Periyaicken-Palayam (PNP) and Narasimhanaicken-Palayam (NNP) are two Town Panchayats chosen by the Government of Tamil Nadu to demonstrate Fecal Sludge Management (FSM) as an economical and effective means to attain total sanitation, and provide a basis for state-wide scaling up. There are 528 Town Panchayats in Tamil Nadu, and the Government of Tamil Nadu has decided to implement FSM as a stand-alone option for these towns.

**Periyaicken-Palayam (PNP)**
- Population: 26,000
- Households: 7,400
- Area: 9.38 sq.km
- Households with individual latrines: 83%
- No. of Wards: 18
- Households using public/community toilets: 14%
- Slums: 3

**Narasimhanaicken-Palayam (NNP)**
- Population: 17,900
- Households: 5,000
- Area: 6.37 sq.km
- Households with individual latrines: 75%
- No. of Wards: 15
- Slums: 11
- Households using public/community toilets: 20%

Source: Census 2011
ASSESSMENT & STUDIES

Numerous studies were conducted to understand the state of sanitation in these two Town Panchayats. Some key findings are listed below.

- Most community toilets are used by households, both with and without individual household toilets.
- Inadequate operation and maintenance of public and community toilets emerge as a key concern.
- The overflow from septic tanks are discharged into SWDs due to lack of soak away structures. Grey water from households is also directly let out into SWDs.
- The per capita water consumption rate is higher than the prescribed standard (135 litre per capita per day).

- Majority of septic tanks in PNP and NNP are not constructed as per Central Public Health and Environmental Engineering Organisation (CPHEEO) standards, e.g. the base or the walls of the tank is not plastered.

Desludging practice among households in NNP

Source: TNJSSP analysis, 2018
• Only five per cent of the containment structures have ever been emptied in the two Town Panchayats. The remaining have never been emptied since their construction.

• There are 54 private desludging operators registered under the Coimbatore City Municipal Corporation, out of which six provide regular service to the two Town Panchayats.

• The nearest designated disposal point is at a distance of 21 kms from Coimbatore city, posing a challenge for operators to dispose fecal sludge carried from distant towns such as PNP and NNP.

• Desludging workers have not received training for use of Personal Protective Equipment (PPE). Further, most workers are not covered by health insurance.

• Five slums (one from PNP and four from NNP) out of 11 slums in the two towns belong to the 'moderately vulnerable' category. The rest of the slums belong to 'least vulnerable' category.

• Employment pattern, non-availability of primary health centres in proximity and poor coverage of nutrition services are the main contributing factors to the vulnerability of the slums considered under this study. Other significant factors are absence of toilets and open defecation.

IMPROVEMENTS ALONG THE SANITATION CHAIN

• Support to Swachh Bharat Mission – Urban (SBM–U): The Town Panchayats have been provided with a guide book on how to construct sanitary toilets with proper containment structures, within the stipulated funds provided under SBM–U.
- **Public Toilets/Community Toilets Improvement Plan:** An improvement plan for the Public Sanitary Conveniences (PSCs), including sustainable Operation and Maintenance (O&M) arrangements, is being drawn up with the Town Panchayats. A Detailed Project Report (DPR) for renovation of the public and community toilets has been prepared.

- **Containment improvement and desludging plan:** Preliminary observations in selected schools, industries and households in PNP and NNP have affirmed visible exfiltration from containment structures. A containment improvement plan is being designed to address this issue. Further, pilot models for improved containment for bulk generators are being planned.

- **Registration of Desludging Operators:** At present, all desludging operators are registered with the Coimbatore City Municipal Corporation. Efforts are being made to register them in the Town Panchayats as well.

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D Kannan, Proprietor of Annai Septic Tank Cleaning, Coimbatore, a desludging service won an award in the category of Best Social Enterprise at the ISC FICCI Sanitation Awards 2018, in New Delhi. Using state-of-the-art desludging equipment & trained workforce, he has been offering safe desludging services to households and commercial establishments in the north-western parts of Tamil Nadu.

- **Fecal Sludge Treatment Plant (FSTP):** An FSTP is being constructed to cater to the needs of the two Town Panchayats. The capacity of the plant is 25 Kilo Litre per Day, and the PNP Town Panchayat has provided land for this facility.
PNP FSTP Process Flow

- Once the FSTP is operational, it will generate treated water that can be reused for gardening purposes within the premises and the dried sludge can be used as manure through co-composting with organic Municipal Solid Waste (MSW). Sludge characterisation is being conducted to determine viability of co-composting with MSW. A market assessment is being conducted to understand the market potential for compost.

Reuse

ENGAGEMENT & COLLABORATIONS

- The working groups meet once a month to review progress of sanitation action of TNUSSP.

Working Groups in PNP & NNP

- TNUSSP has also prepared a City Sanitation Plan & an Investment Plan for the Town Panchayats.
Capacity Building

The following stakeholders were provided training

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Number of people trained</th>
<th>Focus Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desludging Operators</td>
<td>28</td>
<td>Orientation on Government of Tamil Nadu’s Operative Guidelines on Septage Management and Occupational Safety Standards (OSS)</td>
</tr>
<tr>
<td>Masons</td>
<td>58</td>
<td>Construction of proper septic tanks and twin pits</td>
</tr>
</tbody>
</table>

Training for desludging operators  
Training for masons

Behaviour Change Communication

School Sanitation and Hygiene Promotion (SSHP) Programme at PNP, 2016

World Toilet Day at PNP, 2017

Global Handwashing Day at NNP, 2018
TOWARDS INCLUSION

Gender Assessment and Strategy

- A gender assessment is being carried out which will help in understanding intersectionality of gender with socio-economic status, caste and disability. In addition, it will also look into the resultant differential sanitation needs and its impact on women. A gender strategy will be subsequently prepared.

Health Camp for Sanitation Workers

- In an effort to improve preventive health care, TNUSSP has launched an initiative to provide regular health check-ups for sanitation workers, to which they are entitled as per law. The objective is to mainstream health check-ups into the government system, with appropriate support from the private sector. Three health camps have been conducted through a multi-party collaboration.

Number of Beneficiaries of the Health Camps

- Town Panchayat sanitation workers: 89
  - Male: 67
  - Female: 22
- Family members: 41
  - Male: 77
- Private desludging workers: 22
  - Male: 22
  - Female: 0
**Slum Improvement Plan**

- Based on the slum vulnerability assessment, a comprehensive slum improvement plan has been developed. Awareness programs on safe water handling practices and menstrual hygiene management will be conducted in all slums. In addition, two slums have been selected in each Town Panchayat, in consultation with the ULBs for intense intervention. In these slums, existing community toilets will be retrofitted and sustainable models for managing these toilets will be demonstrated. Allied improvements in water supply and solid waste management will also be carried out in these two slums.

![Slum households in NNP](image)

**WASH Programme in Schools**

- In collaboration with school authorities, improvements in water and sanitation situation will be conducted in five selected schools. Training will be provided to the students and teachers on the importance of safe water, sanitation and hygiene practices with a special focus on FSM.