



RESEARCH - ACTION - LEARNING NOTES

About Project Nirmal

The overall vision of Project Nirmal is the demonstration of appropriate, low-cost, decentralised, inclusive and sustainable sanitation service delivery solutions for two small towns (Angul and Dhenkanal) in Odisha leading to improved sanitation access for all households and integration of FSM in the sanitation value chain, through enabling institutional and financial arrangements and increased private sector participation.

The project is being implemented by Practical Action and Centre for Policy Research with support from Bill and Melinda Gates Foundation; Arghyam; Housing and Urban Development, Government of Odisha; and Municipalities of Angul and Dhenkanal.

The project aims to :

- Demonstrate State Government and ULB commitment towards sanitation service delivery in small towns;
- Capacity development of states and cities for effective sanitation service delivery;
- Increase in number of people in Angul and Dhenkanal with access to better sanitation services;
- Improve city-wide planning approaches for sanitation; and
- Demonstrate models for Faecal Sludge Management (FSM).

CREATING AN ENABLING POLICY ENVIRONMENT FOR IMPLEMENTING FSM IN SMALL TOWNS



Background

Most interventions relating to urban sanitation in India have, until very recently, focussed on either improving access of households to sanitation facilities or creating centralised infrastructure for wastewater conveyance and treatment¹. While the implementation of Swachh Bharat Mission – Urban (SBM-U)² has significantly improved access of urban households to sanitation facilities, the creation of infrastructure for wastewater conveyance and treatment has not seen the same kind of uptake due to high capital and Operation and Maintenance (O&M) costs involved despite steady funding from Government of India (GoI) through its various missions and programs³. Under the ambit of SBM-U, 6.11 million Individual Household Latrines (IHHLs) and 0.52 million Community Toilets (CTs)/Public Toilets (PTs) have been constructed between 2014-2019 which has resulted in over 4,000 urban centres being declared Open Defecation Free (ODF)⁴.

Most households with IHHLs in urban India depend on On-site Sanitation (OSS) systems. As per Census 2011, most urban households (45.3

percent) depended on OSS systems; this figure included households with IHHLs based on septic tanks (38.2 percent) and pits (7.1 percent)⁵ while 32.7 percent of households with IHHLs were connected to underground sewerage systems⁶. Field/ anecdotal evidence suggests that most IHHLs constructed under SBM-U are also connected to OSS systems. Despite this overarching dependence on OSS systems limited attention has been accorded to (a) proper construction and maintenance of OSS systems and (b) safe management (containment, conveyance, treatment and disposal) of faecal sludge and septage from OSS systems (Box 1).

In this background, a need was felt to put in place national policies to ensure a focus on Faecal Sludge and Septage Management (FSSM) and to create an enabling framework for implementation of FSSM related initiatives across urban centres in the country. Thus, the Ministry of Housing and Urban Affairs (MoHUA), GoI launched the “National Policy on Faecal Sludge and Septage Management”⁷ in February 2017. The Policy sets the context, priorities and direction for states and cities in the context of FSSM. (For details refer Box 2)

Addressing aspects related to safe containment, conveyance, treatment, disposal and reuse of wastewater are crucial to ensure that the social, economic and environmental benefits of improved sanitation access accrue to each and every urban household in the country

¹In the form of underground sewerage systems and Sewage Treatment Plants (STPs)

²The Government of India (GoI) launched the Swachh Bharat Mission - Urban (SBM-U) in October 2014. SBM-U envisions elimination of open defecation through provision of IHHLs, Community and Public Toilets (CTs/PTs) and putting an end to the inhuman practise of manual scavenging. The program also includes an Information, Education and Communication (IEC) campaign aimed at promoting behaviour change among all stakeholders for adoption of safe sanitation and hygiene facilities and practices. Further, in order to encourage cities to improve their sanitation status, a ‘Swachh Survekshan’ for rating cities has also been institutionalised.

³Including Jawaharlal Nehru National Urban Renewal Mission (JnNURM), Atal Mission for Rejuvenation and Urban Transformation (AMRUT) and Smart Cities Mission (SCM)

⁴Source: SBM – U Dashboard (<http://swachhbharaturban.gov.in/dashboard/DashBoard.aspx>). accessed on 12th December 2019

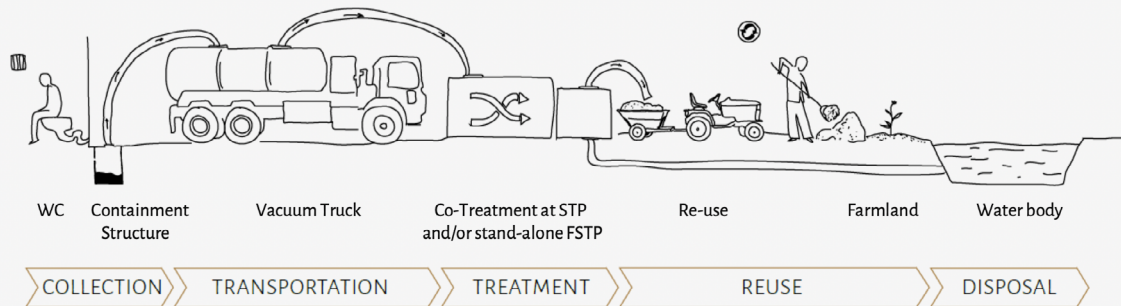
⁵Includes With Slab Improved Ventilated Pit (6.4 percent) and Without Slab / Open Pit (0.7 percent). Source: Census of India, 2011, “Houses, Household Amenities and Latrines - Availability and Type of Latrine Facility 2001-2011”, available at http://censusindia.gov.in/2011census/hlo/Data_sheet/India/Latrine.pdf

⁶Source: Census of India, 2011, “Houses, Household Amenities and Latrines - Availability and Type of Latrine Facility 2001-2011”, available at http://censusindia.gov.in/2011census/hlo/Data_sheet/India/Latrine.pdf

⁷Available at https://smartnet.niua.org/sites/default/files/resources/FSSM%20Policy%20Report_23%20Feb_Artwork.pdf

Box 1 FSM and its value chain

FSSM is the process of safe collection, conveyance, treatment and reuse/disposal of faecal sludge and septage from On-Site Sanitation systems (such as pit latrines and septic tanks). A typical FSSM system involves the following steps: (a) desludging of a septic tank/pit latrine; (b) storage of the collected waste in a sealed container; (c) transportation of the collected waste to a treatment facility; (d) treatment of the collected waste; and (e) disposal of treated waste or recycling/reuse of the treated waste.



Box 2 National Policy on Faecal Sludge and Septage Management – Key Aspects

VISION:

All Indian cities and towns become totally sanitized, healthy and liveable and ensure sustenance of good sanitation practices with improved OSS services together with FSSM to achieve optimum public health status and maintain clean environment with a special focus on the poor.

OBJECTIVES:

The National FSSM Policy has six specific objectives.

1. Mainstreaming FSSM in urban India by 2019
2. Creating an enabling environment for safe and sustainable FSSM
3. Defining roles and responsibilities of government agencies and other key stakeholders including private sector, civil society organisations and citizens
4. Enable and support synergies among relevant Gol programs and Missions (SBM, AMRUT, SCM)
5. Adopting an appropriate, affordable and incremental approach towards achieving environmental standards
6. Mitigate gender-based sanitation insecurity related to FSSM

SPECIFIC MILESTONES:

Leveraging FSSM to achieve 100% access to safe sanitation	<ul style="list-style-type: none"> • Promoting access to safe FSSM facilities for households • Promoting community planned and managed FSSM • Ensuring adequate availability and maintenance of public sanitation facilities
Achieving Integrated City wide Sanitation	<ul style="list-style-type: none"> • Mainstreaming FSSM in all sectors as a cross cutting theme • Strengthening national, state, city and local institutions to accord priority to sanitation provision • Extending access to proper FSSM facilities for poor and marginalised communities
Safe and Sanitary Disposal	<ul style="list-style-type: none"> • Promoting proper functioning of FSSM systems and ensuring proper collection and disposal of faecal sludge • Promoting recycle and reuse of treated sewage • Promoting proper design and construction of OSS facilities
Awareness Generation and Behaviour Change	<ul style="list-style-type: none"> • Generating awareness about FSSM and its linkages with public and environmental health amongst communities and institutions • Bringing about and sustaining behavioural changes aimed at adoption of healthy sanitation designs and practices including safe containment and management of faecal sludge and septage by urban households

LEGISLATIVE AND REGULATORY CONTEXT:

- *The Municipal Law, the Environment (Protection) Act, 1986 and the Water (Prevention and Control of Pollution) Act, 1974* provide the framework for “control of effluent, sewage and septage discharge”
- *The Solid Waste Management (SWM) Rules, 2016 under the Environment (Protection) Act, 1986* provide the framework for “final and safe disposal of post-processed residual faecal sludge and septage to prevent contamination of ground water, surface water and ambient air” and “disposal and treatment of faecal sludge and septage, before or after processing, at landfills and for use as compost”
- *Building Code of India* published by the Bureau of Indian Standards (BIS) outline the design standards for septic tanks, soak pits, cess pools, leach pits, drainage fields, etc.
- *The Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993 and Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013* have banned dry latrines, employment of persons for manually carrying human excreta as well as “hazardous cleaning” in relation to sewers and septic tanks.



Creating an enabling policy framework for FSM in Odisha

Taking a cue from the national government, the Government of Odisha (GoO) initiated work to draft state policies that would facilitate creating an enabling environment for the implementation of FSM initiatives in the state. The Housing and Urban Development Department (H&UDD), GoO prepared the Odisha Urban Sanitation Policy⁸ (OUSP) and revised the Odisha Urban Sanitation Strategy⁹(OUSS) in 2017, with technical assistance from Centre for Policy Research (CPR) under Project Nirmal. These efforts have enabled Odisha to become a front runner among states with a comprehensive policy framework that ensures compliance with national environment, health and safety laws as well as those prohibiting manual scavenging. Further, in order to facilitate adoption of FSM by Urban Local Bodies (ULBs), the GoO also prepared Odisha Urban Septage Management Guidelines in 2016 and Model Faecal Sludge and Septage Management Regulations in 2018.

Odisha Urban Sanitation Policy (OUSP) and Odisha Urban Sanitation Strategy (OUSS), 2017

The OUSP¹⁰ envisions making all cities and towns in the state totally clean, sanitised, safe, healthy and liveable, managed by ULBs and with active

citizen and stakeholder participation. The Policy is aligned with national policies (namely, National Urban Sanitation Policy, 2008 and National Policy on Faecal Sludge and Septage Management, 2017). Guided by a set of seven principles (Figure 2) the OUSP sets out to achieve six outcomes over a ten-year period (2017-2027). Of these six outcomes, four are directly related to sanitation and FSSM¹¹ (Figure 3), including

- Urban areas are Open-Defecation Free (ODF) and Open-Discharge Free (ODF+/+++);
- 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; and
- Cities/towns do not discharge untreated waste (water and faecal waste) into the water bodies of Odisha.

In order to facilitate the implementation of OUSP, the H&UDD, GoO developed OUSS 2017, which details out (a) the institutional framework at the state, district and city level; (b) provisions and guidance for planning, Monitoring and Evaluation (M&E), capacity building and training; and (c) phasing and funding.



Figure 2: OUSP: Guiding Principles

⁸Available at <https://odxpress.com/wp-content/uploads/Odisha-Urban-Sanitations-Policy-2017.pdf>

⁹Replacing the Odisha Urban Sanitation Strategy, 2011

¹⁰Notified vide Notification No.30586, dated the 30th December, 2016

¹¹While the other outcomes are also related to sanitation, they do not have a direct bearing on FSSM



Figure 3: OUSP: Planned Outcomes for Urban Odisha

Facilitating urban areas to be ODF (Open Defecation and Open Discharge Free)

Odisha, has been one of the first states to demonstrate its commitment towards making all urban areas (cities and towns) not just Open Defecation Free¹² but also Open Discharge Free¹³. The state has adopted an incremental approach for ULBs to attain an ODF status, progressing from Stage 1 to 3.

ODF Stage I is a first stop for a city/town in its efforts towards improved sanitation and also a measure of the successful implementation of SBM-U. This definition is aligned with the UN 2030 Agenda for Sustainable Development – Sustainable Development Goal (SDG) 6.2. (Box 3)

ODF Stage II (ODF+) brings into consideration aspects of environmental sanitation and is defined as no undesigned discharge of septage, sewage and black water.

ODF Stage III (ODF++) covers the entire sanitation value chain and has been defined as “no open discharge of human faecal and liquid waste” and “safe containment, transport, treatment and disposal of all human faecal waste”. This definition is aligned with the UN 2030 Agenda for Sustainable Development – SDG 6.3. (Box 3)

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

This outcome is aimed at ensuring that all faecal

SDG 6.2 calls upon signatory nations “to ensure access to adequate and equitable sanitation and hygiene for all and **end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations by 2030**”.

SDG 6.3 emphasises the need for improving water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials and **halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse**.

BOX 3: UN 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT – SUSTAINABLE DEVELOPMENT GOAL 6

¹²Open Defecation Free is defined as (a) No observed open defecation; (b) All city residents have access to and use household, community, and/or public latrines; (c) There is adequate access and use of latrines in all institutions; (d) All insanitary latrines (including single pit latrines) are converted to sanitary latrines, and no incidence of manual scavenging observed; and (e) All city residents are engaged in safe hygiene practices, including hand washing

¹³Open Discharge Free, is understood to mean an environment free from human waste which is to be determined as follows: (a) there is no open discharge of faecal and liquid waste, or raw sewage into the open drains or environment; and (b) there is safe containment, collection, transportation, treatment, and disposal of sewage, septage, and waste water



waste generated in an urban environment is safely confined, regularly collected, safely transported, and disposed after adequate treatment; with due care being taken of persons, machinery, materials and surroundings involved in the process.

In order to achieve this outcome, the OUSS, outlines a set of actions to be undertaken by state, district and local governments. (Table 1) While the state government is responsible for preparing “Guidelines on Sewerage and Septage Management” for cities and towns, the onus of implementation of FSSM initiatives rests with ULBs. The ULBs are required to prepare City Sanitation Plans (CSPs) integrating FSSM initiatives, in line with the State Government’s Guidelines and with active participation of the citizens. ULBs also have to ensure that the Operation and Maintenance (O&M) of all sanitation infrastructure is proper and that adequate funds are available for imple-

mentation of FSSM related initiatives planned under the CSP. ULBs have also been made responsible for facilitating capacity building initiatives on FSSM for officials and elected representatives and for creating an enabling environment for the participation of private and/or informal sector in the provisioning of FSSM services, infrastructure creation and O&M. The district governments, on the other hand, have been entrusted with the responsibility of providing land for the development of sanitation infrastructure (either at an individual ULB level or for a cluster of ULBs) and for monitoring implementation of septage management across ULBs in the district.

During the implementation of Project Nirmal in Angul and Dhenkanal Municipalities the state, district and local institutions took up their roles and responsibilities as defined in the OUSS.

Table 1: Actions to be undertaken by the state, district and local (city / town) governments for ensuring safe management, treatment and disposal of sewage, septage, faecal sludge and liquid waste

State Government	District Government	City Government
Preparation of the State Sewerage and Septage Management Guidelines (for details of the elements to be covered by the state guidelines as outlined in the OUSP and OUSS, 2017 refer Figure 4)	Providing land for development of sanitation infrastructure for ULBs, either at an individual ULB level, or in a cluster as per the plan for each district. The land is to be identified based on technological ¹⁴ and environmental ¹⁵ considerations and is to be approved by a competent authority identified by the state.	Preparing CSPs which include septage management / FSM plans ¹⁶ with active participation of the general public
	Undertake monitoring and evaluation for septage / sewage management in all ULBs within the district	Ensuring that all sanitation infrastructure (already created and planned under CSP) is properly operated and maintained
		Supporting capacity building initiatives and ensuring participation of appropriate officials and elected representatives
		Facilitation of engagement of the private and informal sector in infrastructure creation, O&M, and service delivery related to FSSM
		Ensure adequate budgetary provision for city-wide sanitation delivery under the CSP
		Nomination of a nodal officer for septage / sewage management in the city

¹⁴Quantity of waste generated

¹⁵Compliance with the applicable environmental laws

¹⁶Based on the GoO’s “Sewerage and Septage Management Guidelines”



Defining safety standards for septic tanks and OSS systems

Conforming to GoI and State Government standards

Safe transportation of sludge

Including checklist of tools to be kept on transportation vehicle

Standards and norms for safely treated septage/sewage and effluent, safety and public health

- Environmental standards (not already set by GoI) for discharge/disposal of effluent and sludge, posttreatment, into water bodies and land
- Norms for site selection of treatment facilities
- Safety standards for workers involved in safe sanitary disposal and management, including identification of hazards and minimum-worker safety and process standards

Service delivery standards

- For sewerage and septage management at city level

Engagement of non government stakeholders including public, private sector and informal sector

- Public through IEC campaigns
- Private sector in infrastructure provision and O&M through public-private partnerships
- Private informal sector in service delivery of FSM at the city / district level

Regulation, coordination and ULB primacy

- Strategies for cost recovery (e.g. user charges)
- Clear planning and implementation roles for ULBs

O&M and Monitoring & Evaluation (M&E)

- ULBs to be responsible for O&M of sanitation facilities for a 10 year time period
- State Government to have a half-yearly review of these facilities and their operationality

IEC / BCC targeting public, septic tank masons and septage transporters and other private transporters

- Public: need for proper construction of OSS systems and public health effects of poor sanitation (Target Audience: RWAs, CBOs, SHGs, and schools)
- Septic tank masons - sensitize them on environmental norms and train them on the guidelines
- Septage transporters and other private operators to ensure safe handling of septage at the time of desludging and transportation

Capacity Building and Training of ULB staff and elected representatives.

- Identification of Master Trainers and Training of Trainers

Figure 4: Guidelines for Sewerage and Septage Management – Key Components



Safety standards and guidelines are followed in the physical handling and management of waste

In order to ensure successful implementation of the *Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013*, the OUSP provides that the State government through the H&UDD will formulate rules and ensure that all relevant state and local government officials as well as citizens, are familiar with these rules and their provisions. Under the *Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993* the state government has been made responsible for ensuring that all insanitary latrines are identified and converted and that in the future neither are insanitary latrines constructed nor any manual scavengers engaged. The state government also needs to ensure that all household and institutional establishments construct sanitary and ecologically safe toilets (and containment structures) that require neither manual scavenging, nor hazardous cleaning.

Cities/towns do not discharge untreated wastewater and faecal waste into the state's water bodies

The sixth outcome of the OUSP is aimed at eliminating urban pollutants, including septage/faecal sludge, and municipal solid waste, from reaching the state's rivers and river basins. The OUSP presents a multi-pronged approach, which includes, strengthening of existing drainage systems; strong FSSM and/or underground sewerage networks (including STPs) wherever relevant; and interception, diversion, and treatment of septage and waste water flowing through natural drains.

The OUSP outlines a set of actions to ensure attainment of this outcome including (1) elimination of open defecation and insanitary latrines through provision of household, community, public and institutional toilets; (2) all toilets based on OSS systems to follow safety standards for FSSM; (3) all existing drains to be repaired at vulnerable points to prevent leakages into the en-

vironment; (4) provision of adequate wastewater and solid waste treatment facilities to ensure scientific processing of all waste so that only treated effluent, which meets environmental discharge norms, is released into the water bodies.

Model Faecal Sludge & Septage Management (FSSM) Regulations, 2018

Project Nirmal, provided technical assistance to H&UDD, to prepare the Model Faecal Sludge and Septage Management Regulations, 2018. Section 388(8) read with sections 390 and 392 of the Odisha Municipalities Act, 1950 empowers Municipalities and Notified Area Committees (NACs), while sections 657, 658 and 659 of the Odisha Municipal Corporation Act, 2003 empowers Municipal Corporations, to make regulations. In line with these provisions, all ULBs in the state have promulgated FSSM bye laws based on the Model Faecal Sludge and Septage Management Regulations, 2018.

The provisions of the Model FSSM Regulations, 2018 cover the entire sanitation value chain and details out roles and responsibilities of all concerned actors including owners of premises, cesspool operators, treatment facility operators and the ULB. The details of the Model FSSM regulations, 2018 are presented in Table 2.

Odisha Wastewater and Faecal Waste (Management and Disposal) in Urban Areas Act (Draft)

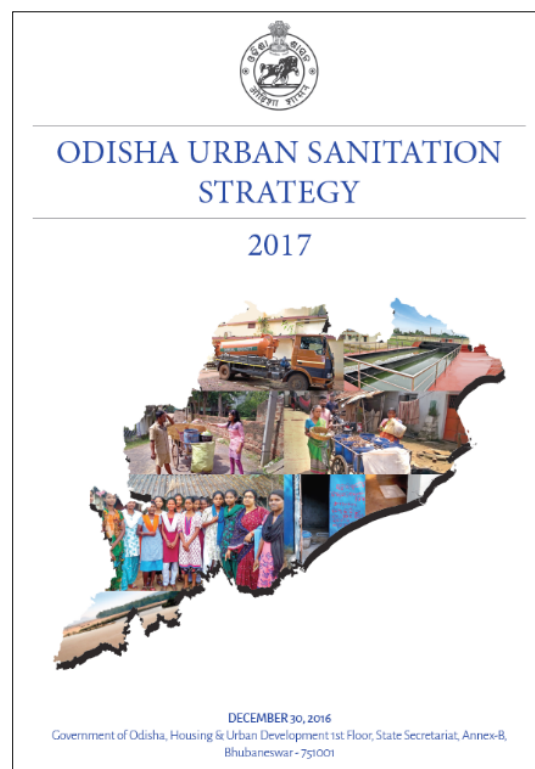
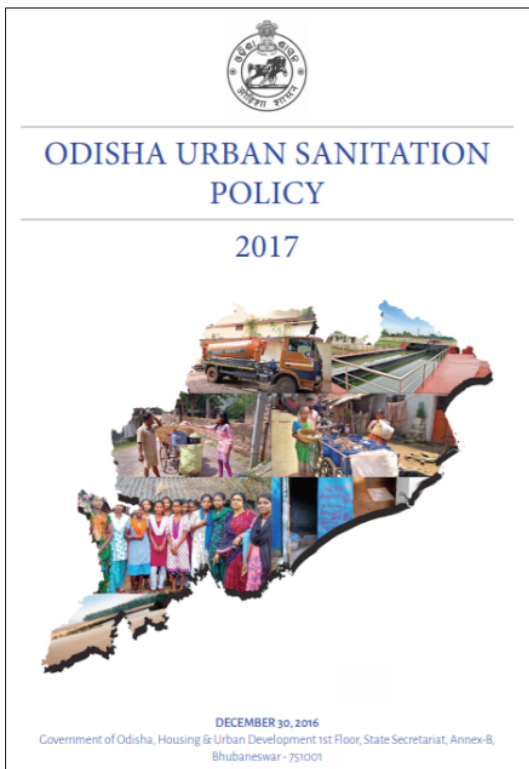
Project Nirmal helped develop a draft of the Odisha Wastewater and Faecal Waste (Management and Disposal) in Urban Areas Act. The Act aims to provide a framework for ensuring safe management and disposal of wastewater and faecal waste by individual households and establishments, municipalities and other local authorities and state agencies and authorities in urban areas in order to minimise risks to health and well-being, environmental harm and human dignity resulting from unsafe exposure to wastewater and faecal waste, and for any connected or incidental matters.

Table 2: Provisions of the Model Faecal Sludge and Septage Management Guidelines, 2018

<p>CONTAINMENT AND DESLUDGING</p>	<p>Design and construction of containment structures</p> <p>The design, construction and installation of containment structures is to be in accordance with the provisions of the Odisha Urban Septage Management Guidelines, 2016 (OUSMG, 2016) or any other accepted sound engineering practice issued by the ULB (with prior approval of the State Government) or the State or Central Government (reg 4 (1))</p> <p>Responsibility of the owner of premises where the toilet is connected to septic tank</p> <ul style="list-style-type: none"> ◆ To undertake upkeep, maintenance and safe disposal of sludge from septic tank (reg 4(2)) ◆ To undertake regular desludging of septic tank (every three years) or pit latrine (every five years) (reg 5 (2) read with Schedule I) on payment of user fee determined by the ULB which shall be acknowledged through a receipt (reg 4 (3)), through a Septage Transport Vehicle (STV) registered with the ULB (reg 5 (1)) ◆ To ensure that no pollution is caused due to direct discharge of sludge into open areas / drains due to the malfunctioning or faulty construction of the containment unit (reg 4 (4)) ◆ To ensure mechanical cleaning of septic tanks by ULB or registered cesspool operators with adequate safety measures and no manual cleaning (reg 4 (5)).
<p>DESLUDGING & TRANSPORTATION</p>	<p>Registration of Septage Transport Vehicle (STV) and its operation</p> <ul style="list-style-type: none"> ◆ Any person, including the ULB, having cesspool emptying vehicle shall apply for its registration as a Septage Transport Vehicle (STV) to the ULB after fixing Global Positioning System (GPS) with tracking facility and sharing the tracking link with the ULB and on payment of a registration fee (reg 6(1) (2) (3)). ◆ The ULB shall inspect the STV annually for proper functioning of all equipment and compliance with the Motor Vehicles Act, 1988 (reg 6(4)). ◆ The STV shall be registered with the ULB and possess a valid inspection certificate (reg 8). ◆ The registration may be temporarily suspended if the STV does not have the inspection certificate or if it is deemed unfit or if its operation is likely to have negative environmental and health impacts in the opinion of the competent authority (reg 9(1)). ◆ The registration may be cancelled if the owner violates the regulations / terms and conditions of registration or the STV is found not fit to be in service (reg 9(2)). <p>Responsibilities of STV operator during desludging</p> <ul style="list-style-type: none"> ◆ Carrying out desludging using safe and appropriate technology, equipment, protective gear and sound operating practices, which are in compliance with the relevant law or as per the OUSMG, 2016 (reg 12 (1)). ◆ Ensuring that all workers are trained on how to use protective gear and follow hygiene practices (reg 12 (2) (a)). ◆ Ensure that all safety equipment is operational and in good condition for use (reg 12 (2) (b)). ◆ Ensure that first aid kit, gas detection lamp, fire extinguisher and sufficient disinfectant are kept in the vehicle before proceeding to a collection site (reg 12 (2) (c and d)) ◆ Ensure that sanitary workers do not enter a septic tank under any circumstances (reg 12(2) (e)). ◆ In the event of accidental spillage of sludge or septage, the STV operator shall immediately take action to prevent further spillage, minimize the environmental impact and undertake clean-up action, and disinfect the area of spillage by appropriate method (reg 13(1) (a & b)).



<p>TREATMENT</p>	<p>Treatment Mechanism</p> <ul style="list-style-type: none"> ◆ The ULB has been given the discretion to approve and notify the manner in which septage is to be processed and treated at the treatment facilities. However, the selected treatment mechanisms have to be in accordance with relevant laws, notifications, or as provided in the OUSMG, 2016 or any good engineering practices (reg 14 (1)). ◆ Septage or sludge is not be treated or disposed in any other manner except what has been specified and approved by the ULB (reg 14(2)). <p>Responsibilities of the operator of treatment facilities</p> <ul style="list-style-type: none"> ◆ To ensure adequate safety measures are put in place to protect the workers and neighbourhood, to ensure proper sanitation facilities in the premises, and that the disposal of treated septage is in compliance with standards laid down by the Odisha State Pollution Control Board (OSPCB) (reg 15 (1) and (2))
<p>DISPOSAL AND REUSE</p>	<ul style="list-style-type: none"> ◆ The treated septage is to be disposed only at a specified location authorized and notified by the ULB which is to be chosen in compliance with the Environment Protection Act, 1986 and the Water (Prevention and Control of Pollution) Act, 1974 and the rules framed there-under (reg 16(1)). ◆ The location of the disposal site is to be finalized by the ULB in consultation with the OSPCB and the district administration (reg 16(2)). ◆ The treated septage may be reused in accordance with applicable rules and safety standards (reg 16(3)).
<p>POWERS OF THE ULB</p>	<p>The ULB is empowered to</p> <ul style="list-style-type: none"> ◆ levy user charges for providing services with respect to containment, conveyance or treatment (reg 17(2)) ◆ Inspect any premises, STV and septage treatment plant/facility, at any time (reg 18), and ◆ Issue directives to remove difficulties in operation of the regulations (reg 22).
<p>PENALTIES AND FINES FOR VIOLATIONS</p>	<ul style="list-style-type: none"> ◆ In the first instance, a notice for compliance will be issued to the violator. ◆ In case of non-compliance, a fine of Rs 50 in case of first and second instance of breach, and seizure of property/STV, as the case may be, and a fine of Rs 15 per day in case of third and subsequent instance of breach (Schedule II) shall be imposed on the following persons for the following violations: <ul style="list-style-type: none"> ◇ Owner of property - unscientific design and construction of containment unit; direct discharge of sewage into drain or road or open area ◇ Owner of STV – plying of STV without registration/valid certification; failure to attend to accidental spillage ◇ Owner of treatment plant - discharge of untreated septage ◆ For other violations of the regulations, a fine of Rs 50 in the first instance and Rs 15 per day in case of continuing contravention shall be imposed.



Lessons Learnt

- The GoO, through the H&UDD, has created an enabling environment for adoption of FSSM in the state by promulgating the Odisha Urban Sanitation Policy, 2017; Odisha Urban Sanitation Strategy, 2017; Odisha Urban Septage Guidelines, 2016; and Model Regulations for Sewage and Septage Management for ULBs, 2018. Project Nirmal has been a key partner in creating this enabling environment by providing technical support towards drafting of these policies and guidelines. The formulation of the OUSP has ensured that the ULBs comply with the national environment, health and safety laws and those prohibiting manual scavenging. Further, the OUSS outlines the contours of the OUSP implementation over a ten-year period (2017-2027) outlining expected outcomes and allocating responsibilities to various government actors at state, district and local government levels. The Odisha Urban Septage Guidelines
- (2016) and the Model Regulations for Sewage and Septage Management for ULBs (2018) have served as useful tools and guides for ULBs seeking to implement FSSM initiatives.
- The division of responsibility between the government actors/institutions at the state, district and local level has been clearly articulated in the OUSP and OUSS. Each government actor at the state, district and local level, has been allotted well defined roles and responsibilities in accordance with their constitutional mandates. While the state government has been made responsible for preparing the “Guidelines on Sewerage and Septage Management” for cities and towns, the onus of implementation of FSSM initiatives rests with ULBs. The district governments have been entrusted with the responsibility of facilitating creation of “common treatment facilities”, providing land for these facilities and monitoring the implementation of FSSM initiatives across the urban centres in the district.



- In order to ensure a continued focus on FSSM, ODF has been defined as both Open Defecation Free and Open Discharge Free. The application of an incremental approach, from ODF to ODF++ has ensured that cities and towns are able to visualise their ultimate goal and move towards it in a step wise manner. Their journey consists of three sub goals, namely, “ensuring that there is no open defecation and that all households have access to sanitation facilities”; “creating an environment free from undesignated discharge of septage, sewage and black water”; and “safe containment, transport, treatment and disposal of all human faecal waste and liquid waste”.
- While the policy framework outlines the roles and responsibilities of each actor a need was felt to build awareness among these actors about their roles related to FSSM and this component was facilitated under Project Nirmal’s institutional capacity building interventions.
- Capacity building of officials and elected representatives on FSSM and engagement with non-state actors (including public, private sector and private informal sector) were also identified as key areas of interventions in order to ensure speedy and effective implementation of the FSSM initiatives in the state. These themes have been worked upon under Project Nirmal and the processes, outcomes and success stories are documented in subsequent notes.

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