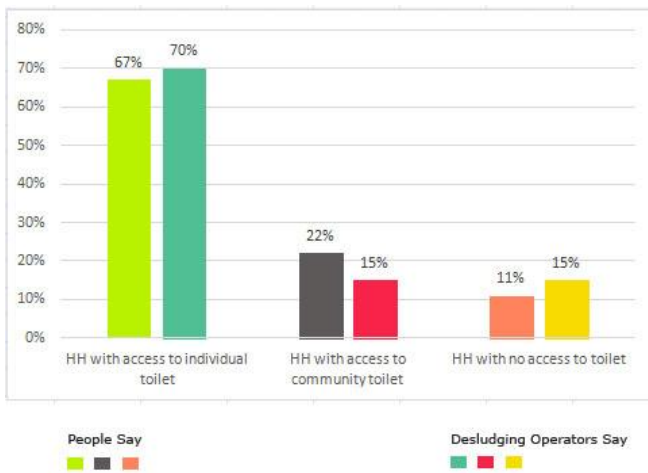
Sample Size:

The FSM Pro assessment was conducted in Vellore Municipal Corporation with a ward level sampled population. The sample was calculated with a confidence level of 95%. The table shown below is the sample size that was covered for arriving at the assessment report.

	Household	Slum Household	Commercial Buildings	Industrial Buildings	Institutional Buildings	Desludging Operators
Total size of the Vellore City Municipal Corporation	530,000	24,589	30,140	784	7,230	43
Proposed Sample Size	Identify this value from the sample calculator	Identify this value from the sample calculator	Identify this value from the sample calculator	Identify this value from the sample calculator	Identify this value from the sample calculator	Identify this value from the sample calculator
actual Sample Size Covered	30	10	5	5	5	5



Access to toilets - Households



Households Say (Based on actual values)

if the 530,000 households in the city, 67% of households have access to individual toilet facility and 22% of households have access to community toilets in their neighbourhood. The remaining 11% of households do not have access to any kind of toilet facility in the city.

Based on responses collected during primary surveys, the access to toilets among different wards is visualized in the geospatial map.

Desludging operators say (Perception)

However, the views of desludging operators seem to vary from households.

People say

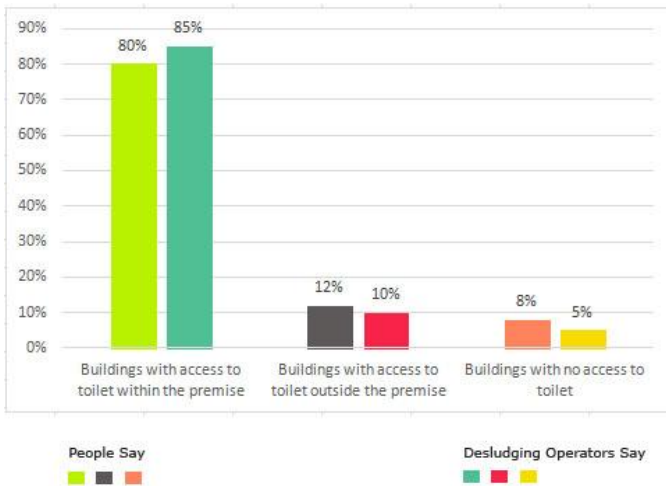


Desludging operators say that 70% of households have access to household toilet facility and 15% of households have access to community toilets in their neighbourhood. The remaining 15% of households do not have access to any kind of toilet facility in the city.

FSM Toolbox has dedicated modules to assist you in planning household and community toilet construction in your city.



Access to toilets - Other buildings.



The commercial establishments, institutions and industrial properties are together classified as CII properties.

Property owners say

There are a total of 38,154 commercial establishments, institutions and industrial properties in the city of Vellore. 80% of buildings have access to toilet facility within their premises and 12% of buildings have access to community toilets in their neighbourhood. 8% of buildings do not have access to any kind of toilet facility in the city.

Based on responses collected during primary surveys, access to toilets by commercial establishments, institutions and industrial buildings among different wards is visualized here in the geospatial map. (Colours on the map represent the level of access to toilet by CII buildings across the wards in the city).

People Say



Desludging operators say :

The views of desludging operators almost resonate with the households. Desludging operators say that 85% of buildings have access to toilet facility within their premises and 10% of buildings have access to community toilets in their neighbourhood. The remaining 5% of buildings do not have access to any kind of toilet facility in the city.

FSM Toolbox has dedicated modules to assist you in planning household and community toilet construction in your city. Click here to [learn more](#)".