Odisha is experiencing a fast pace of urbanization (27% decadal urban growth rate) which is accompanied by challenges of providing people of the state with good quality basic amenities such as water and sanitation. As the Government of Odisha has been committed to the cause of ensuring safe, healthy and sanitized towns and cities in the state, it took initiatives four and a half years ago to focus on safe containment, safe transportation, safe disposal and safe treatment of faecal matter. Considering the preponderance of on-site systems in the urban Odisha, the government realized that sewer networks cannot be the only solution for waste water management. Hence, the government has decided to opt for low cost, impactful non-sewer sanitation systems to make cities environmentally clean and safe for the citizens.

### Journey of Odisha FSSM

#### 2011
**Odisha State Sanitation Strategy**
The strategy focuses on strengthening the ULBs to provide sanitation infrastructure including those related to FSSM.

#### 2015
**Exposure visit**
Piloting FSSM in two cities through Project Nirmal. Exposure visit to advanced faecal sludge and septage management practices in other countries including Malaysia.

#### 2016-17
**Policy and guidelines**
Odisha Urban Septage Management Guidelines, Odisha Urban Sanitation Strategy and Odisha Urban Sanitation Policy to set a road map for scaling up FSSM across the state.

#### 2017-18
**Implementation**
Implementation of Fecal Sludge and Septage Management in 11 towns of Odisha.

#### 2018 onwards
**Scale up and sustainbility**
Scaling up and sustaining the services provided by the FSSM value chain.
Key Interventions in FSSM

- Financial Sustainability
- Institutional Strengthening
- Processes and Systems
- Capacity Building
- Regulation
- Communication
- Infrastructure
- Monitoring and Evaluation
- Sanitation Entrepreneurship

Infrastructure

**Constructing SeTPs & FSTPs**

- Constructing Septage Treatment Plants (SeTPs) and Faecal Sludge and Septage Treatment Plants (FSTPs) for safe treatment of waste.
- Procuring cesspool vehicles of varying sizes especially to negotiate narrow lanes/streets and SeTPs to ensure safe emptying and transportation of the contained faecal waste.
- Eight AMRUT towns have approval to construct SeTPs i.e. Balasore, Baripada, Berhampur, Bhubaneswar, Cuttack, Puri, Rourkela & Sambalpur town through AMRUT programme. Out of these, five SeTPs have been completed & commissioned in Bhubaneswar, Puri, Berhampur, Sambalpur and Rourkela. Construction of SeTPs in three towns i.e. Cuttack, Balasore and Baripada is under progress.
- Construction of three SeTPs have been taken under “PROJECT NIRMAL” in Dhenkanal, Angul and Choudwar, out of which SeTP in Dhenkanal is completed and commissioned. The other two SeTPs are under construction.
- Some plants have adopted co-treatment and co-location options, which optimize the capacity and land requirements. The plants employ a decentralized wastewater system (DEWATS).
The Government of Odisha has made investments to procure cesspool emptier vehicles to ensure safe emptying and transportation of the contained faecal waste.

57 ULBs of the state possess cesspool emptier vehicles which have been procured by the state Government.

Total 86 cesspool vehicles were procured by the state. The state has also approved procurement of two small sized cesspool emptier vehicles in Puri and Berhampur on trial basis to address local challenges related to access to septic tank.
Capacity Building

- A training module on Non Sewered Urban Sanitation was developed under Project Nirmal for deeper understanding of FSSM amongst stakeholders involved in FSSM.
- A training of master trainers was conducted for 11 towns as well as for various project management units (PMUs).
- The capacity building programs are oriented to cover various aspects of FSSM services and infrastructure such as technology, financing, community engagement, O&M, etc.

Along with FSSM training exposure visits were also conducted to help participants understand problem solving relating to sanitation services.

Demand Generation through IEC

- In order to improve awareness Information Education Communication (IEC) and Behaviour Change Communication (BCC) are being implemented at State and ULB level.
- A wide range of communication activities, adopting a 360-degree approach, have been undertaken at the city level to communicate the key messages on FSSM.
- The outcomes of such communication campaigns are evident from the increased awareness on FSSM in Odisha, which in turn has led to an increase in the demand for FSSM services.
Private Sector Engagement

- The Government of Odisha has taken measures to facilitate private sector engagement in FSSM. This is currently achieved by providing cesspool emptying licenses to private sector entities.
- Once the vehicles are procured and sent to the ULBs, the private operators are given the responsibility of operating and maintaining the cesspool emptier vehicles.
- As a result, currently, desludging activity is carried out in the state by both ULB-operated and ULB-contracted cesspool emptier vehicles (operated by private players).
- Licensing of cesspool emptier vehicle operators to private players has also resulted in a substantial reduction in the tariff payable by the customer. As a result, outsourcing has helped in increasing the uptake for mechanized emptying services.

Processes and Systems

**State-level interventions**
- GPS monitoring of cesspool emptier vehicle fleets
- Use of PPE during service delivery
- Escrow account opening to maintain transparency on the financial transactions between the ULB and the private cesspool emptying operator

**ULB-level interventions**
- Price rationalization
- Establishment of cesspool service requisition cells and appointment of a nodal officer for FSSM
- Trainings to cesspool emptying operators
- Designated place for disposal through DRE where there are no treatment facilities, currently

**Cesspool emptier requisition cell**
To take requests from the customers, collect service fees and maintain detailed records of the provided services and to periodically monitor the use of PPEs during desludging.

**ICT-enabled cesspool emptier vehicle monitoring**
ULBs are recognizing the importance of using ICT as an enabler to integrate and improve FSSM service delivery. Berhampur and Bhubaneswar are embracing technology to improve governance and service delivery.
Odisha Urban Sanitation Policy (OUSP), 2017

Vision
All cities and towns in Odisha are to become totally clean, sanitized, healthy, and liveable, ensuring and sustaining good public health and environmental outcomes for all citizens, in line with the National Urban Sanitation Policy

Objective
Transforming urban Odisha into a community driven, sanitized, safe, healthy and livable towns by aligning with Swachh Bharat Mission (SBM) Urban and other relevant policies of the Government with necessary institutional framework, planning, monitoring, evaluation, Capacity Building and funding support, thereby ensuring 100% ODF, strengthening of sanitation chain, Faecal Sludge and Sewerage Management (FSSM), Solid Waste Management infrastructure and service delivery in urban areas of the State

Seven principles in OUSP

1. Sanitation will be treated as a basic service

2. Ensure equity and safety of access and use, particularly to the vulnerable and unserved populations

3. Increased awareness of the collective goal of sanitised cities; 8 Sanitation Capacity Building Platform

4. Institutional roles, responsibilities and capacity development in line with 74th Constitution Amendment Act, 1994

5. Emphasis on operations and maintenance of sanitation infrastructure

6. Integrating broader environmental concerns in the provision of urban sanitation service delivery

7. Choosing technology and solutions appropriate to the context

Expected outcomes of OUSP

- Urban areas are Open-defecation Free (ODF) and open discharge free (ODF+/++)
- Solid waste is safely managed & treated
- Sewage, septage / faecal sludge and liquid waste is safely managed, treated, and disposed
- Safety standards and guidelines are followed in the physical handling and management of waste
- Women and girls have access to safe menstrual hygiene management
- Cities/towns do not discharge untreated waste (water and faecal waste) into the water bodies of Odisha
1. **Urban areas are open-defecation and discharge free**
   
   Open defecation free under this policy is understood as the termination of faecal-oral transmission determined by:
   
   - No open defecation
   - All city residents have access to and use of household, community, and/or public latrines
   - There is adequate access and use of latrines in all institutions
   - All insanitary latrines (including single pit latrines) are converted to sanitary latrines, and no incidence of Manual Scavenging is observed
   - All city residents are engaged in safe hygiene practices, including handwashing

   In addition, open discharge free, under this policy shall be understood to mean an environment free from human waste which shall be determined as follows:
   
   - There is no open discharge of faecal and liquid waste, or raw sewage into the open drains or environment
   - There is safe containment, collection, transportation, treatment, and disposal of sewage, septage, and waste water

2. **Municipal Solid Waste is safely managed and treated**

   - Odisha will follow a policy whereby minimal amount of waste is sent to landfills by following the three ‘R’s, namely reduce, reuse, and recycle. The ultimate goal will be to create value out of waste and produce a paradigm shift from garbage as ‘disposable’ to ‘renewable resource’.

3. **Sewage, septage / faecal sludge and liquid waste is safely managed, treated, and disposed**

   Under this outcome, the entire sanitation chain will be covered. This includes:

   **CONTAINMENT** | **EMPTYING** | **TRANSPORT** | **TREATMENT** | **REFUSE / DISPOSAL**
---|---|---|---|---
Here toilet construction technologies will ensure safe containment of human faeces from the environment | Regular de sludging of septic tanks and other on-site systems will be undertaken in a safe and scientific manner | The transportation of this sludge to the treatment site shall be undertaken to approved treatment sites designated by ULBS | Only approved and designated treatment facilities by ULBS shall be used. This may be either at an existing Sewage Treatment Plant (STP) designated for treatment of sewage and sludge, or at an independent faecal sludge treatment plant (FSTP) | This involves treatment of solid sludge for reuse by composting, with the final effluent discharged into surface water, or re-used for gardening or agricultural purposes after due processing
4. **Safety standards and guidelines are followed in the physical handling and management of waste**  
   The Prohibition of Employment as Manual Scavengers and their Rehabilitation as per the act passed by the Union Government on 19th September, 2013 (MSA 2013).

5. **Women and girls have access to safe menstrual hygiene management (MHHM)**  
   The State Government shall promote the access of women and girls to safe Menstrual Hygiene Management in public, community, and private institutional sanitation facilities as follows:

6. **Cities / towns do not discharge untreated waste (solid, liquid, and faecal waste) into the water bodies of Odisha**  
   - At present, cities are disposing septage/sludge directly into water bodies, either though non-functional drains, natural drains, or through open defecation. This is compounded by solid waste being disposed into rivers/river basins.
   - Under this outcome, Odisha will focus on a combination of strengthening the constructed drainage systems, strong FSM / septage management, and/or underground sewerage networks where relevant (including treatment plants), and interception, diversion, and treatment of septage and waste water flowing through natural drains.

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**Institutional Framework as per Odisha Urban Sanitation Strategy (OUSS)**

**STATE LEVEL**

- High Power Committee (HPC)  
  (Chaired by Chief Secretary)

- State Mission Directorate (SMD)  
  (headed by Mission Director)

**DISTRICT LEVEL**

- District Level Review and Monitoring Committee(DLRMC)  
  (Chaired by Member of Parliament)

- District Urban Sanitation Committee(DUSM)  
  (Chaired by by District Collector)

**CITY LEVEL**

- CITY SANITATION TASK FORCE (CSTF)  
  (Headed by Commissioner/ Executive Officer)

- City Mission Directorate (CMD)  
  (Headed by Commissioner/ Executive Officer)

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**Sources:**

- Urban Wastewater Management in Odisha, A City Level Sanitation Study, Sanitation Capacity Building Platform (https://scbpi.org/research-reports/city-level-sanitation-study-Odisha)
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- The Faecal Sludge and Septage Management Journey of Odisha - National Workshop on Faecal Sludge and Septage Management, Bhubaneswar- by Government of Odisha, Knowledge Partner EY