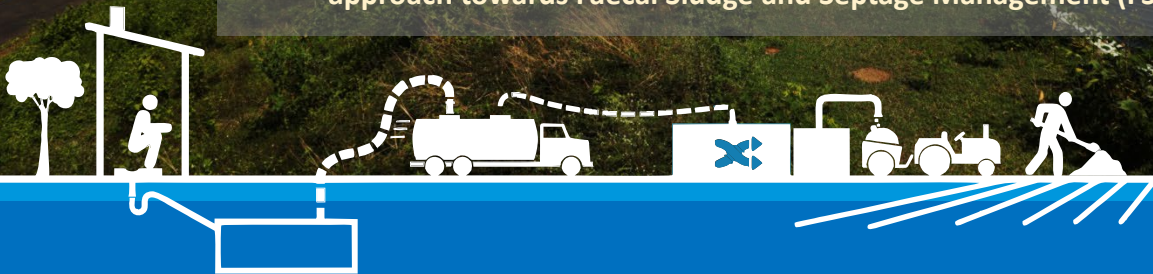


Odisha FSSM

Odisha, a frontrunner to recognize significance of comprehensive approach towards Faecal Sludge and Septage Management (FSSM)



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.

2.5%

Population having access to sewerage network

97.5%

Population dependent on onsite sanitation systems

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.

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

2018 onwards

Scale up and sustainability

Scaling up and sustaining the Services provided by the FSSM value chain

2015

Expo sure visit

Piloting FSSM in two cities through Project Nirmal. Expo sure visit to advanced faecal sludge and septage Management practices in other countries including Malaysia

2017-18

Implementation

Implementation of Faecal and Septage Management in 8 AMRUT towns of Odisha

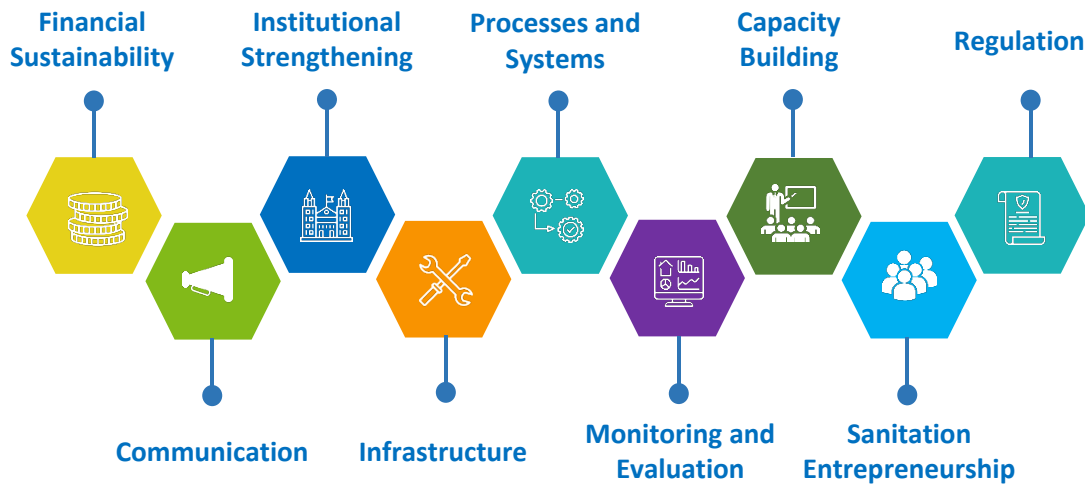
2019-21

Implementation

Implementation of Faecal and Septage Management in 114 towns of Odisha. By end of 2021, entire state will be covered



Key Interventions in FSSM



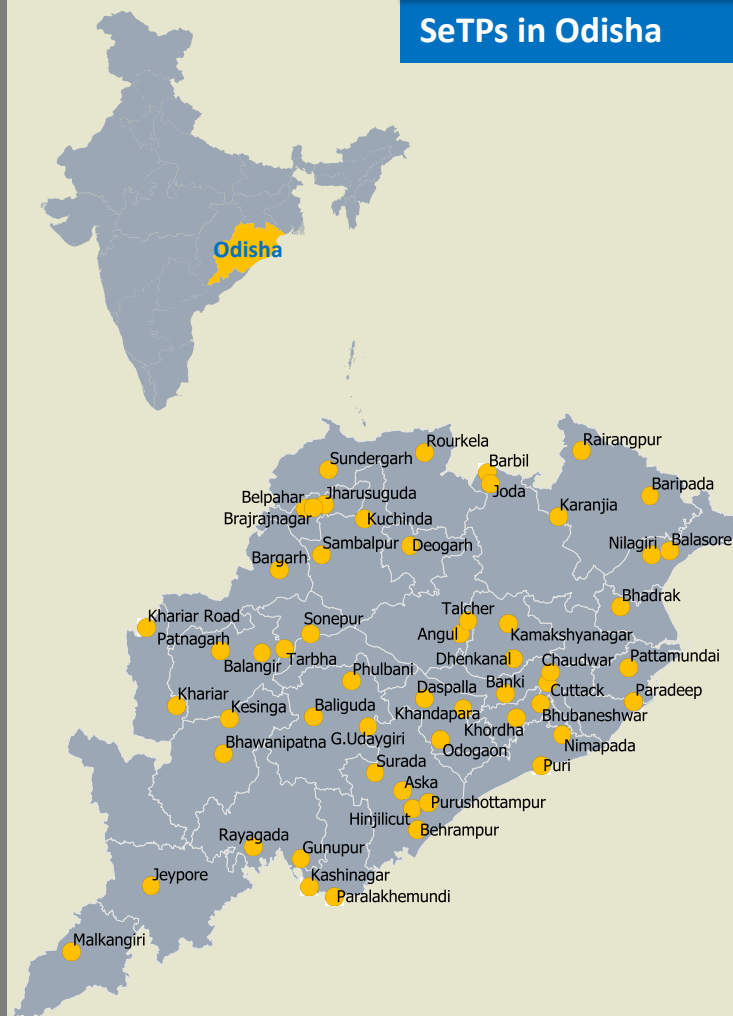
Infrastructure

Constructing SeTPs & FSTPs

Procuring cesspool vehicles

- The state has adopted construction of Septage Treatment Plants (SeTPs) and Faecal Sludge and Septage Treatment Plants (FSTPs) for safe treatment of waste.
- Cesspool vehicles of varying sizes are procured, especially to negotiate narrow lanes/streets and SeTPs to ensure safe emptying and transportation of the contained faecal waste.
- The state currently has 57 operational SeTPs and the remaining 61 are under various stages of 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).

SeTPs in Odisha



Cesspool Vehicles

- The **Government of Odisha** has made investments to procure cesspool emptier vehicles to ensure safe emptying and transportation of the contained faecal waste.
- Cesspool emptier vehicles which have been procured by the state Government and outsourced to the private sector. All vehicles have GPS tracking and regularly are monitored.
- Desludging rates are capped and licensing of all operators has been made mandatory and strict safety measures are ensured.



Community Engagement – convergence of missions



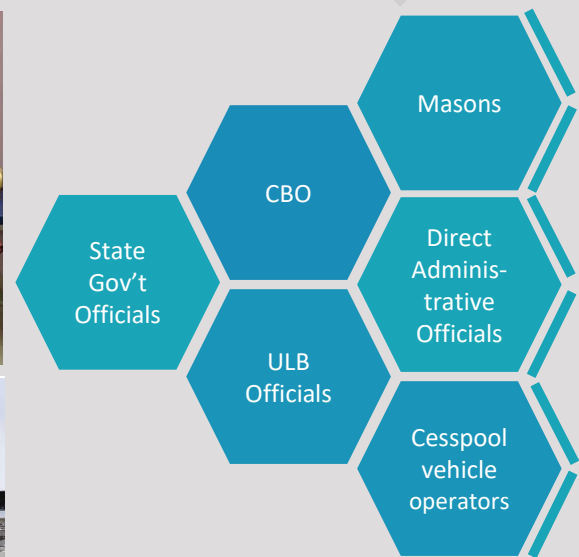
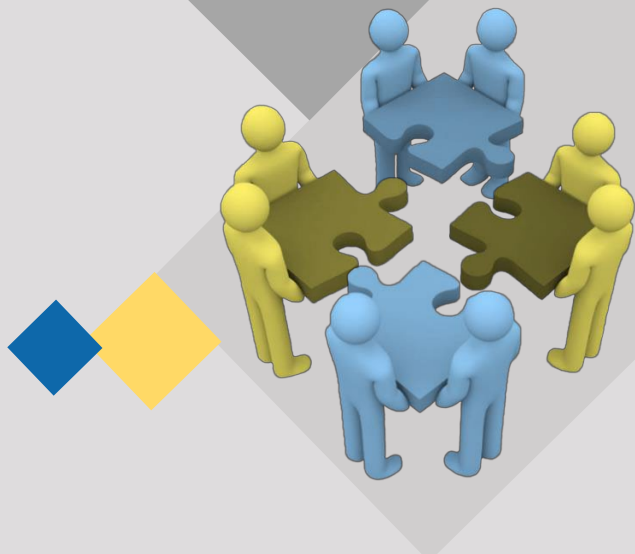
Odisha has converged Swachh Bharat Mission with the National Urban Livelihood Mission to provide livelihoods and involve women SHGs in sanitation in:

- Construction and maintenance of community toilets
- Incentive for desludging referral and increasing awareness
- Management of septage treatment plants



Capacity Building

- Organization of orientation training and capacity building of the ULBs on construction process management across 114 ULBs of Odisha
- Organization of orientation training for the Municipal Engineers / Junior Engineers on Operation & Maintenance and overall management of the SeTPs.
- Organization of orientation training for the Mission Shakti Groups (MSGs) on Operation & Maintenance of the SeTPs and preparing them to take the handover from the ULB



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

Expected outcomes of the policy

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:

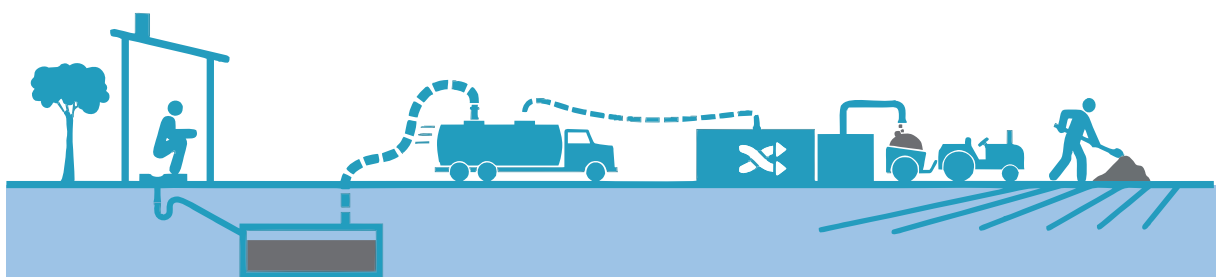
- There is no open discharge of faecal and liquid waste, or raw sewage into the open drains or environment
- There is safe containment, collection, transportation, treatment, and disposal of sewage, septage, and waste water

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).

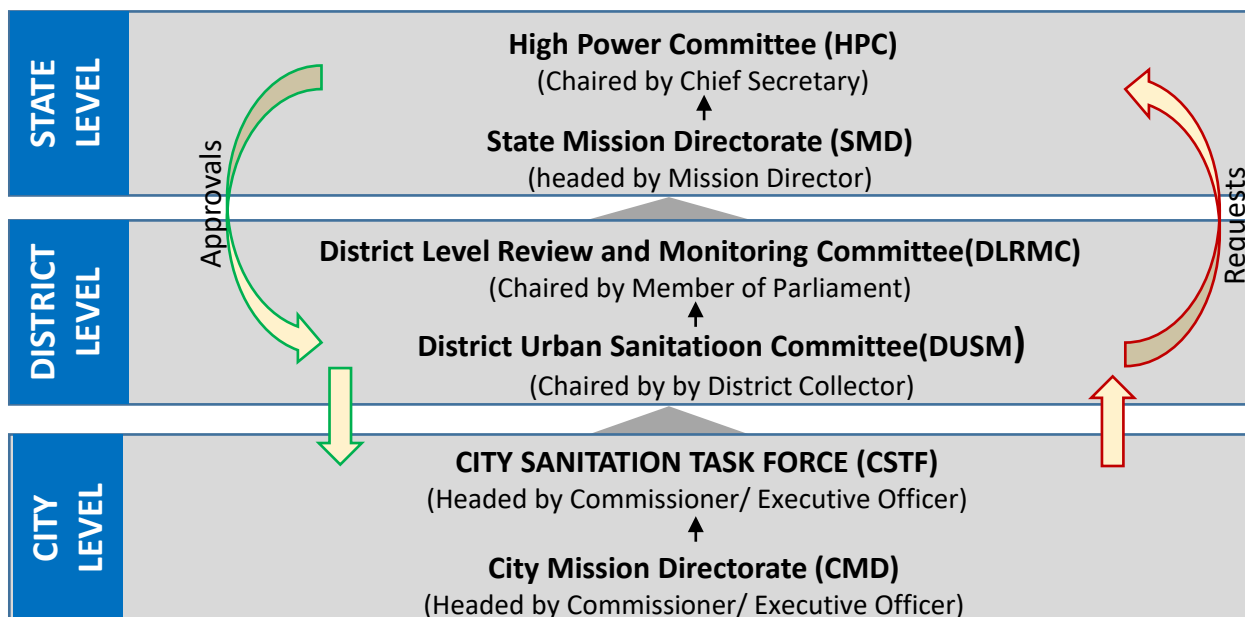
5. Women and girls have access to safe menstrual hygiene management (MHM)

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 through 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.

Institutional Framework as per Odisha Urban Sanitation Strategy (OUSS)



Sources:

- Odisha Urban Sanitation Policy 2017 and Odisha Urban Sanitation Strategy 2017, Housing and Urban Development Department (<https://odxpress.com/wp-content/uploads/Odisha-Urban-Sanitations-Policy-2017.pdf>)
- Urban Wastewater Management in Odisha, A City Level Sanitation Study, Sanitation Capacity Building Platform (<https://scbp.niua.org/research-reports/city-level-sanitation-study-Odisha>)
- Odisha's Journey of Faecal Sludge and Septage Management - Towards sustainable sanitation goals - by Government of Odisha, Knowledge Partner EY
- The Faecal Sludge and Septage Management journey of Odisha - National Workshop on Faecal Sludge and Septage Management, Bhubaneshwar- by Government of Odisha, Knowledge Partner EY

