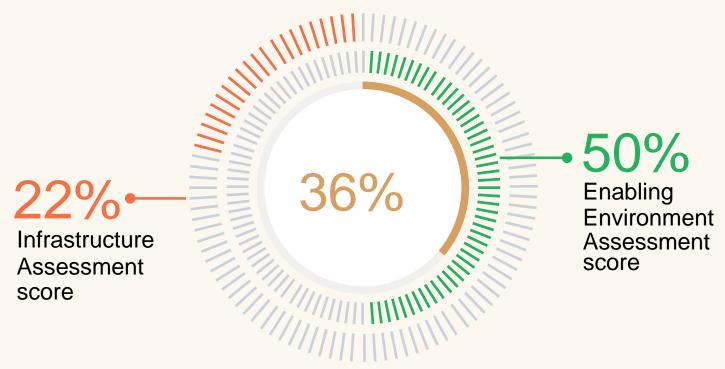


# New Tamil Nadu

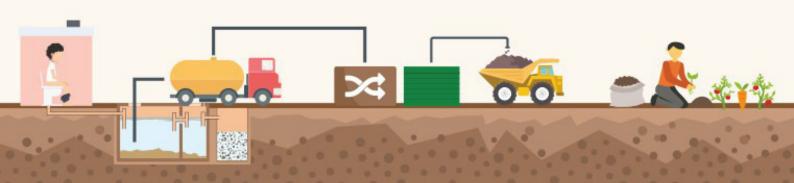


The FSM Index score indicates that the Overall FSM performance of the city is

### **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 enabling environment 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.



### City Assessment Report: New Tamil Nadu

17 Jun 19

Produced By: Vishnu New 26.05.2019, Athena, New Tamil Nadu , Karnataka, India.

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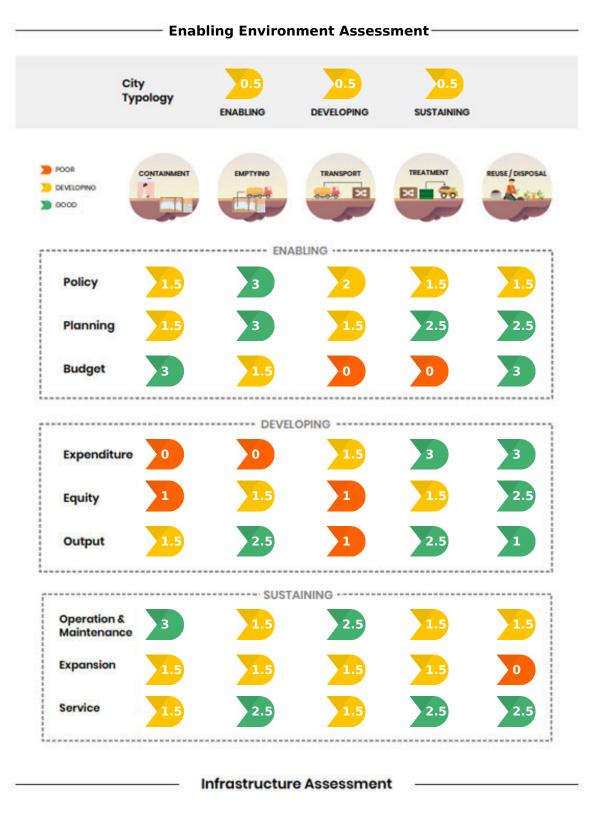


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## **Overall Assessment Output**







### **Enabling Environment Assessment**



- Great to learn that the city has an appropriate and approved policy document acknowledged by all the stakeholders in the city (Containment|Emptying|Reuse/Disposal)
- Good that you have taken the first step towards development of the policy document.

  Present the draft policy document among the core stakeholder, solicit feedback from the core group, refine and publish the policy document widely. (Transport|Treatment)
- Encourage / enforce the stakeholders to operationalize defined institutional roles (Containment|Treatment|Reuse/Disposal)
- Great to learn that the city has clearly defined and operationalized institutional roles (Emptying|Transport)
- Legal and regulatory mechanisms are the backbone for successful FSM implementation in cities. It is recommended that your city should take efforts to establish appropriate legal and regulatory mechanisms. (Containment|Reuse/Disposal)
- Great to learn that the city has established and enforced legal and regulatory mechanisms in the city (Emptying)



• Though legal and regulatory mechanisms exist in your city, it is important to operationalize them effectively. Educate and encourage the ground officers about the pros of effectively operationalizing legal and regulatory systems in the city. (Transport Treatment)								















#### ----- ENABLING -----

#### **Planning**











- No service targets are defined at the city level. Please engage with the relevant stakeholders and define service targets in a collaborative fashion. (**Containment|Transport**)
- Great to learn that the city has defined service targets as part of the FSM service chain in the development plan that is adopted at the city level (Emptying|Treatment|Reuse/Disposal)
- Though FSM investment plan exists, it is important to comprehensively cover all aspects of FSM implementation such as HR needs, TA needs, etc.
   (Containment|Transport|Treatment|Reuse/Disposal)
- Great to learn that the city has FSM incorporated into an approved investment plan that covers all aspects of project lifecycle including HR investment plan, TA, capacity building, etc. (Emptying)















#### ----- ENABLING -----

#### **Budget**











- Great to learn that the city has a defined process for coordinating FSM investments (Containment|Reuse/Disposal)
- The city must strengthen the process for coordinating investments from domestic and international donors, national grants, state budgets, donor loans, grants and others (Emptying)
- The city must establish a process for coordinating investments from domestic and international donors, national grants, state budgets, donor loans, grants and others (Transport|Treatment)















#### ----- DEVELOPING

#### **Expenditure**











- The annual public financial commitments for fsm is insufficient to meet the service levels and needs for the city. The existing financial commitment meets less than 50% overall FSM requirement for the city. It is advised that the city attempts to mobilize funds from domestic and international donors, national grants, state budgets, donor loans, grants and others.

  (Containment|Emptying)
- The annual public financial commitments for fsm is insufficient to meet the service levels and needs for the city. The existing financial commitment meets just over 50% of overall FSM requirement for the city. It is advised that the city attempts to mobilize funds from domestic and international donors, national grants, state budgets, donor loans, grants and others. (Transport)
- The annual public financial commitments for fsm is quite healthy to meet the service levels and needs for the city. The existing financial commitment meets over 75% of overall FSM requirement for the city. It is advised that the city attempts to mobilize gap funds from domestic and international donors, national grants, state budgets, donor loans, grants or engage the private sector through PPP mode. (Treatment|Reuse/Disposal)















#### DEVELOPING -----

#### **Equity**











- The technology options are not sufficiently available in the city. The city needs to encourage private sector to research / develop / make available technologies that meets the needs of the urban poor (Containment|Emptying)
- The technology options are insufficient in the city. The city needs to engage with private sector extensively to encourage mobilization of affordable, appropriate, safe and adoptable technologies for FSM services in the city (**Transport**)
- Great to learn that the city has sufficient technology options, especially to meet the needs of the urban poor (**Treatment**|**Reuse**/**Disposal**)
- The city must take adequate efforts to reduce inequalities by ensuring adequate funds, plans and measures are in place to serve FSM for all users in the city (Containment|Treatment)
- Though there are adequate funds arranged according to the plan, measures must be taken to actually implement and reduce inequalities in the city, specifically for the urban poor (Emptying|Transport|Reuse/Disposal)















#### ----- DEVELOPING ------

#### **Output**











- Great to learn that the the capacity of the FSM players / infrastructure in CityName is growing at a good pace (over 75% growth) to meet the needs, demands and targets to protect the overall public and environmental health. The city can further encourage players to build capacities / mobilize investments / seek VGF / encourage PPP to improve the overally quality of FSM service delivery in the city. (Containment)
- The capacity of the FSM players / infrastructure is partially growing at a decent pace (just over 50% growth) to meet the needs, demands and targets to protect the overall public and environmental health. The city must further encourage players to build capacities / mobilize investments / seek VGF / encourage PPP to improve the overally quality of FSM service delivery in the city. (Emptying|Transport|Treatment)
- Great to learn that the city has sufficient technology options, especially to meet the needs of the urban poor (Reuse/Disposal)
- The quality of FSM is insufficient, less than 50% of services are adequate to meet the public health standards. It is recommended to engage with sanitation experts to improve the overall quality of service delivery. (Containment|Transport)
- Great to learn that the quality of FSM is quite sufficient, just greater than 75% of services are adequate to meet the public health standards. Cities must revisit their service delivery value chain to improve the overall quality of services. (Emptying|Treatment)
- Though there are adequate funds arranged according to the plan, measures must be taken to actually implement and reduce inequalities in the city, specifically for the urban poor (Reuse/Disposal)















#### ----- SUSTAINING -----

### Operation & Maintenance











 Great to learn that over 75% of the city's overall operations and maintenance cost is met through user fees and/or local revenue or transfers. It is highly recommended that the city should revisit its cost to deliver services and revise its cost to the consumer such that 100% of the operational cost is covered through either user fees / local revenues.

#### (Containment|Transport|Treatment|Reuse/Disposal)

- Just over 50% of the city's overall operations and maintenance cost is met through user fees and/or local revenue or transfers. It is highly recommended that the city should revisit its cost to deliver services and revise its cost to the consumer such that 100% of the operational cost is covered through either user fees / local revenues. (Emptying)
- Great to learn that the city ensures to monitor the overall user fees collection progress regularly as per the norms and encourages the tax collectors to levy penalities to users who are uncompliant to set standards. (Containment)
- Though the city is monitoring the overall user fees collection progress, the city is not
  adequately levying penalities for users who are unwilling to comply to set standards. It is
  highly encouraged that the city should set individual collection targets for each year,
  encourage the tax collectors to levy penalities for users unwilling to comply to standards and
  incentivize the fees collectors for achieving individual service targets.

#### (Emptying|Transport)

• Though norms and standards exist for systematic collection of the user fees, the collection efficiency is not being monitored at the city level. It is highly encouraged that the city should set collection targets for each year, monitor the overall collection progress and incentivize fees collectors for achieving individual service targets. (Treatment|Reuse/Disposal)















#### ----- SUSTAINING -----

#### **Expansion**











- Great to learn that the city taken adequate effort to increase the overall demand for FSM services and this has resulted to a constant growth in demand. (**Containment**)
- Though city has taken effort to increase the overall FSM demand, it is learnt that the demand
  has not increased quite significantly. The city should build capacities of the service providers
  and develop targetted IEC strategies for improving the overall demand for FSM services in
  the city (Emptying|Transport)
- The city should take adequate efforts to increase the overall FSM demand by creation of
  policies, procedures and plan programs to stimulate demand of FSM services, behavior of
  households and responses by service providers (Treatment|Reuse/Disposal)
- The city should focus on overall sector development by establishing programs to strengthen the quality of service providers, structure in their day to day operations and develop a roadmap for comprehensive growth / expansion over years (Containment|Reuse/Disposal)
- Though programs and measures to strengthen the quality of service providers exist, little has been changed over years. Majority of the service providers remain disorganized and the sector is not expanding as per the development plans prepared by the city government. (Emptying|Transport)
- Great to learn that the programs and measures to strengthen overall quality of service providers has been successfully implemented in the city. The entire value chain has been streamlined, the sector is highly organized and is constantly expanding over years.

  (Treatment)















#### ----- SUSTAINING -----

#### **Service**











- Over 75% 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. (Containment)
- Just over 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. (Emptying)
- 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. **(Transport)**
- Over 75% of FS generated in the city is safely managed at the treatment stage. The city should ensure adherance of safe treatment standards in all treatment units installed in and around the city. **(Treatment)**
- Over 75% 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 byproducts produced from the treatment plants operating in and around the city (Reuse/Disposal)
- FSM systems and services are not available to any extent to low-income communities in the city. The city should take adequate effort to ensure inclusive coverage of hygienic FSM services to all low income communities in the city. (Containment)
- FSM systems and services are very well available to low-income communities in the city. (Emptying|Transport)
- FSM systems and services are little available to low-income communities in the city. The city should take adequate effort to ensure inclusive coverage of hygienic FSM services to all low income communities in the city.

  (Treatment|Reuse/Disposal)

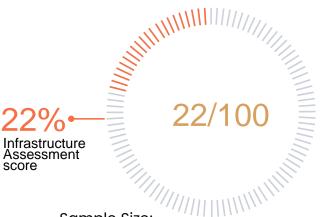


Over 75% of FS	Over 75% of FS	Over 75% of FS	Over 75% of FS	Over 75% of FS
generated in the city is	generated in	generated in	generated in	generated in
safely managed at the	the city is	the city is	the city is	the city is
containment stage. The	safely managed	safely managed	safely managed	safely managed
city should encourage	at the emptying	at the	at the	at the re-
households to improve	stage. The city	conveyance	treatment	use/disposal
the overall quality of	should enforce	stage. The city	stage. The city	stage. The city
containment systems in	the desludging	should enforce	should ensure	should
the city to meet	operators to	the desludging	adherence of	educate/ensure
environmental safety	adhere to	operators to	safe treatment	safe disposal/re-
standards.	global safety	strictly adhere	standards in all	use of treated
	standards and	to conveyance	treatment units	by-products
	educate them	and disposal	installed in and	produced from
	about personal	standards.	around the city.	the treatment
	health and			plants
	hygiene.			operating in
				and around the
				city.
Just over 50% of FS	Over 75% of FS	Just over 50%	Over 75% of FS	Just over 50%
generated in the city is	generated in	of FS generated	generated in	of FS generated
safely managed at the	the city is	in the city is	the city is	in the city is
containment stage.		safely managed		safely managed
		at the emptying		at the
		stage.		conveyance
				stage.

- It is great to note that hygienic FSM systems and services are affordable and readily available in low-income communities
- Hygienic FSM systems and services are available on a partial / piecemeal basis in low-income communities (or in some)
- Hygienic FSM systems and services are not available to any significant extent in low-income communities.



### **Infrastructure Assessment**



32,321,321 Households

3,213,213 Commercial

322,132,132 Institutional

3,132,132 Industrial

23,132,132 Community toilets

213,121 Public Toilets

#### Sample Size:

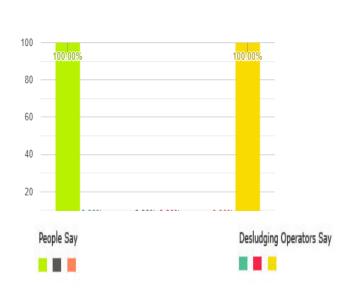
The FSM Pro assessment was conducted in New Tamil Nadu with a city level sampled population. The sample was calculated with a confidence level of 95%. The table shown below is the sample size that was covered for arriving at the assessment report.





### Access to Toilets

### Access to toilet by households

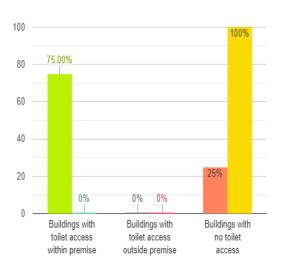


Access to toilet by households, of the 32,321,321 households in the city, about 100% of households have access to household toilet facilities The city has already taken adequate efforts to improve the overall coverage of toilet access in the city.



FSM Toolbox has dedicated planning modules to assist you in planning household and community toilet construction required by geography, type of toilet user interface and onsite sanitation system technology relavent by geography in your city. <u>Learn more</u>

### Access to toilet - Other buildings

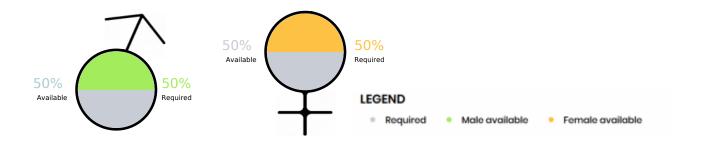




The commercial establishments, institutions and industrial properties are together classified as CII buildings. There are a total of properties in this category in the city of New Tamil Nadu About 75% of buildings have access to toilet facility within their premises. and 0% of buildings have access to toilet facility outside their premises. The remaining 25% of buildings do not have access to any kind of toilet facility in the city. The city has already taken adequate efforts to improve the overall access to toilets in CII buildings in the city.



### Community toilet seats adequacy



**Community toilets**It is learnt that the city of New Tamil Nadu do not have adequate toilet seats for men and women in public areas of the city. The coverage of community toilets for men is about 50% and 50% for women respectively. It is important for city governments to take initiative to improve the coverage of community toilets across the public areas in city.

\*It is to be noted that the rapid assessment is built to measure only the adequacy of toilets in terms of quantity while the actual geographical positioning of these toilets could vary in reality. In order to conduct an accurate assessment, we highly recommend you conduct FSMPro assessment to arrive at a comprehensive geospatial assessment of sanitation situation of your city.

FSM Toolbox has dedicated planning modules to assist you in planning total number of community toilet seats required by geography, type of toilet user interface and onsite sanitation system technology relevant by geography in your city. <u>Learn more</u>



Community toilet seats - Female Map

Community toilet seats - Male Map



### Community toilet - ease of access



On average, community toilets can be accessed at a distance of 0 meters and people take about 0minutes to reach the nearest community toilet and it takes at least 0minutes of waiting time to get a turn to use the community toilet seat in the city.

### Public toilet seats - male / female (Required)



**Public Toilets**It is learnt that the city of New Tamil Nadu do not have adequate toilet seats for men and women in public areas of the city. The coverage of public toilets for men is about 61% and 39% for women respectively. It is important for city governments to take initiative to improve the coverage of public toilets across the public areas in city.

FSM Toolbox has dedicated planning modules to assist you in planning total number of public toilet seats required by geography, type of toilet user interface and onsite sanitation system technology relevant by geography in your city. <u>Learn More</u>



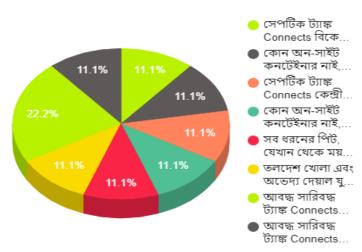
Public toilet seats - Male Map

Public toilet seats - Female Map



### **Types of OSS**

#### People say



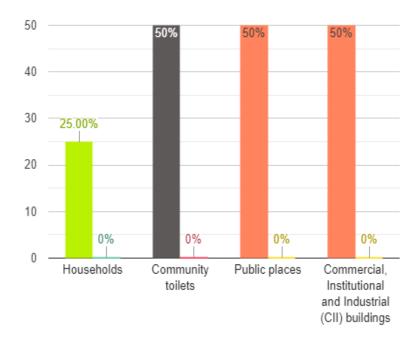
#### Desludging operators say

No data



### Accessibility of properties easily by road (greater than 3m)

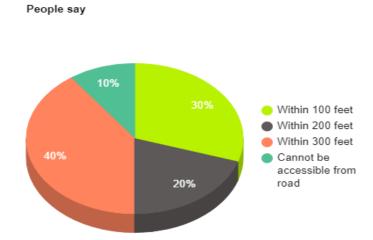
The graph shown here describes the percentage distribution of properties in the New Tamil Nadu that can be accessed by road of width greater than 3m only. It is to be noted that the desludging operators should take efforts to cater to the needs of properties located on roads with poor access.





### Accessibility of properties easily by road (greater than 3m)

The graph shown here describes the percentage distribution of properties in the New Tamil Nadu with varying degrees of access to the containment system for conducting the desludging service. It is to be noted that the city government should enforce the property owners to adhere to construction standards in order to reduce the time take



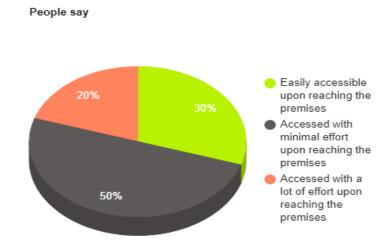
Desludging operators say



25

### Accessibility to containment systems

The graph shown here describes the percentage distribution of properties in the New Tamil Nadu that can be accessed by road of width greater than 3m only. It is to be noted that the desludging operators should take efforts to cater to the needs of properties located on roads with poor access.

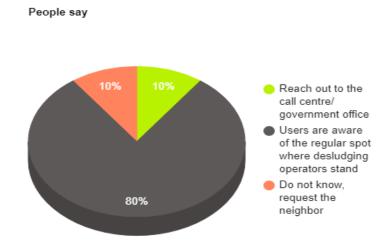


Desludging opertors say



### Reaching out to desludging operators

The following are the preferred modes of reaching out to desludging operators in the city. City government should take adequate effort to streamline / ease the process of booking operators for conducting desludging services in the city.

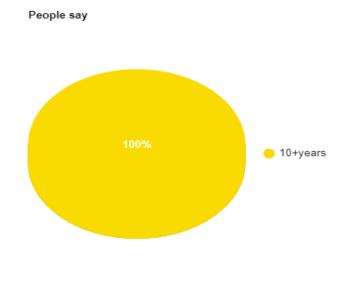


Desludging operators say



### Average desludging frequency

The graph shown here describes the desludging frequency of properties in the city. Effort should be taken by the city government to enforce property owners to adhere to safe desludging standards.



Desludging operators say



### **Usage of safety gears**

It is learnt that about 0% of desludging operators use safety gears at the time of conducting desludging services. City government should take efforts to educate and enforce the desludging operators to adhere to safety standards.





### Adequacy of desludging vehicles and operators in the city

### **ADEQUATE**

After studying the existing desludging operators in the city, it is apparent that there are adequate desludging vehicles in the city.

FSM Toolbox has dedicated modules to assist you in developing vehicle procurement plan to meet future demand. <u>Learn more</u>.



It is to be noted that only 40 % of emptied faecal sludge reaches the treatment plant in the neighbourhood. The city government should take adequate steps to administer that all of the emptied faecal sludge treatment reaches the treatment unit in a timely manner.

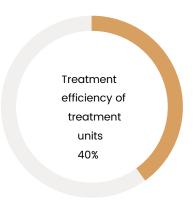
FSM Toolbox has dedicated modules to assist you in developing vehicle procurement plan in order to meet the city's overall demand for conducting desludging services effectively <u>Learn more</u>







### Presence of treatment systems in and around the city



It is to be noted that the output does not meet the effluent and biosolids standards. The city should take adequate efforts to achieve 100% treatment efficiency of treatment units in order to future proof natural resources in the city neighbourhood.

FSM Toolbox has dedicated modules to assist you in planning and implementation of faecal sludge treatment units that can achieve higher treatment efficiencies. <u>Learn more</u>



### End-use/Disposal



18% of treated wastewater and 30% of treated faecal sludge is currently being re-used in the city. The remaining treated products are mixed with natural sources without being reused in the city. The city should take efforts to promote re-use of treated sanitation products among key stakeholders in the city neighbourhoods.

