

IMPLEMENTATION OF SWM RULES



KERALA SOLID WASTE MANAGEMENT STATUS
Compliance of OA 606/2018

Glimpses of Waste Management



Door to door collection



Storage and transfer

Mini MCF (Transfer stations at ward level)



Transportation from Mini-MCF to MCF







Shredding and Baling Units



Non biodegradable waste management facilities



Biodegradable waste management





Perinthalmanna Biogas plant



Legacy waste management

Drone image of Kureepuzha dumpsite before and after removing vegetative cover (KOLLAM CORPORATION)



Legacy Waste Management



Before



After

MUNNAR GRAMA PANCHAYAT

Before



After



BIOMINING- KOZHIKODE MUNICIPAL CORPORATION



Before



After

Trivandrum Corporation - Erumakkuzhy



Vadakarapathy GP



Before



After

Kodungallur Before & after



Perinthalmanna Municipality-Malappuram Before & After



River Rejuvenation Campaign





കൊല്ലം ചിറ ശുചീകരണത്തിന് മുമ്പും ശേഷവും



Kaladi Panjayath

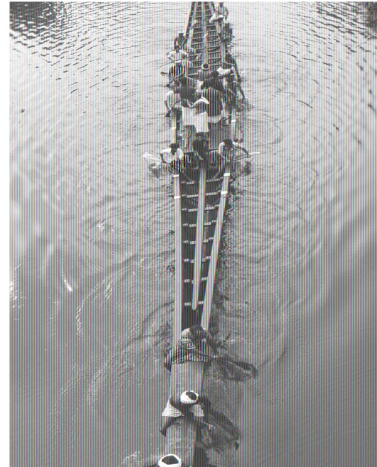
വട്ടാർ പുനരുജ്ജീവനം



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വട്ടാറിൽ പള്ളിയോടമി

“Thelineer ozhukum navakeralam-Clean Aquifer” campaign



“Thelineer ozhukum navakeralam-Clean Aquifer” campaign



Videos

[Best Practice @ Anthoor, Punalur Municipality, Bedadukka GP](#)

[Best Practice @ Attingal, Punalur, Aryad, Thaliparamb, North Paravoor, Chottanikara](#)

[Bio Park @ Guruvayoor](#)

[Marine Cleaning drive](#)

[Neeleswaram Municipality](#)

[Green protocol @ Ottapalam Mini civil station, @ Chemanchery GP, Ollookara GST office](#)

[Marine cleaning drive](#)

Thank You

SOLID WASTE MANAGEMENT

CONTENTS

- ▷ STATUS OF SOLID WASTE MANAGEMENT IN KERALA
- ▷ COLLECTION MECHANISM
- ▷ WASTE COLLECTION - PROGRESS
- ▷ PROCESSING OF WASTE
- ▷ LEGACY WASTE MANAGEMENT
- ▷ IMPLEMENTATION OF PLASTIC WASTE MANAGEMENT RULES
- ▷ OTHER INITIATIVES

OVERALL WASTE MANAGEMENT STATUS IN THE STATE

Status	As on July 2019	As on July 2020	As on Dec 2021	As on June 2022
Quantity of MSW - BDW and NBW generated (TPD)*	3903	3521	3472	3472
Quantity of MSW NBW Collected (TPD)**		880 (BDW+NBW)	1261	1283
Quantity of MSW NBW segregated & transported (TPD)			1261	1283
Quantity of MSW BDW + NBW processed (TPD)	772.23(20%)	1837(52%)	2502 (72%)	2691 (77%)

Setting up of assistance centre at State and District Level to facilitates ULBs

Kerala Solid Waste Management Project (KSWMP)



- ▶ In order to support the Urban local bodies in managing and setting up waste management facilities, GoK with the financial aid of World Bank has formulated a project for **Rs.2100 Crores. First ever World Bank project for SWM covering an entire State.**
- ▶ The project envisages setting up technical support team at **State (SPMU), District (DPMU) and ULB level (PIU)** including dedicated Environmental Engineers and has been setup. PMC for the project is in place. PIU selection process is near complete.
- ▶ Projects consists of
 - setting up ULB level decentralized waste management projects
 - regional level waste management facilities such as Recycling parks, Sanitary Landfills.
 - Remediation of legacy dumpsites
- ▶ Action plans based on gap analysis being developed in all ULBs

PROCESSING OF WASTE GENERATED

Biodegradable waste

Strategy

- ▶ Decentralized waste management Facilities at Household/Institution/Community Level and centralized windrow compost plants
- ▶ Clean kerala company in position for material management on onward linkages - Tie up with waste processors - for plastic, bottle, chicken waste, metal, electronic waste, etc.
- ▶ Centralized Waste to Energy Plans for overflow waste management to manage existing gap in waste management

Progress

- ▶ [Details of decentralised biodegradable waste management facilities](#) &

[Waste to energy plants](#) - [Link](#)

- ▶ Government is in the process of setting up cluster level W2E plants at 8 major cities of the state through KSIDC at Thiruvananthapuram, Kollam, Ernakulam, Thissur, Palakkad, Malappuram, Kozhikode, Kannur



PROCESSING OF WASTE GENERATED (URBAN)

Non biodegradable waste management

Strategy

- ▶ Segregated waste is collected from door steps and sorted and stored at Mini Material Collection Facilities (MCFs), MCFs. Segregation of plastic is done at the Resource Recovery Facilities (RRFs) which have baling and shredding facilities.
- ▶ Gap to be covered by August 2023

SINo	Status	As on June 2022		
		Existing	Target	Gap
i	Number of Mini Material Collection Facilities	722	-	-
ii	Number of MCFs	186	200	14
iii	Number of Resource Recovery Facilities	69	93	24

PROCESSING OF WASTE GENERATED (RURAL)

Non biodegradable waste management

Strategy



- ▶ Segregated waste is collected from door steps and sorted and stored at Mini MCFs, MCFs. Segregation of plastic is done at the RRFs which have baling and shredding facilities.
- ▶ Gap to be covered by June 2023

SINo	Status	As on June 2022		
		Existing	Target	Gap
i	Number of Mini Material collection Facilities	7001	-	-
ii	Number of MCFs	907	941	34
iii	Number of Resource Recovery Facilities	114	152	38

PROCESSING OF WASTE GENERATED

Non biodegradable waste management

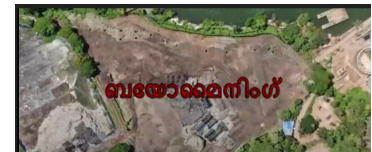
Progress

- ▶ 214 plastic recycling units including small scale plastic granules, chips, product manufacturing industries, 21 Steel mills, 7 kraft paper units are working in the private sector.
- ▶ From RRFs, waste is taken care by Clean Kerala Company Ltd (CKCL) for forward linkage for recycling/scientific disposal  
- ▶ **2501 T** of shredded plastic has been used for tarring **4191.27** km of road.
- ▶ **9748.46 MT** of rejects has been collected by CKCL from **18** ULBs and **145** GPs till May 2022
- ▶ Transported **15204 MT** of RDF from **43** ULBs and **421** rural local bodies till May 2022 for processing.

LEGACY WASTE MANAGEMENT

Description	Status
Number of dumpsites (No.)	44
Quantity of Waste dumped at dumpsites (Tons)	7.51 lakhs
Number of dumpsites cleared (No.)	12
Number of dumpsites in which biomining has commenced (No.)	10
Number of dumpsites in which biomining is planned(No)	22

Details major dumpsites in the State



LEGACY WASTE DUMPSITES in ULBs

Sl.No	Dumpsites cleared	Dumpsites in which biomining is ongoing
1.	Erumakuzhi, TVM Corporation	Kureepuzha,kollam (90% completed)
2.	Palayam, TVM Corporation	Brahmapuram,Ernakulam (60% completed)
3	Mini Stadium,Pathanamthitta	Njaliparambu,Kozhikode (70% completed)
4	Adoor, Pathanamthitta	Laloor,Thrissur
5	Pandalam	Kunnamkulam,Thrissur
6	Kodungallur, Thrissur	Chelora,kannur
7	Guruvayoor, Thrissur	TKS puram,Thrissur
8	Pattambi,Palakkad	Near Inkel City, Malappuram
9	Tirur,Malappuram	Koyilandy,Kozhikode
10	Perinthalmanna, Malappuram	Kozhikode River side
11	Kalpetta,Wayanad	
12	Manjeri,Malappuram	

DISPOSAL FACILITIES

Strategy

- ▶ Government has planned to setup regional sanitary landfills at cluster level (5 clusters) and the process is in pipeline as part of KSWMP
- ▶ Cluster Planning

Progress in identification of land for regional facilities

- ▶ Cluster 1-25 Acres at Cheemeni, in Kasargod District .
- ▶ Cluster 2- 25 acres of Private land at Thamarassery , Kozhikode Dist
- ▶ Cluster 3- 25 acres of Private land at Kanjikode in Palakkad Dist
- ▶ Cluster 4- 25 acre of land has been earmarked by KINFRA at site of FACT at Ernakulam
- ▶ Cluster 5- 50 acres Kodumon estate under PCK in Pathanamthitta Dist

Model cities, towns and villages as per Government order

Corporations	Municipalities	Panchayats (Districts Concerned)
Thiruvananthapuram	Attingal	Karakulam, Poovachal, Parassala (Thiruvananthapuram)
Thrissur	Punalur	Kadakkal, Chavara, Perinad (Kollam)
Kozhikode	Kunnamkulam	Kulanada, Aranmula, Thumbaman (Pathanamthitta)
		Aryadu, Mararikulam, North thamarakkulam (Alappuzha)
		Moonilavu, Kadaplamatom, Poonjar (Kottayam)
		Adimali, Nedungandam, Kumali (Idukki)
		Pambakkuda, Chottanikkara, Kaladi (Ernakulam)
		Manalur, Parappukkara, Peringanam (Thrissur)
		Muthalanga, Sreekrishnapuram, Vellinezhi (Palakkadu)
		Maranchery, Chaliyar, Thuvur (Malappuram)
		Kunnumel, Kuttiyadi, Meppayur (Kozhikode)
		Meenangadi, Muttil, Vythiri (Wayanad)
		Pariyaram, Padiyur, Udayagiri (Kannur)
		Kinanoor-Karinthatam, Bedadukka, Madikkai (Kasargode)

STATUS OF PROJECTS IN MODEL CITY Corporations

- More than 65% Door to door collection for dry and wet waste was achieved for both households and establishment in Kozhikode Corporation. 87% door-to door collection provided for establishments through 12 agencies by Thiruvananthapuram Corporation. More than 60% door to door collection of dry waste from households and establishments Thrissur Corporation and 90% wet waste from establishments.
- Centralized facility exists for Kozhikode and decentralized facility provided in Thiruvananthapuram and Thrissur Corporations.
- Work started for the waste to energy plant at Kozhikode. Thiruvananthapuram and Thrissur identified land for WTE could not be proceeded with on account of local protest. New land identification ongoing.
- Thiruvananthapuram (along with Alappuzha for source segregation, and Taliparamba for landfill management) has been selected as one of the 20 best practices for waste management published by **NITI Aayog for best practices in Municipal SWM in 2021-22**. under the category 'innovative model'.
- Biomining
 - ★ Dumpsite remediation works at Erumakkuzhy and Palayam in Thiruvananthapuram Corporation under Smart City programme have been completed.
 - ★ 60% progress achieved in the Biomining process at Kozhikode Corporation.
 - ★ 90% progress achieved in the biomining process at Kollam Corporation.
 - ★ Work awarded at Thrissur corporation

DETAILS OF PROJECTS IN MODEL TOWNS

- 100% Door-to-Door collection achieved for dry waste from households and establishments in Punalur and Kunnamkulam municipality.
- 100% Door-to Door collection for dry waste from establishments in Attingal Municipality. Both Attingal and Kunnamkulam have branded fertilisers from organic waste.
- Dumpsite cleared in Punalur Municipality. Attingal, it is under project preparation. Construction of a secured landfill is being initiated.
- Haritha Karma Sena has been established in all model towns.
- Kunnamkulam has developed its own inoculum. Punalur has a junklee park - an artistic rendering of recycled waste.

ACTIONS FOR COMPLIANCE AND MONITORING

Smart Garbage App

- ▶ For data collection and monitoring of WM activities
- ▶ Vide G.O (Rt) No. 1220/2021/LSGD dated 28.06.2021, Administrative Sanction was issued for the implementation of Smart Garbage App in all the Local Bodies for management of waste across the State along with sanction for setting up a control room for State-wide monitoring
- ▶ Primary Agreement was signed between Keltron and Suchitwa Mission dated 20th Oct. 2021.
- ▶ 426 Local Bodies have placed sufficient projects in the first phase.
- ▶ 371 (4 Corporations, 58 ULBs and 309 Panchayats) had signed Agreement and the App is in the implementation stage.
- ▶ Orientation and Capacity Building training has been given to State and District Master trainers and Haritha Karma Sena has completed.

IMPLEMENTATION OF PLASTIC WASTE MANAGEMENT RULES

- ▶ From 01.01.2020 Government of Kerala has issued orders banning the use of single use plastic through various orders
 - **G.O.(Ms)No.6/2019/Env. dated 27.11.2019** Ban on single use disposable plastic -w.e.f January 1st, 2020
 - **G.O(Ms)No.7/2019/Env. dated 17.12.2019** Blanket ban on single use disposable plastic modified order -
 - **G.O. (Ms) No. 7.2019.Env. dated 17.12.2019- G.O.(Ms)No.8/2019/Env. dated 19.12.2019-Erratum**
 - **G.O.(Ms)No.2/2020/Env. dated 27.01.2020** Alternative materials that can be used as a substitute for banned single use plastics
 - **G.O.(Rt) No.04/2020/ENV. dated 16.02.2020** Further clarification on Ban on Single use plastic-
 - **G.O.(Rt) No.06/2020/ENV. dated 11.05.2020)** Exemption of Plastic bags used to collect bio-medical waste from Healthcare Institutions from banned items-
 - **(G.O.(MS) No.02/2021/ENV. dated 28.02.2021)** Ban on Single use Plastic (disposable plastics) - Modification

Other initiatives...

Implementation of plastic ban

- ▶ Government of Kerala issued orders banning the use of single use plastic from 01.01.2020.
- ▶ Campaigns for effecting green protocols, reduction of plastic usage and substitution of plastic with bio degradable alternatives have been undertaken by LSGs.
- ▶ The state Government approved the model Plastic waste management bylaw on 04.01.2021 vide GO(Rt) No. 18/2021/LSGD
- ▶ Directions were issued to all LSGIs to prepare and publish Plastic Waste management Bylaw for each LSGIs based on the same in order to comply the Plastic Waste Management Rules, 2016. 48 ULBs and 586 GPs have approved their byelaws (60% of LSGs). The rest are in the process of publishing the same

Other initiatives...

Poultry Waste Management

- Policy framework for managing the Poultry waste has been issued vide GO(Ms.) No. 227/2021/LSGD dated 07.10.2021.
- A District Level Facilitation and Monitoring Committee (DLFMC) has been constituted to regulate the approval of proposed/existing rendering plants.
- Rendering plant of capacity of about 40 TPD for treating the Poultry waste in Kozhikode Corporation is in operation.
- 6 units in Palakkad, 3 units in Kasargode, 2 units in Ernakulam & Kollam each, 1 unit in Pathanamthitta, Thrissur, Kozhikode, Wayanad each 14 units in Malappuram and 2 units in Kannur are working.
- 5 large rendering plants and 30 small rendering plants(80TPD) are in the State.
- The large rendering plants are in Kozhikode, Ernakulam, Kannur, Palakkad and Thrissur.

Other initiatives...

Inter-state movement of waste-Tracking of vehicles

- ▶ Local Self Governments (LSGs) are engaging Clean Kerala Company Limited (CKCL) and private agencies for the collection and movement of waste to recycling/disposal facilities from collection centres/dumpsites.
- ▶ The Hon'ble NGT in OA No.100/2021 'Dumping of Garbage foiled near Annamalai, trucks seized', directed on 29-7-2021 to create a mechanism for registering the vehicles
- ▶ LSGD issued **Govt. Order G.O.(Rt.)No.1673/2021/LSGD dated 06/09/2021** regarding guidelines for registering vehicles transporting waste.
- ▶ Monitoring and implementation guidelines for registering and tracking vehicles for transporting waste and institutional mechanism to identify and take action against defaulters was issued vide **G.O. (Rt) No. 2485/2021/LSGD dated 6/12/2021**. Both State and district level committees are active with the coordination of transport and police departments.

Other initiatives...

- **Domestic hazardous and sanitary waste management**

- Guidelines have been approved by the state of Kerala for safe disposal of Household biomedical and sanitary waste through CBMWTF set up by KEIL at ambalamedu Kochi vide G.O (Rt) No. 1227/2022/LSGD dated 16.05.2022
- Accordingly local bodies have initiated engaging dedicated agencies for collection of waste from sources and handing over it for disposal

- **C&D Waste Management**

- Draft Guidelines have been prepared based on the C&D waste management rules for handling and safe disposal of C&D waste, which is under the consideration of the Government.
- C&D waste treatment plant of capacity 20 TPD is being set up at Ernakulam as PPP project

GRADING OF LOCAL BODIES

Based on the recommendations of the National Green Tribunal(NGT), the government is grading all local self-government bodies on the basis of public hygiene and performance to put them in a better position in solid waste management. Better performing LSGs have been incentivised with awards and recognition, and information on poorer performing panchayats put in the public domain.

Basic assessment factors

- The grading evaluation will be done on the functional components
- More emphasis has been placed on the assessment components and essential components to be ensured for clean waste management.
- The second emphasis is placed on the supporting factors for the implementation of essential components.
- Thirdly, the emphasis is placed on the sub-components to activate the above two components

Evaluation Method

The assessment will be done based on factors such as the extent of operation, the quantity of waste collected, the operational quality, the quality of the physical infrastructure for waste management, the management method and system.

TIMELINE

Component	Target	Timeline
SWM Plan	93 ULBs	2023
Door-to-door waste collection of non-biodegradable waste	93 ULBs	Complied
Door-to-door waste collection of biodegradable waste (Overflow in excess of source level treatment)	93 ULBs	2024
Waste processing/recycling		
Decentralized Biodegradable waste management facilities	93 ULBs	2024
Non-biodegradable waste management facilities (MCFs/RRFs)	93 ULBs	2024
Setting up of centralized recycling facility	1 No	2025
Waste to Energy Plants	2/8 Nos	2024
	1/8 Nos	2025
	3/8 Nos	2026
Legacy waste management	32 Nos	2024
Sanitary landfills	2/5 Nos	2024
	3/5 Nos	2026

LIQUID WASTE MANAGEMENT



LIQUID WASTE MANAGEMENT

CONTENTS

- ▷ STATUS OF LIQUID WASTE MANAGEMENT IN KERALA
- ▷ STATUS OF PROJECTS FROM 2018 ONWARDS
- ▷ PROGRESSING WORKS
- ▷ CONNECTING ISSUES
- ▷ APPROACH TO REDUCE GAP AND ACHIEVE 100%
WASTEWATER MANAGEMENT
- ▷ STRATEGY FOR LWM
- ▷ TIMEFRAME

	Subject	Quantity in MLD	
1.	Total domestic wastewater in urban area(sewage+sullage)	1058 MLD	Sewage-317MLD; Sullage-741 MLD
2.	Total domestic wastewater in rural area(sewage+sullage)	2917 MLD	Sewage-875MLD; Sullage-2042 MLD
3.	Total sewage generation	1192 MLD	Urban – 317 MLD, Rural- 875MLD
4.	Total sewage treatment capacity in the State through existing common STPs (MLD)	129.476	Capacity utilization-77.886 MLD (60%)
5.	Total septage treatment capacity in the State through existing common FSTPs (MLD)	0.21	Three common FSTPs
6.	Sewage treatment capacity via individual STPs in establishments (MLD)	69	STPs in 1000 high rise buildings/commercial establishments in large and medium scale
7.	Treatment of sewage in septic tank/soakpit (MLD)	935.4	
8.	Gap in sewage treatment(MLD)	51.3	

STATUS OF PROJECTS FROM 2018 ONWARDS

	Subject	Number	Capacity
1.	STPs completed and functioning	6	8.076MLD
2.	Under Construction	13	STP-11 nos of 21.48 MLD; FSTP-1 no of 0.1 MLD, ETP-1 no of 0.01 MLD
3.	STPs under work to awarded/ tendered/DPR/Administrative sanction	59	67.013 MLD
4.	FSTPs under preparation	6	0.7 MLD
5.	Proposed Mobile Septage Treatment plants	2	0.02 MLD
6.	ETPs under preparation	7	0.153 mLD

COMPLETED AND FUNCTIONING STPS AFTER 2018

1. STP of capacity 5 MLD at Medical College, Thiruvananthapuram
2. STP of capacity 3 MLD at Chakkamkandam, Thrissur
3. Septage treatment facility in Common sewage treatment plant at Thiruvananthapuram
4. Renovation of sewer pipelines in Trivandrum city - providing additional 15 MLD to the sewage treatment plant at Muttathara
5. 3 institutional STPs (Malappuram, Adimali, Kalamssery) and 1 ETP at Kumily

PROGRESSING WORKS (to be completed soon)

1. Elamkulam : 92 % of the work has been completed for the STP at Elamkulam, Ernakulam and trial run & remaining works are progressing on war foot.
2. Kureepuzha: 62% of the works of Kureepuzha 12 MLD STP has been completed. The expected date of completion is rescheduled as 31/07/2022
3. Guruvayur: Administrative sanction obtained for providing septage treatment facility as co treatment in the existing STP

UNDER-CONSTRUCTION AND PROPOSED STP/ETP/FSTP

DETAILS	STP	FSTP	ETP	TOTAL
Under Construction	11 Nos, Capacity - 21.48 MLD	1 No, Capacity- 100 KLD	1 No	13 Nos
Work started but stalled (protest/land issue)	1 No	2 Nos	NIL	3 Nos
Awarded	3 Nos, Capacity – 19.5 MLD	NIL	NIL	3 Nos.
Agreement executed	1No	NIL	NIL	1 No
Selection notice issued	3Nos, Capacity – 3.6 MLD	1 No, Capacity-100 KLD	NIL	4 Nos
Tendering Stage	19 Nos, Capacity - 38.09 MLD	4 Nos, Capacity- 420 KLD		
DPR stage	39 Nos, Capacity- 32.0815 MLD	Nil	7 Nos, Capacity-153 KLD	46 Nos
Total	77 Nos, Capacity – 116.1234 MLD	8 nos, Capacity – 800 KLD	8 nos, capacity -163 KLD	93 Nos.

Connecting issues

- ▶ Utilisation of full capacity
- ▶ Availability and suitability of land
- ▶ Technical capability of LSGs
- ▶ Inadequate number of technical service providers

Addressing Connecting Issues (STPs -Utilisation of full capacity and reuse of treated water)

- ▶ **Trivandrum 107 MLD** - At present only 60MLD out of the 107 mld STP is used. Completion of ongoing works will enhance the utilization by 20%. Full utilization of this plant can be achieved only by expanding the sewer network for which DPR is under preparation. Road cutting sanction, land availability for pumping stations and collection wells and public protest are the major issues that are being addressed. Planning to use treated water for construction activities and for non-drinking purpose.
- ▶ **Kochi 4.5 MLD** - At present, utilisation is only 3.25 MLD. As this plant is very old, the newly constructed 5MLD STP constructed under AMRUT can be utilised For the full utilization of this plant 1.75 MLD Sewerage Network has been designed and AS is under consideration.

Addressing Connecting Issues (Technical service providers)

- ▶ **Lack of Technical Know-how** - a two-day workshop on "Strategies for Waste Water Management and Sanitation," was conducted. Subsequent trainings for field level people are on-going. Matrix of technology options to suit unique and location specific characteristics of the state (high water table, High population density,Hilly terrain etc.)evolved as part of the national level workshop.
- ▶ **Empanelment of agencies** for execution of DBOT model of execution of STP and FSTP projects based on the above technology options is under progress.

Addressing Connecting Issues (Capability of LSGs)

- ▶ **Lack of public awareness regarding necessity of LWM projects** – A massive campaign named “Thelineer Ozhukum Navakeralam” was undertaken. Around 60,000 water samples were tested as part of the campaign using field test kits. Projects mitigating pollution of water bodies identified during the campaign have been given top priority LSGs with high water body contamination identified as part of the “Thelineer Ozhukum Navakeralam” campaign - cluster based FSTPs to be planned on this basis
- ▶ Project Clinics organised for taking up projects for mitigating pollution from sources identified as part of the “Thelineer Ozhukum Navakeralam” campaign.
- ▶ **Annual Plan of Local governments**: the annual plan guidelines for preparation of projects of local governments emphasises solid and liquid waste management projects. These will be ensured by the District Planning Committees.

Institutional Capacity - A separate vertical for the design of LWM projects has been constituted in Kerala Water Authority (the parastatal implementing agency)

- ▶ Capacity enhancement of District Suchitwa Mission for providing better technical assistance to the LSGIs is underway.
- ▶ Process of inducting young professionals and interns for helping LSGIs is going on. This will create a pool of young technocrats to assist LSGIs in various LWM projects
- ▶ Partnership with UNICEF for both technical and IEC activities and coordination with WASH Institute and NIUA for capacity building and training

Approach to reduce gap and achieve 100% Wastewater Management

For Urban

- Providing sewer network and sewage treatment plants catering to core sanitation area where the majority of population resides. There will be at least one common STP in every city/town with co-treatment facility for treating septage.
- For fringe area, where population density is less than 1500 people/ sq.km, strengthening of onsite sanitation system will be done.
- For the intermediate areas, decentralized wastewater treatment plants and interception of drains and diversion of drains shall be done

For Rural

- As laying of sewer networks will not be economical in rural areas, strengthening of onsite sanitation systems and facilities for faecal sludge treatment and grey water treatment will be facilitated in rural areas

Timeframe for 100% Compliance – Urban

Area	Actions planned	Numbers	Timeline	Rough Cost Estimate
Urban	STPs with Co-treatment	One in each municipality	2025	1000 Crores
	Interception & Diversion of Drains	Around 300 MLD	2025	150 Crores

Timeframe for 100% Compliance – Rural

Area	Actions planned	Number Estimated	Timeline	Rough Cost Estimate
Rural	Standalone FSTPs	28 (2 in each District)	2025	80 Crores
	Grey Water management	For covering 700 villages	2025	600 Crores
Urban and Rural	Rejuvenation of Water Bodies	100	2025	200 Crores

Thank You