

# **TAMIL NADU URBAN SANITATION SUPPORT PROGRAM**

## **WORKSHOP ON SETPAGE TREATMENT TECHNOLOGY**

**CEPT University**

**All India Institute of Local Self Government**

**Urban Development Department, Government of Maharashtra**

**TECHNICAL  
SUPPORT UNIT:**

10/25/2016

**iihs**<sup>TM</sup>  
INDIAN INSTITUTE FOR  
HUMAN SETTLEMENTS

IN ASSOCIATION  
WITH:

 **Keystone**<sub>1</sub>



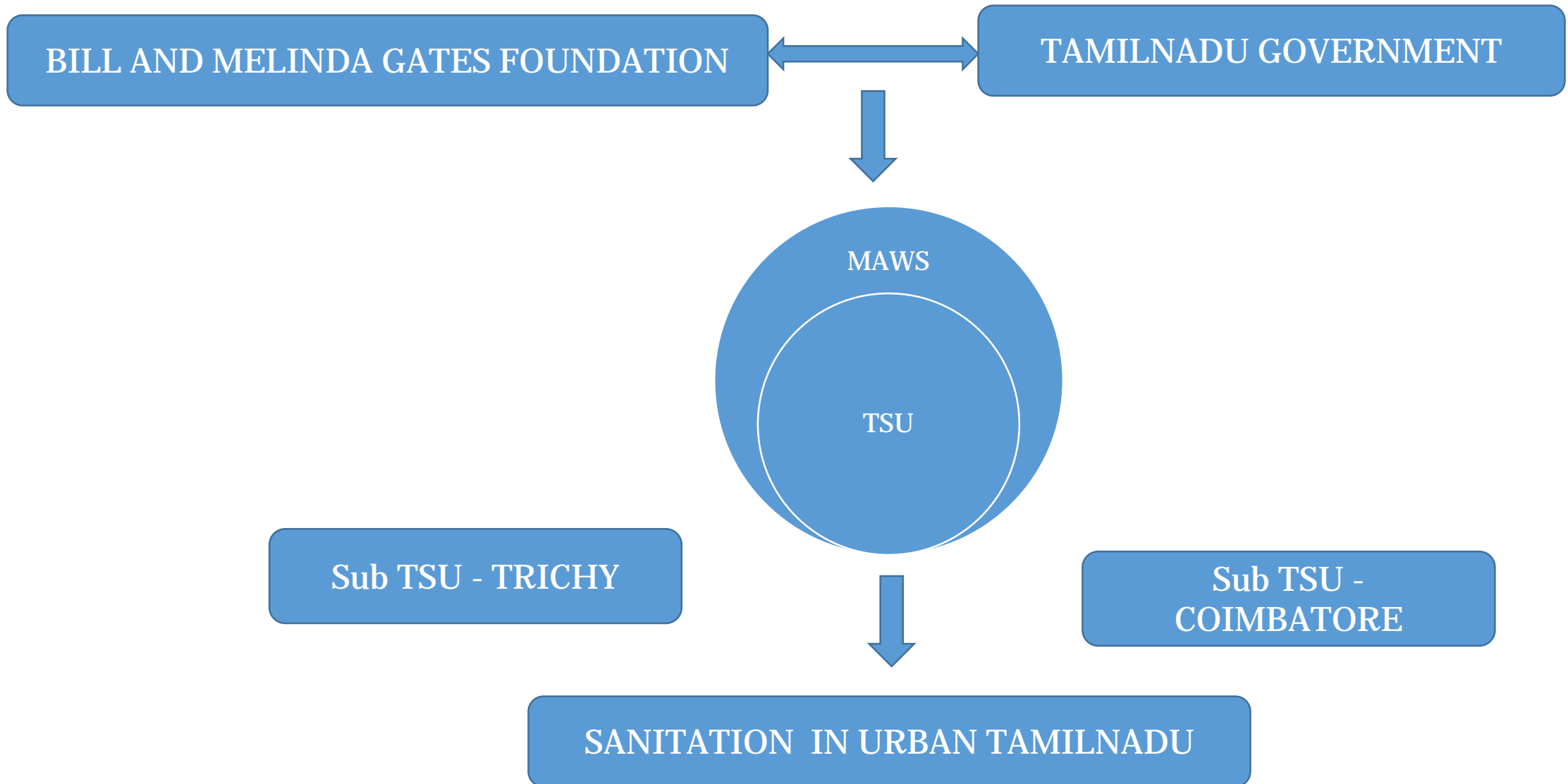
 Consortium for  
DEWATS  
Dissemination  
Society



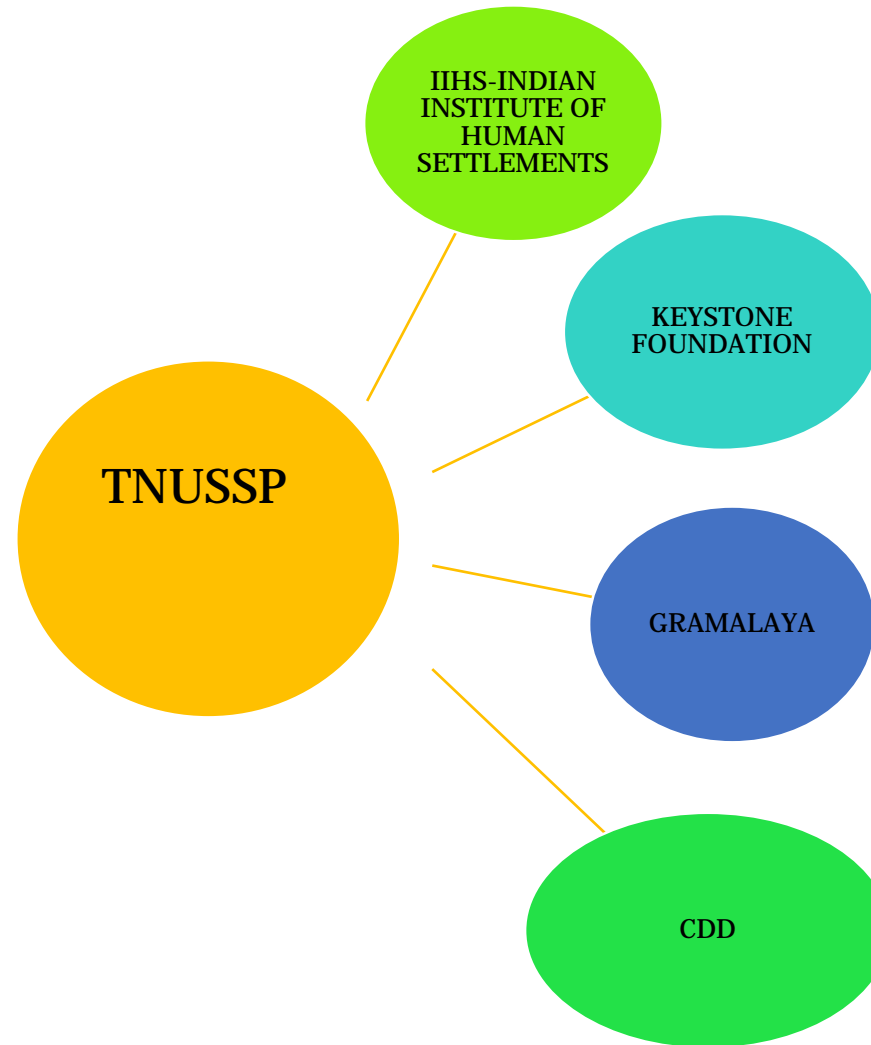
# **OBJECTIVES OF TNUSSP**

- 100 % Open Defection Free Status**
- Sanitary Toilets/ Safe Containments**
- Safe Collection, Conveyance, Treatment, Disposal And Reuse**

# TNUSSP - ORGANIZED STRUCTURE

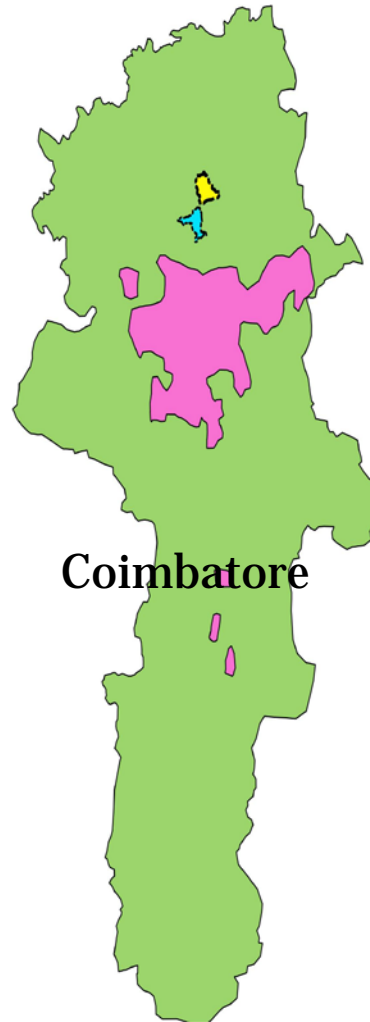
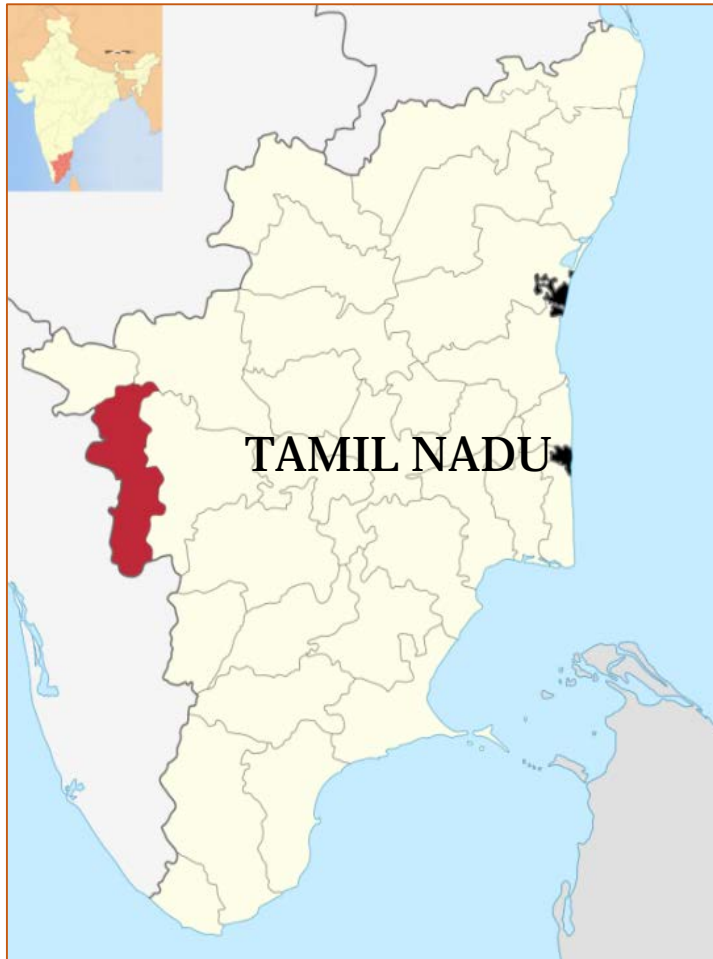


# CORE TEAM



- Technical Support

# LOCATION OF ULBs



## Legend

- NNP Boundary
- PNP Boundary
- District Boundary
- Corporation Boundary

## Scale

500 0 500 km

## Population Details of ULB

### Periyanaickenpalayam

Population:25930 ,

HH:7377

PT:13

OD % : 1.5 ~

### Narasimhanaickenpalayam

Population:17858

HH:5023

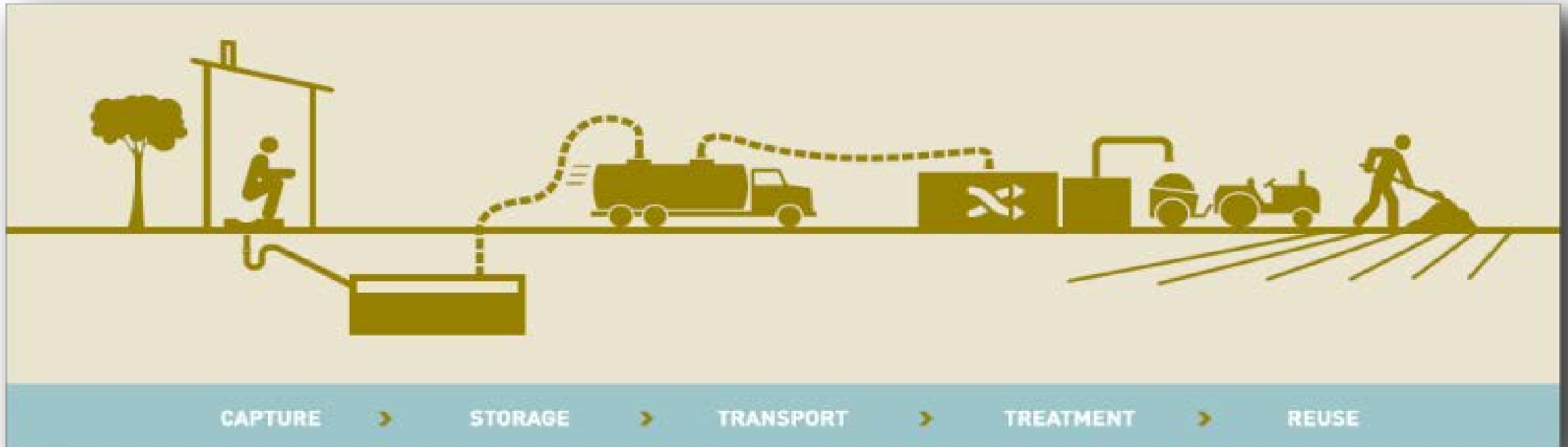
PT:12

OD %: 2.0~

*\*No Treatment System  
Available in the Project  
area*

*Census Source:2011*

# CHALLENGES ACROSS SANITATION VALUE CHAIN



# USER INTERFACE

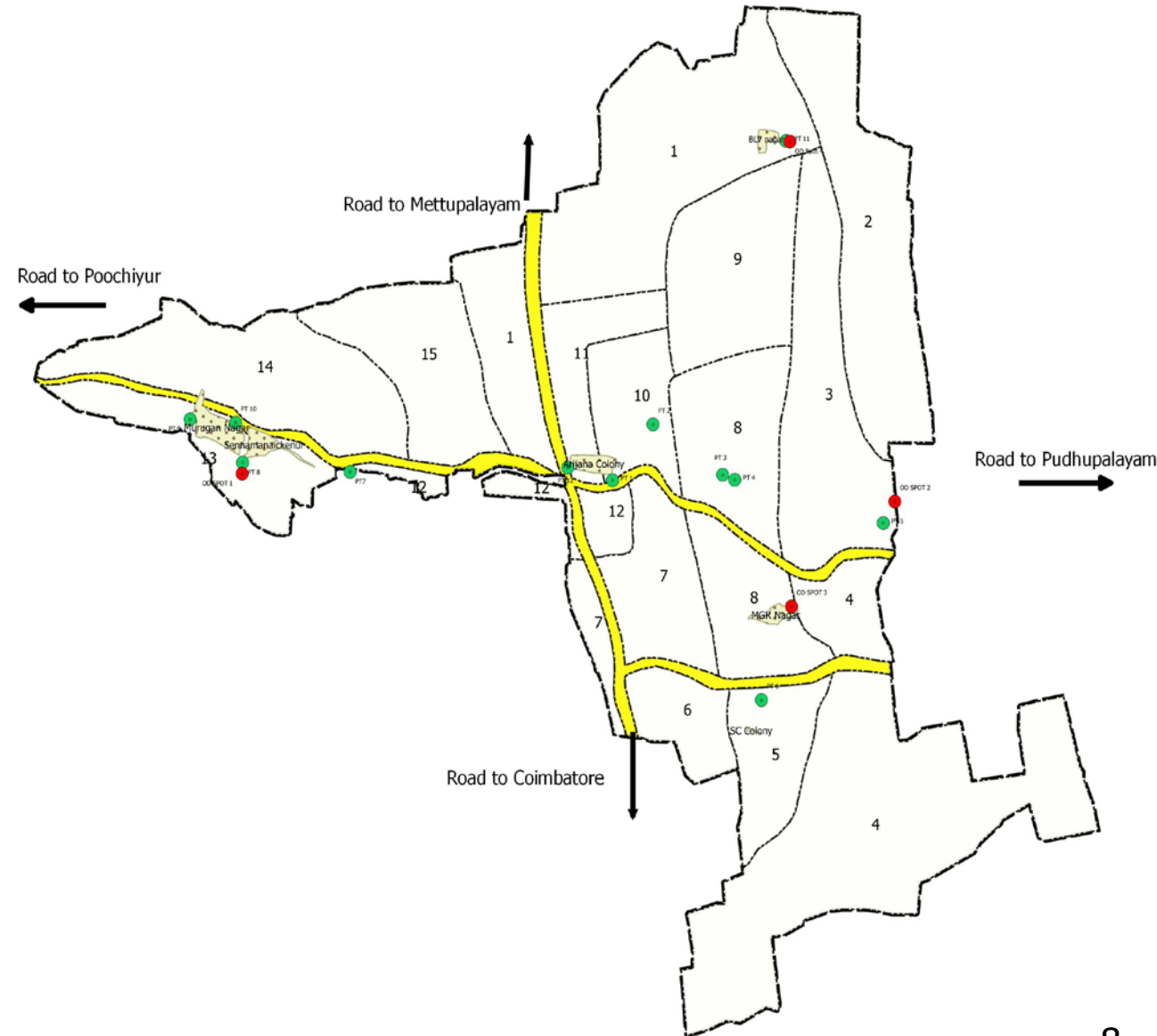
BSUP SCHEME - 2008



SBM - 2016



# NNP - SANITATION CONDITION



## Legend

### Sanitation Facilities

- PT 1 AD Colony
- PT 2 Om Sakthi nagar
- PT 3 Palayur Perumal Kovil
- PT 4 Burial Ground
- PT 5 Pudhupalayam
- PT 6 Rakkipalayam
- PT 7 Poochiyur Road
- PT 8 Sennamanaickennur
- PT 9 Murugan nagar
- PT 10 Hitech City
- PT 11 BLV Nagar
- PT 12 Urinals for Men
- OD SPOTS

SLUM BOUNDARY

Roads

Ward boundary

TP BOUNDARY

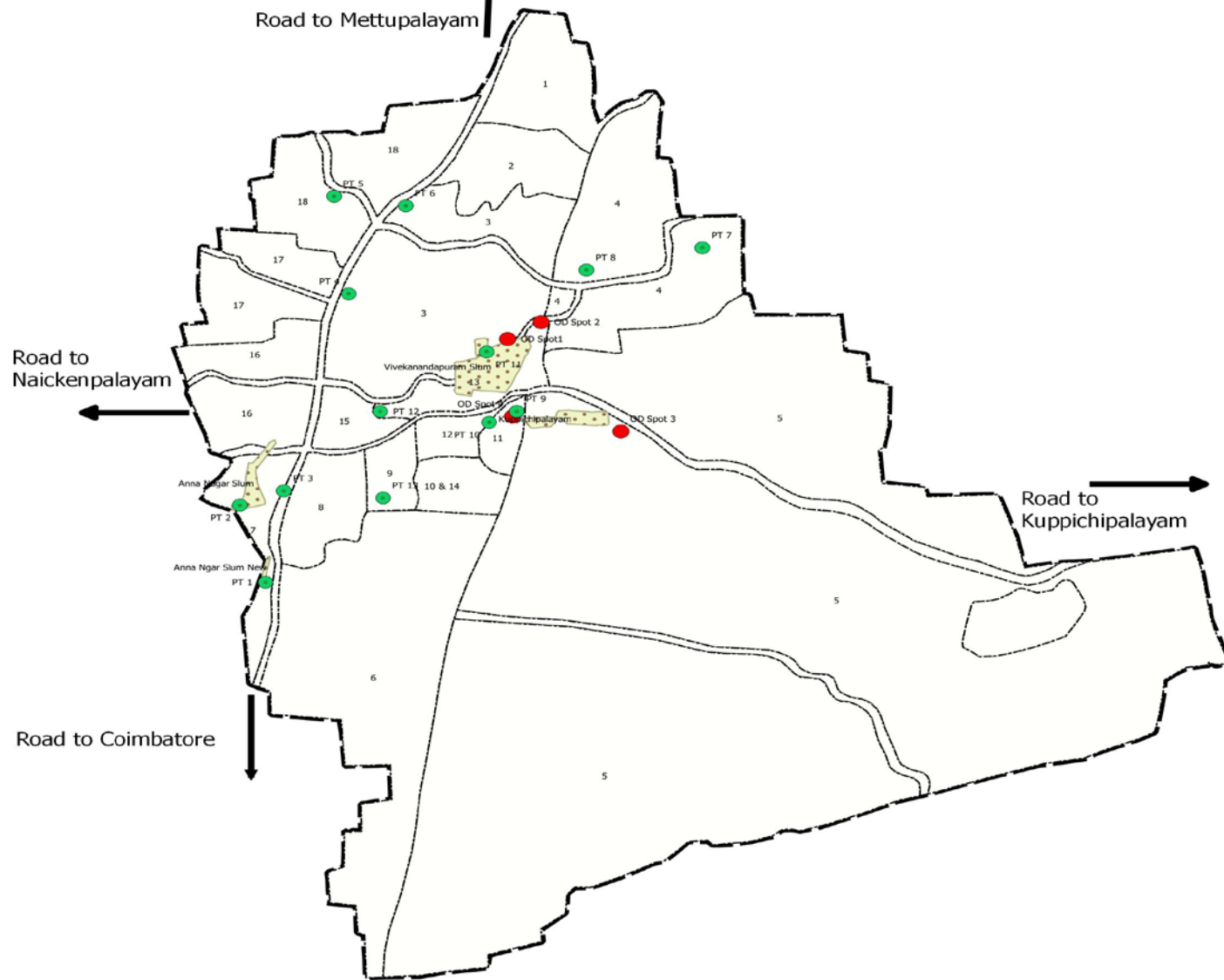
## SCALE

500 0 500 m





# PNP – SANITATION CONDITION

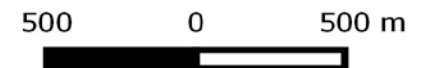


## Legend

### Sanitation Facilities

- PT 1 Anna nagar Main road
- PT 2 Anna Nagar Slum
- PT 3 Shopping Complex
- PT 4 Irwin road
- PT 5 KK nagar
- PT 6 Jothipuram
- PT 7 Recovery Park
- PT 8 Kasthuripalayam
- PT 9 Railway Bridge
- PT 10 Ganguvar Street
- PT 11 Vivekanandhapuram
- PT 12 Sakthi nagar
- PT 13 Union tank Road
- OD Spot
- Slum Boundary
- Ward Boundary
- TP Boundary

## SCALE



# PUBLIC SANITARY CONVENIENCES





# TYPICAL UNDER CONSTRUCTION CONTAINMENTS IDENTIFIED



# COLLECTION AND CONVEYANCE

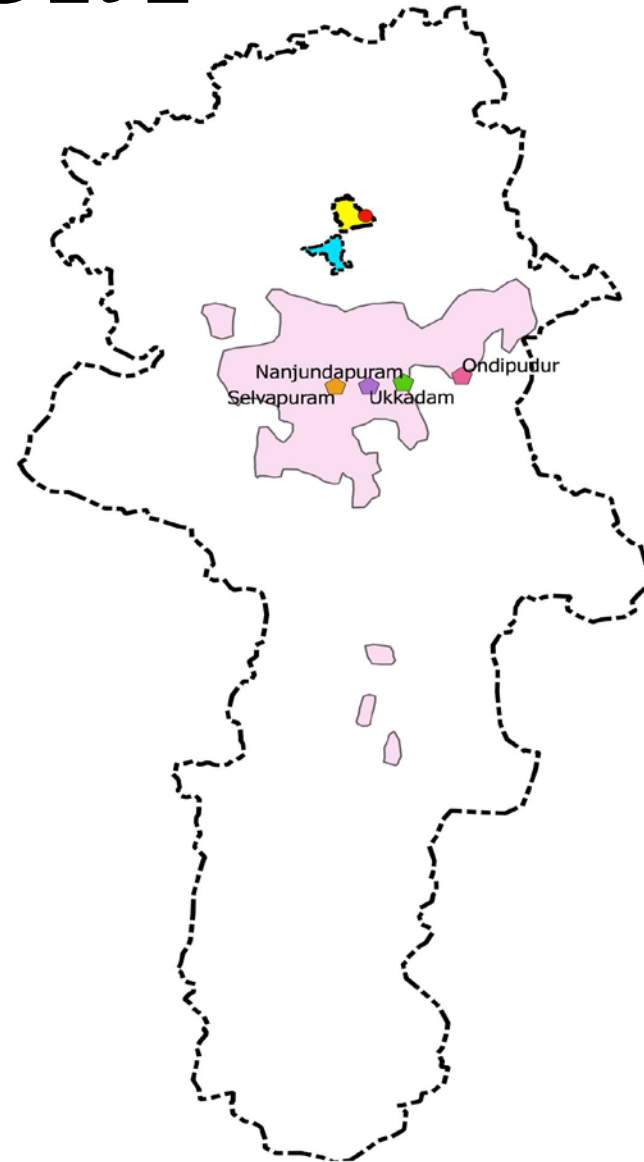
- Two TPs completely depend on the private sludge operators for emptying the septic tanks in HH and PTs
- Safety gears not used due to operational difficulties.
- Access to the septic tank/pit is difficult as most of them are sealed and need to break open
- They face **criticism and** exclusion from the households (dirty job, stay away attitude)
- Lack of disposal points in the vicinity (the Ukkadam STP is too far and is only for registered operators)

*(Source- Field study TSU & CDD technical baseline)*





# TRANSPORT



## Legend

● Proposed FSTP Site

■ NNP boundary

■ PNP Boundary

## STP Locations

■ Nanjundapuram

■ Ondipudhur

■ Ukkadam

■ Selvapuram

■ District boundary

■ Corporation Boundary

Scale

5000 km

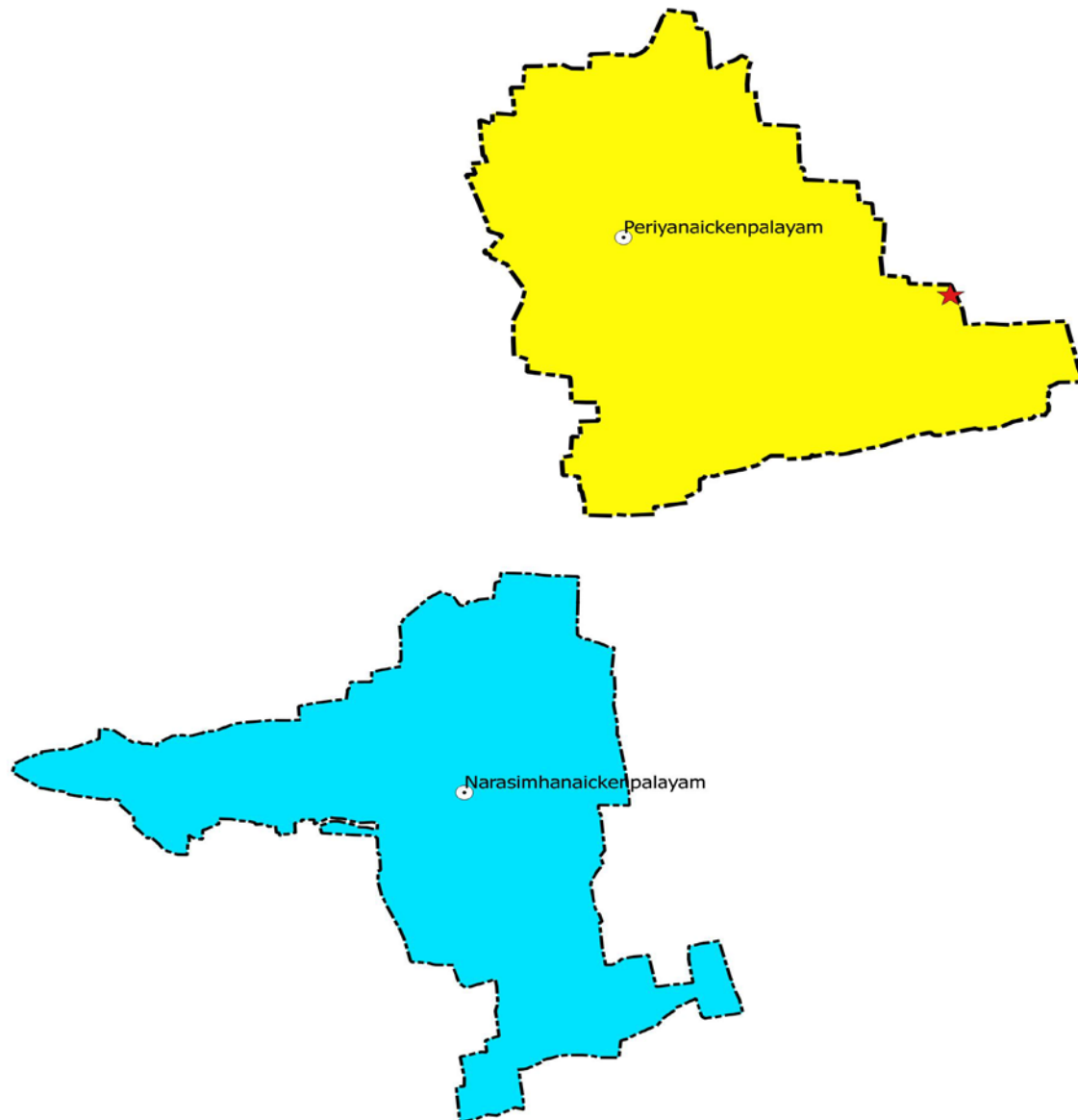


# DISPOSAL & RE-USE





# LOCATION OF FSTP



## Legend

- Narasimhanaickenpalayam
- Periyanaickenpalayam
- ★ Proposed FSTP site
- PNP Boundary
- NNP Boundary

Scale

500 0 500 km





# VOLUME OF FAECAL SLUDGE COLLECTED

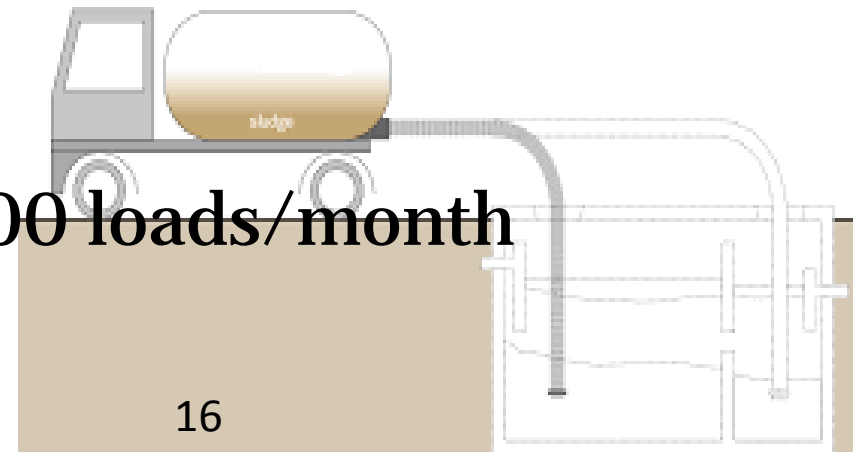
- No. of service providers – 6
- No. of vehicles -12
- No. of loads collected by sludge operators: 130/month  $\pm 10$  loads
- Average capacity of Collection vehicle :5000 L

Total sludge collected: 650 m<sup>3</sup> / month

- Per day sludge collected : 21.7 m<sup>3</sup>

- Total Load Accepted by farmers for disposal: 100 loads/month

*(Source- Field survey, TSU)*







**GROUND WORK OF FSTP SITE**



**BMGF VISIT TO THE SITE**



**GEO-TECHNICAL STUDY**



# ACHIEVEMENTS

- Formation of Advisory committee and working groups in TPs
- Baseline survey
- Community interaction
- Mapping – TP Features
- Water sampling and analysis
- Soil sampling and analysis
- School sanitation program for about 1200 students
- Support from ULB officials for CT renovation
- Increased awareness among the general public
- Stakeholder analysis
- Acquired land for [FSTP](#)



# **PLANNED ACTIVITIES**

- City Sanitation Plan (CSP)
- Assessment of Public Sanitary Conveniences
- Renovation of one Community Toilet as sample intervention
- Establishing a Fecal Sludge Treatment Plant (FSTP)
- Programme on School Sanitation
- Organizing FSTP awareness campaigns in both the ULBs
- Training for SHG women on toilet management
- Engaging stakeholders and communities in TNUSSP
- Capacity Building -Masons on appropriate technologies
- Enterprise development



# CHALLENGES FACED

- Secondary data unavailable and un-organised from ULB
- Farmers and sludge operators are skeptical
- Organizing regular district level Advisory committee meeting
- Difficulty in identifying type of containments
- Team faced resistance in interacting with public in the absence of elected members
- Difficulty in identifying the categories of residential settlements



# **Thank You!**