

BEFORE THE NATIONAL GREEN TRIBUNAL, EASTERN
ZONE BENCH, KOLKATA.

Original Application No. 116 of 2022

In the matter of:

Ramakant Rout & Ors. ... Applicant

-Versus-

State of Odisha and others ... Respondents

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Date: 12.01.2023

BY THE RESPONDENT NO. 2 THROUGH

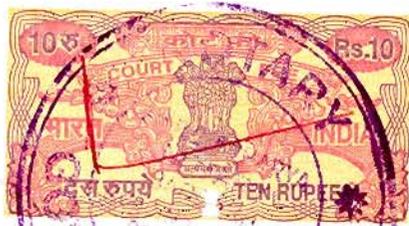

ADVOCATE

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**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
EASTERN ZONE BENCH, KOLKATA**

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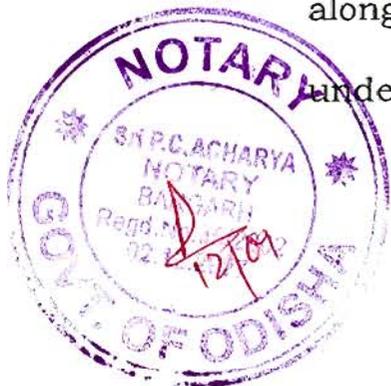
COUNTER AFFIDAVIT ON BEHALF OF RESPONDENT

NOS. 1, 2 & 7

I, Smt Monisha Banerjee aged about 39 years, W/o. Dr. Suryapratap Singh, at present working as Collector Bargarh, Odisha, do hereby solemnly affirm and state as follows:-

1. That, I am the Collector Bargarh I have been duly authorized by the Respondent Nos. 1, 2 & 7 to swear this affidavit on their behalf.

2. That, I have gone through the Original Application along with the Annexures appended thereto and understood the content thereof. I am well acquainted with

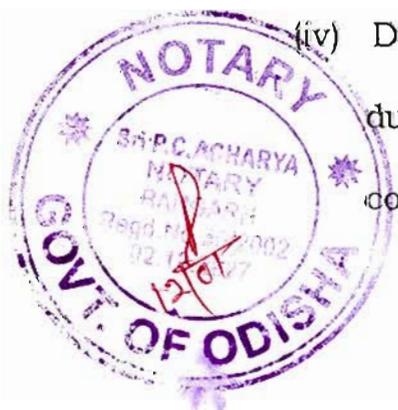


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the facts of the case and thus competent to swear this affidavit in my official capacity.

3. That, the present Original Application has been filed by the Applicant being allegedly aggrieved by the open dumping of municipal waste at the dumpsite in Ward No.15 of Bargarh Municipality with the following prayers:

- (i) To constitute a Committee to look into the issue of air and water pollution caused due to the open dumping by Bargarh Municipality and thereafter computing the environment compensation;
- (ii) Direct the Chief Secretary to fix the accountability of erring Officers for violation of order of Hon'ble NGT and SWM Rules, 2016 in terms of adverse entry in ACR;
- (iii) Direct the SPCB, Odisha to initiate criminal proceedings against the Executive Officer of Bargarh Municipality under Section 15 of EP Act, 1986; and
- (iv) Direct the District Collector, Bargarh to shift the dumpsite in a stipulated time and after bio-mining convert the present site to a park.



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4. That, all averments, contentions and/or statement contained in the Original Application filed by the Applicant, which may not have been specifically denied or traversed by the petitioner herein but are in essence, contrary to the substance of this Counter Affidavit, should not be deemed to be admitted by reason of mere non-traverse, but should be treated as expressly denied and the Applicant should be put to strict proof in respect thereof. The Opp. Parties further crave leave of this Hon'ble Court to file further Affidavit / Counter, if the same is deemed necessary.

5. That at the outset, it is stated that this Hon'ble Tribunal vide its order dated 02.09.2022, had directed for constitution of a committee comprising of the Collector, Bargarh, Scientist Odisha Pollution Control Board, Scientist, Central Pollution Control Board and Executive Officer, Bargarh Municipality for inspection of the dumpsite and submission of a report providing the information as mentioned in the said order. In compliance to such order, a report dated 13.09.2022 has been prepared pursuant to such inspection carried out on 13.09.2022. It is stated that

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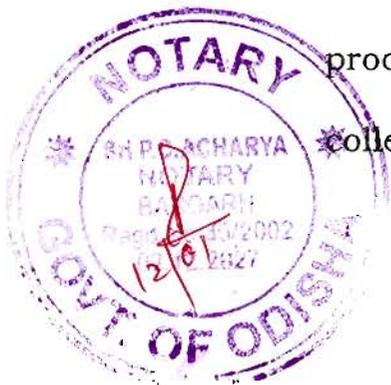


the said report dated 13.09.2022 has only been signed by the Collector, Bargarh and the Executive Officer, Bargarh Municipality. Copy of the report dated 13.09.2022 is annexed herewith as **ANNEXURE-1**.

6. That, in response to Paragraph No.1 of the Original Application, it is humbly submitted that, in consonance with the directions issued by the Hon'ble National Green Tribunal, Principal Bench in O.A. No.606/2018, the Housing & Urban Development ('HUD') Department, Government of Odisha has adopted the "decentralized processing" for solid waste management as envisaged under clause (15) of sub-rule (1) of Rule 3 of the Solid Waste Management Rules, 2016.

Statement of Purpose (SOP) has been issued by the HUD Department vide Letter No. 13408 dated 30.07.2019 and Letter No. 19700 dated 18.12.2020 in pursuance of which Micro Composting Centers ['MCC'] and Material Recovery Facilities ['MRF'] have been established for processing of the wet and dry wastes respectively which are collected from the household level and the same is duly

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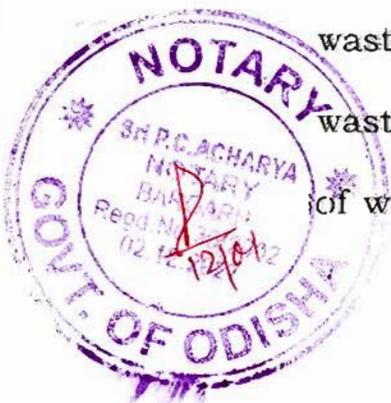


processed. Further it is stated that the Legacy Waste site has been surrounded by boundary wall and steps have been taken has been initiated for taking up Bio-mining of the Legacy Waste.

In so far as the averment of the Applicant that the dump site is in close proximity of habitation, it is humbly submitted that the dump site had started to occur from 2017 onwards when there was no habitation in and around the dump site.

7. That, in reply to the averments made in Paragraph No.2 of the Original Application, it is humbly submitted that as a part of the drive to operationalize solid waste management norms, a sample survey was conducted to assess the quantity of waste generated by the Urban Local Body. The household waste was segregated and weighed through weighing machines at the doorsteps of the household. Ten days' data from the households from each ward was taken to estimate quantum of average per-capita waste generation. The survey found that the Wet and Dry waste generation was about 300gm per capita per day, out of which about 50% was Wet Waste and about 50% was

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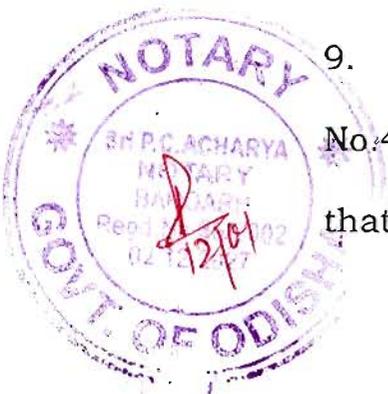
Dry Waste. The Bargarh Municipal Council, Respondent No.3 has passed a resolution for carrying out bio-mining of the Legacy Waste which will be completed in a time bound manner.

The municipal solid waste to the tune of about 35 MT is being collected from households per day which are processed in the Micro Composting Centers [**MCC**] and Material Recovery Facilities [**MRF**].

8. That, in reply to the averments made in Paragraph No.3 of the Original Application, it is humbly submitted that, in a paradigm shift, consequent upon adoption of the “decentralized processing”, the waste collected from households to the tune of about 35 MT per day are being processed in the Micro Composting Centre’s [MCC] and the Material Recovery Facilities [MRF] with the help of the Community Partners, viz. the women members of the Mission Shakti Self Help Groups named as Swachh Karmis.

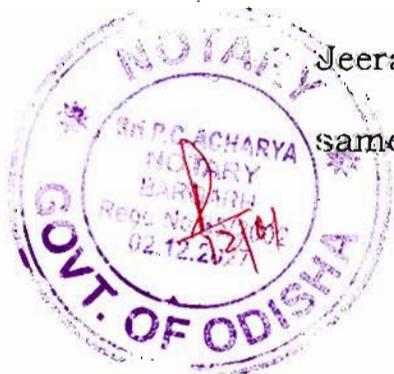
9. That, in reply to the averments made in Paragraph No.4 of the Original Application, it is humbly submitted that, till February, 2019, the river Jeera was serving as a

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drinking water source for Bargarh town, but after commissioning of Water Treatment Plant of 15 MLD at Kantapalli, Bargarh, the water supply is being made from the aforesaid Plant with Bargarh Main Canal since February, 2019. Bargarh town has on-site sanitation system (septic tanks and pits) in the households.

The Bargarh Municipality is enforcing faecal sludge and septage regulations, 2018. Desludging of septic tanks are being carried out through cesspool emptier vehicles deployed by Private as well as by Government to prevent illegal discharge of faecal sludge into water bodies. A 30 KLD capacity Faecal Sludge Treatment Plant has been made operational for treatment of faecal sludge from on-site systems in Bargarh Municipality since June 2022. The Faecal Sludge Treatment Plant (FSTP) is being operated by a Mission Shakti Self-Help Group. The Deponent also disputes and denies the averment of the Applicant that untreated municipal waste water is being mixed in the Jeera river and the Applicant is put to strict proof of the same.



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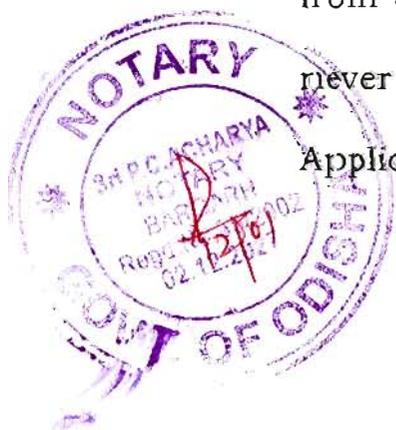
10. That, in reply to the averments made in Paragraph No.5 of the Original Application, it is humbly submitted that none of the public buildings as averred by the Applicant in the said paragraph is near the dump site and those are around 1 km away from the dump site.

11. That, in reply to the averments made in Paragraph No.6 of the Original Application, it is humbly submitted that, steps have been taken by Bargarh Municipality to prevent burning of any waste by imposing a ban on the same. It is stated that the district administration has not burned any plastics or garbage.

12. That, in reply to the averments made in Paragraph No.7 of the Original Application, it is humbly submitted that, no bio-medical waste are being collected by Bargarh Municipality, the faecal sludge on being collected by the Cesspool emptier vehicles are processed in the Faecal Sludge Treatment Plant. No further dumping has been done from September, 2022 onwards and Bio medical waste has never been dumped in the dump site as alleged by the Applicant. The averment of the Applicant that the people

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have suffered diseases due to the dump site is disputed and denied.

13. That, in reply to the Paragraph No.8 to 10 of the Original Application, it is humbly submitted that the after the dump site is cleared by Bio-mining, the vacant land will be used for public use. The dumping at the dump site is completely prohibited now. The legacy waste will be treated by the Municipality in a time bound manner by adopting the procedure of bio-mining.

14. That the averments in Paragraph Nos. 11 & 12 are a matter of record and the same needs no reply.

15. That in reply to the averments made in Paragraph Nos. 13 to 15, it is humbly submitted that no burning of plastic waste is being done as alleged by the Applicant.

16. That the averments made in Paragraph 16 of the Application relates to statutory provisions and the same needs no reply.

17. That, in reply to the averments made in Paragraph Nos.17 to 26 of the Original Application it is humbly



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submitted that, the State Government have taken several steps covering various aspects of solid waste management aligned with provisions of Solid Waste Management Rules, 2016, Plastic Waste Management Rules, 2016, E-Waste Management Rules, 2016 and other relevant regulations. and orders such as segregation at source, collection, transportation, treatment, and scientific disposal of waste. Various measures taken so far are enumerated as follows:

- (i) In order to meet challenges arising out of the dynamic nature of urban growth, the Union Ministry of Environment, Forests and Climate Change (MoEF & CC) notified the Solid Waste Management (SWM) Rules, 2016 in supersession of the Municipal Solid Waste (Management and Handling) Rules, 2000. The State Government in Housing & Urban Development (H&UD) Department has notified "Odisha Urban Sanitation Policy, 2017" on 30.12.2016 and "Odisha Urban Sanitation Strategy, 2017" on 30.12.2016 for implementation of different sanitation services at ULB level including Solid Waste Management.



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Copies of the Odisha Urban Sanitation Policy, 2017 and Odisha Urban Sanitation Strategy, 2017 are annexed herewith as **Annexure-2** and **Annexure-3** respectively.

(ii) The “Odisha Urban Sanitation Policy, 2017” defines a clear vision and goal to make all cities and towns in the State totally clean, sanitised, safe, healthy and liveable, managed by ULBs with active citizen and stakeholder participation. The policy is based on the following principles:

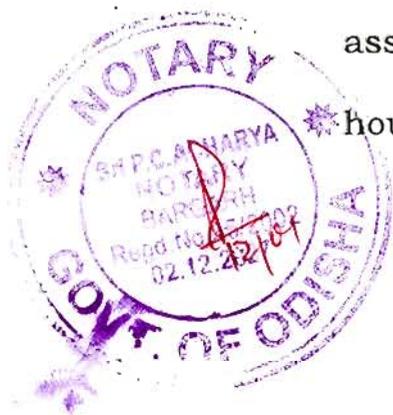
- (a) Sanitation will be treated as a basic service;
- (b) Equity and safety of access and use shall be ensured, particularly to the vulnerable and unserved populations;
- (c) Efforts shall be undertaken to increase the awareness of the collective goal of sanitised cities;
- (d) Institutional roles and responsibilities will be defined and capacity will be developed;
- (e) There shall be emphasis on operations and maintenance of sanitation infrastructure;

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- (f) Integration of broader environmental concerns in the provisions of urban sanitation service delivery.
- (iii) Over the next 10 years, the policy will concentrate on achieving the following outcomes;
- (a) Urban areas are Open-Defecation (ODF) and Open-Discharge Free (ODF).
 - (b) Solid waste is safely managed and treated.
 - (c) Sewage, septage / faecal sludge, and liquid waste is safely managed, treated, and disposed.
 - (d) Safety standards and guidelines are followed in the physical handling and management of waste.
 - (e) Women and girls have access to safe menstrual hygiene management.
 - (f) Cities / towns do not discharge untreated waste (water and faecal waste) into the water bodies of Odisha.
- (iv) As part of the drive to operationalize solid waste management norms, a sample survey was conducted to assess the quantity of waste generated by the ULBs. The household waste was segregated and weighed through

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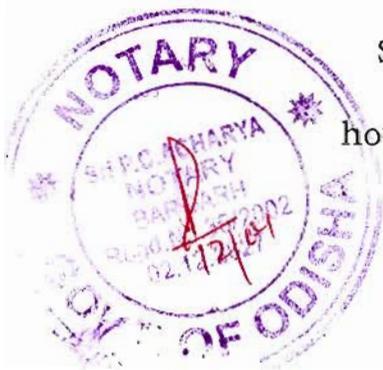


weighing machines at the doorsteps of the household. Ten days' data from the households from each ward was taken to estimate average per-capita waste generation. The survey found that the Wet and Dry waste generation was about 300gm per capita per day, out of which about 50% was Wet Waste and 50% was Dry Waste.

Subsequently a detailed SOP for Decentralised Solid Waste Management was issued by the Department in Letter No. 13408 Dated 30.07.2019 and in No. 19700 Dated 18.12.2020 in pursuance of which lands were identified by the ULBs and Micro Composting Centres [MCC] and Material Recovery Facilities [MRF] have been established for processing of the wet and dry wastes respectively which are collected from the household level. 247 MCCs and 203 MRFs have been established in the State for the management of Municipal Solid Waste.

Segregated Dry and Wet Waste is collected at household level every day. Domestic Hazardous Waste

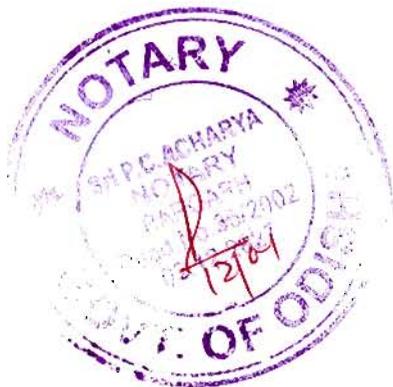
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and E-Wastes are being collected from household level on every Saturday. The following steps have been taken to ensure that the waste disposal is done in terms of the prevailing guidelines;

- (a) As per SOP for Decentralized Solid Waste Management, segregation at doorsteps is being promoted through Community Partnership by Swachh Saathis & Swachh Supervisors, who are the members of the Mission Shakti Groups so as to facilitate collection and transportation of waste in segregated manner to the processing facilities, i.e., to Micro Composting Centre (MCC) for (wet waste processing) & Material Recovery Facility (MRF) for (dry waste processing).

Further to enhance the smooth functioning of MCCs and MRFs, Swachh Karmis (belonging to SHGs/ Waste Pickers/Transgenders) have been associated with the Wealth Centres (MCC & MRF together is called as "Wealth Centre" as they generate wealth from waste).

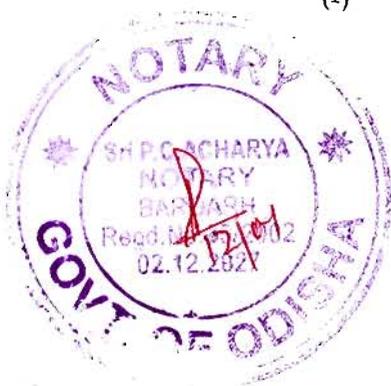


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- (b) Segregated waste collection is done through Battery Operated Vehicle /Light Commercial Vehicles having two different covered containers.
- (c) Swachh Saathis and Swachh Supervisors have been assigned to create awareness and streamline collection of source segregated waste at household level.
- (d) The Directorate of Town Planning has been directed to ensure inclusion of space earmarked for SWM in the CDPs and Master Plans of the ULBs.
- (e) The MRFs established in each ULB fulfill the objectives of Waste Deposition Centres where, these wastes are stored and disposed of through the Agencies authorised by the State Pollution Control Board, Odisha.
- (f) Training to all the Stakeholders has been conducted to ensure job responsibilities and the

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knowledge to manage the solid waste appropriately through Community Partnership.

- (g) Suitable places have been identified for depositing Construction and Demolition Wastes.
- (h) The Urban Local Bodies (ULBs) are submitting within the dateline, the Annual Reports in Form IV as envisaged under Rule 15 (za) read with 24(2) of the Solid Waste Management Rules, 2016 to the State Pollution Control Board, Odisha. Similarly, ULBs are also submitting within the timeline, the Annual Reports in Form V as envisaged under Rule 17(2) of the Plastic Waste Management Rules, 2016 to the State Pollution Control Board, Odisha. ULBs are also submitting within the dateline, the Annual Reports in Form III as envisaged under Rule 8(2) of the Construction and Demolition Waste Management Rules, 2016 to the State Pollution Control Board, Odisha.

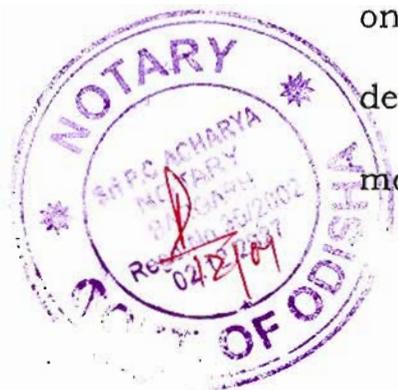
The ULBs are not under obligation to collect and process the bio-medical wastes as these are



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governed under the Bio-Medical Waste Management Rules, 2016 wherein the competent agencies as authorised by the State Pollution Control Board, Odisha need to comply with the same.

- (i) For screening of solid waste, bar screens have been installed at different critical points in the storm water drains. Bar screens are cleaned periodically keeping in view of heavy water flow due to rain.
- (j) Activities like awareness on ban of Single Use Plastic, Principle of 3R; “Reduce, Recycle and Reuse” etc. Wall Paintings, Hoardings, are being taken up by Swachh Sathis for sensitizing people on behavioral changes to minimize waste. At all ULBs, the Solid Waste Management related data/information are being recorded / maintained by the Sanitation Experts both manually & digitally. For online data/information the software has also been developed at State level viz. Ama Sahar (‘My City’) mobile application as well as Swachh Sahar (‘Clean



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City') Odisha web portal. Similar campaigns have also been carried out in Bargarh Municipality.

- (h) It is also stated that Standard Operating Procedure has also been prepared by the Housing & Urban Development Department on 30.07.2019 which delineates the modalities as to how the Solid Waste Management Rules, 2017 is to be implemented in the State of Odisha.

Copy of the Standard Operating Procedure prepared by the Housing & Urban Development Department on 30.07.2019 is annexed herewith as **Annexure-4.**

18. That, in reply to the averments made in Paragraph No.27 of the Original Application, the deponent humbly submits that State Government have taken several steps to improve solid waste management pursuant to the directions issued by Hon'ble NGT as submitted supra.

The biodegradable wastes are converted to organic manure in MCCs named as "Mo Khata" and being sold @ Rs. 20 per kgs that will replace gradually the use of

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chemical fertilizers. Further, following steps have been taken by the District Administration to enhance the sanitization condition of the urban localities;

- i. Complete restriction has been imposed on sale, trade, manufacture, import, store, carry, transport, use or distribution of polythene carry bags of any shape, thickness and size (excluding compostable); bottled drinking water Polyethylene Terephthalate (PET/PETE) bottles of less than 200ml capacity; single use disposable cutleries made up of thermocol (polystyrene), polyurethane and the like; or plastic such as dish, spoon, cup, plate, glass, fork, bowl, pouch to store liquid and container etc. of any size and shape excepting for packing and selling of milk and other ancillary milk products and thermocol decorative materials.
- ii. Enforcement Squad has been constituted in the municipality consisting of members such as Junior Engineer, MIS Expert, Junior Clerk, Municipal



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Engineer, Community Organiser, Sanitation Supervisor.

- iii. The policy relating to ban on the use of plastic articles has been enforced which has led to seizure and collection of fines. The details relating to such enforcement of the ban leading to seizure of plastic materials and collection of fines in the Bargarh Municipality are mentioned herein below:-

Period	Seized Quantity (in MT)	Fine Collected (Rs. In Lakh)
From June-2019 to March 2020	75	22600
From April-2020 to March 2021	157	26800
From April-2021 to March 2022	213	75700
From April-2022 to September 2022	330	108700
Total	0.60	233800

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- iv. The roles and responsibilities of different stakeholders such as, households, ULBs, Bulk Waste Generators, collection of user fee and fine, etc. have been prescribed in the Solid Waste Management Bye-laws notified by Bargarh Municipality.
- v. All ULBs practice separate collection and transportation of Construction and Demolition (C&D) waste. Suitable sites have been designated by all ULBs for deposition of C&D waste and the same has been web hosted for wider publicity.
- vi. All ULBs are taking up road sweeping in all wards. The crowded places of high footfall like market areas are being swept at least twice a day. Night sweeping is also being encouraged in many ULBs.
- vii. All 114 ULBs in the State including Bargarh Municipality have been declared (ODF+) as Open Defecation Free and certified by Govt. of India.
- viii. 2785 no's of Individual Household Latrines (IHHL) and 150 no's of Community & 43 no's of Public Toilet

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(CT/PTs) seats in 29 blocks have so far been constructed in Bargarh Municipality.

- ix. Incentive of Rs.8,000/- has been provided to families of socially and economically vulnerable category and Rs. 6,667/- for other families for construction of Individual Household Latrine (IHHL). In Bargarh Municipality, 2785 no's of IHHL have been constructed under such scheme.
- x. Community Toilets are provided to those households who cannot afford the construction of IHHL due to various reasons, such as non-availability of adequate space, financial problem etc.
- xi. Faecal Sludge and Septage Management (FSSM) has been scaled up across the State after the announcement made by Hon'ble Chief Minister during the National FSSM Workshop in October, 2018 and is now being implemented in all the 115 ULBs of the State. In Bargarh Municipality, Faecal Sludge and Septage Management has been implemented through

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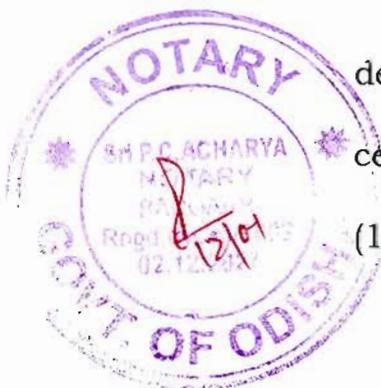


Women Self Help Group naming(Sukanya SHG, Ward No-11) has playing the same role .

xii.

At present, 108 Septage Treatment Plants (SeTPs) are operational across the State. The operational SeTPs cater to a treatment capacity of 1867 KLD. An additional 11 SeTPs are under construction which shall be made operational by March 2023. The state has paved the way to have 119 SeTPs with a total capacity of 2057 KLD as against an estimated septage generation of 1425 KLD. The surplus 632 KLD will be used to treat the waste from semi-urban and rural areas. **In Bargarh Municipality,** *there is* 30 KLD Capacity FSeTP plant constructed and *is* functional at Tentela near Bardol, Bargarh. For maintaining this plant one WSHG is engaged naming-Sukanya **SELF** Help Group

All ULBs have now access to mechanized desludging through cesspool vehicles. A total of 192 cesspool vehicles of varying capacities (1000/3000/4500/5000 litres) are now operational

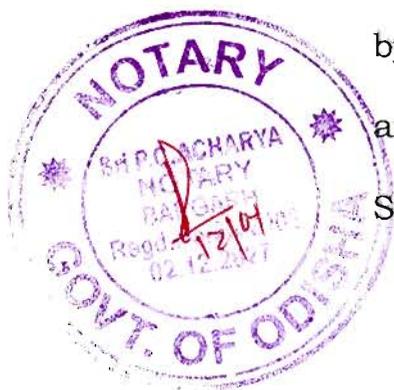


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across the State out of which 66 are Mini cesspool vehicles of 1000 litres capacity which has increased access to houses located in narrow lanes.. Cesspool vehicles are installed with GPS monitoring systems to ensure a check on the indiscriminate disposal. **In Bargarh Municipality 2 nos of Cesspool emptier Vehicle with a capacity of 3000 liters each for** desludging the septic tanks Cesspool vehicles are installed with GPS monitoring systems to ensure a check on the indiscriminate disposal. As well as for receiving of call from citizens for desludging a helpline number(14420) is operated and maintained by Munjicpality.

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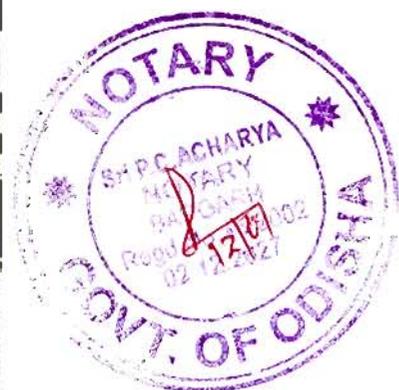
- xiii. Odisha has taken a big leap recently by transferring the Operation and Maintenance of the Septage Treatment Plants (SeTPs) to Mission Shakti Groups / Transgender Groups for ensuring inclusive sanitation by empowering Communities. Additionally, training and selection has been conducted for the Mission Shakti Groups of the 65 newly operational SeTPs for



Operation and Maintenance have been created. The members of Mission Shakti Groups / transgender Groups will not only have a regular source of income but also emerge as successful leaders and service providers in their communities. The trainings have been conducted both virtually and on-site. In Bargarh Municipality have 30 KLD Capacity FSeTP plant constructed and in functional at Tentela near Bardol, Bargarh. For maintaining this plant one WSHG is engaged naming- Sukanya Slef Help Group.

- xiv. To ensure extension of Faecal Sludge and Septage Management services to the rural areas and facilitate rural urban integration, activities have been undertaken under Rural-Urban convergence. The mechanism involving mapping of the Gram Panchayats with nearest ULBs for FSSM purposes has been implemented. In this connection Bargarh Municipality tagged with 20 nos Grampanchayats within 20 km radius.

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xv. Promoting inclusive sanitation in the state has been taken up as a key activity. Numerous campaigns and engagement with the community management members to identify, track and resolve key issues in the core sanitation tracks of Faecal Sludge and Septage Management and SWM have been taken up. Women Self Help Groups are playing an instrumental role as change agents in the provisioning of FSSM services across the State. Their involvement has seen a multi-faceted approach starting from O&M of the SeTPs, Community Toilets / Public Toilets, demand generation, vigilance on indiscriminate disposal of faecal sludge and IEC / Behaviour Change Communication activities. In Bargarh Municipality, has also engaged the Women Self Hep Group naming(Sukanya SHG,Ward No-11) has playing the same role .

xvi. With the help of a team of drainage experts, a system of bar screen / grating was designed to trap solid waste floating in drains and all ULBs were imparted training on the design, fabrication, fixing of the bar



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screen and operation & maintenance of the system. Accordingly, 1281 bar screens have been installed at critical locations in drains in Bargarh Municipality.

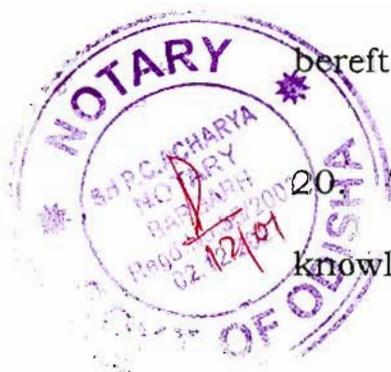
- xvii. In order to inculcate positive behaviour among people for better sanitation, effort has been made by the district administration to focus more on behavioral change communication intervention through sensitization, community dialogue, focus group discussions etc. Swachh Sathis have been engaged ward wise to facilitate positive behaviour. Massive Awareness drive have been organised too to generate awareness among people.

19. That, in view of the aforesaid facts and circumstances, the prayers made in the Original Application are devoid of merit and hence, liable to be rejected. Consequently, the Original Application being bereft of merit is also liable to be dismissed with cost.

20. That, the facts stated above are true to the best of my knowledge and based on official records.

Mousha Banerjee

COLLECTOR
BARGARH



Identified by



Advocate

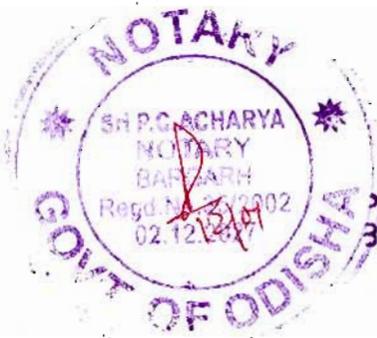
Monisha Banerjee
Smt Monisha Banerjee
DEPONENT

VERIFICATION

I, Smt Monisha Banerjee aged about 39 years, W/o. Dr. Suryapratap Singh , at present working as Collector Bargarh, Odisha, do hereby solemnly affirm and verify the contents of paragraph nos. 1 to 9 affidavit are true to my knowledge and that I have not suppress any material facts. I sign this verification at my office on 9th day of January 2023.

Monisha Banerjee

VERIFICANT



the deponent being identified by
the Advocate
Bargarh, Solmnly affirms before
me on 12.01.23
[Signature]
Sh. P. C. ACHARYA 12.01.23
NOTARY BARGARH

ANNEXURE-1

(11)

JOINT ENQUIRY REPORT OF THE COMMITTEE ON DUMP SITE, AT WARD NO. 15 OF BARGARH MUNICIPALITY IN THE MATTER OF O.A. NO.116/2022/EZ-RAMAKANTA ROUT & OTHERS Vs. STATE OF ODISHA & OTHERS REGARDING DUMP SITE OF BARGARH MUNICIPALITY

[Signature]

S.B.M

The Hon'ble NGT, EZ Bench, Kolkata vide their order dt. 02.09.2022 has been pleased to constitute a committee comprising the members indicated in para-12 of the said order and directed for inspection of the dump site and submit the report within three weeks in the manner as directed in the said order. The Joint Committee comprises of the following members.

- i) District Collector, Bargarh or his representative not below the rank of Additional District Magistrate (ADM)
- ii) Scientist, Odisha State Pollution Control Board
- iii) Scientist, Central Pollution Control Board, Kolkata
- iv) Executive Officer, Bargarh Municipality.

In this connection a meeting was held in the residence office of the Collector & District Magistrate, Bargarh on dt. 12.09.2022 at 6.30 PM and the Committee decided to visit the alleged dump site on 13.09.2022 at 11.00 am. Executive Officer, Bargarh Municipality was requested to submit the details of solid waste generation and its disposal/treatment practice, detail action plan regarding quantification and bio-mining of legacy waste as well as the Plastic Waste Management practice in the municipality area. The Chief District Medical Officer, Bargarh was requested to furnish the detail management practice of Bio- medical Waste generated in the Municipality area of Bargarh.

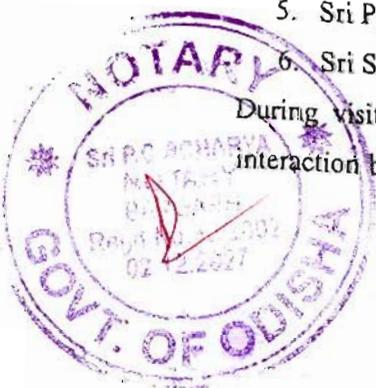
Following officers were present during joint committee visit.

1. Smt Monisha Banarjee, IAS , Collector & District Magistrate, Bargarh
2. Dr.Satya Narayana Nanda, Dy. Environmental Scientist-Cum- Nodal Officer, SPC Borad , Sambalpur
3. Toufic Aslam, Scientist CPCB, Zonal Office, Kolkatta.
4. Sri Narayan Dandsena, ORS, Executive Officer, Bargarh Municipality

Also, the following officials were accompanied the joint committee during their visit.

1. Er. Ramesh Kumar Ekka, Regional Officer, SPCB, Sambalpur.
2. Er. Biswakant Pradhan, DEE, SPC Board, Sambalpur
3. Sri. Manoranjan Pradhan, ASO, SPC Board, Sambalpur
4. Sri Sushanta Pradhan, Sanitation Expert, Bargarh Municipality.
5. Sri ParthaSarathi Sethi, Jr. Sanitation Expert, Bargarh Municipality
6. Sri Souma Ranjan Mallick, SSA, SPC Board, Bhubaneswar.

During visit, Sri. Rama Kanta Raut, applicant and others nearby habitants were contacted for interaction by the committee.



True Copy
Attested
Collector
BARGARH

[Signature]

EXECUTIVE OFFICE
BARGARH MUNICIPALITY

ADM
26/9/22

Following observations were made by the joint committee during enquiry:-

1. It is observed from the records and information submitted by the Bargarh Municipality (Population as per 2011 census is 80,625 and current population is about 101100, waste generation per capita is 350 gm per day) that the Municipal Solid Waste generation is about 35.50 MT per day (wet and dry waste), out of which wet waste of about 15 MT per day waste is being treated in 3 nos. of Micro Compositing Centre (MCC) each having 5 TPD capacity. Dry waste of quantity about 20 TPD is being treated in 3 nos. of Material Recovery Facilities (MRF) each having 10 TPD capacity. Rest of the solid waste of quantity about 0.5 TPD plastic waste is being collected and stored separately at MRF area.
2. It was observed and estimated during visit to the alleged site at ward no: 15 that the Municipality has dumped about 51,476 MT of waste over a span of more than 10-15 years which is spread-over an area of Ac. 1.59 dec. The Municipal Authority has not yet completed remediation of the legacy waste at the alleged site. However, the Municipality Authority has submitted detail estimation of legacy waste (Copy enclosed as Annexure-I). Also the Municipality has initiated the process of remediation which they assured would be completed by a tendered Agency in a time bound manner.
3. It is observed from the records available in the State Pollution Control Board, Sambalpur there are 3 nos. of Govt Health Care Establishments and 10 nos. of Private Health care establishments are operating in the Bargarh Municipality area. Bio-medical waste generated from the Govt. health care facilities are being lifted and transported by M/s. Nischinta Multi Services Pvt. Limited, Bhubaneswar and treatment of the waste is done by M/s. Biotech Solutions at VIMSAR, Burla, Dist.- Sambalpur. Similarly, the Bio- medical waste generated from the private health care establishment are being handled and disposed of by the operator of common waste disposal facility (CBMWTF) M/s. Mediad Marketing Service. The waste is being transported to the common waste disposal facility (CBMWTF) located at Amasranga, Sundargarh. Overall management practice of Bio medical waste generated from the Health Care facilities operating in the Municipality area is observed to be as per the provisions of the rule.
4. The plastic waste generated in the municipality area is being segregated and stored in designated site at MRF area. It is informed by the Municipality authority that they have made an agreement with M/s. ACC Limited, Bargarh Cement works, Bargarh for lifting of plastic waste from the municipality area in order to co-process in the cement kiln. Also, the municipality authority is sending their plastic waste to M/s. Dalmia Cement, Rajgangpur through third party agency namely M/s. GG Wastech Pvt. Limited, B-34/35, Sector- 2,



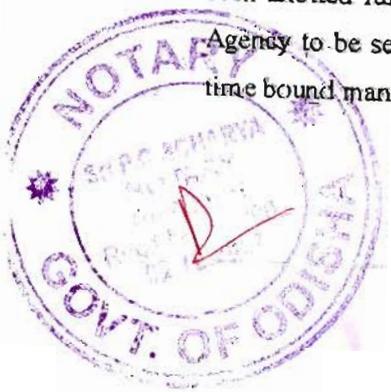
[Signature]
EXECUTIVE OFFICER
BARGARH MUNICIPALITY

Debendra Nagar, Raipur. It is observed from the available records with the municipality that they have sent about 153.53 MT of plastic waste to the said cement plant on 13.07.2022 (copy of the agreement with cement plant and endorsement letter is enclosed for reference as **Annexure-II**).

- 5. During visit water sample was collected by the committee at Upstream of Jeera River of Bargarh Municipality near Bargarh Law College and Downstream of Jeera River of Bargarh Municipality near PHED Pada, with regard to pH, BOD, DO, COD, TC, FC and other parameters. The water samples have been analysed at Central Laboratory, State Pollution Control Board, Odisha, Bhubaneswar and the report thus obtained is enclosed as **Annexure- III** for kind reference.
- 6. The Bargarh Municipality has constructed and started operating a Septage Treatment Plant from January 2022 of capacity 30 KLD, At-Tentela, Bardol G.P, Bargarh for treatment of faecal sludge.
- 7. The Bargarh Municipality has proposed to establish 5 nos. of sewerage treatment plant of capacity (STPs), 125 KLD each at five different locations inside the Municipality area. The detail proposal has been sent to the Department of Housing and Urban Development (CSAP), Govt. of Odisha. Copy of the action plan enclosed as **Annexure- IV**.

Overall observations of the committee:

- 1. The Municipality has obtained authorisation under the provision of Municipal Solid Waste (management and Handling) Rules, 2000 for setting up and operation of waste processing/waste disposal facility at Khata No. 453, Plot No. 1981, Village-Barahaguda, an area of Ac. 18.00 dec. which was valid upto 31.03.2020 vide Board's letter no. 13046,dt. 29.07.2015.
- 2. However, historically waste has been dumped at the alleged site over a period of 10-15 years without valid permission from the State Pollution Control Board, Odisha. However, the dump site has been provided with boundary wall all around the alleged site of height about 15 feet. It was observed during visit that the municipality authority has stopped dumping of waste at the alleged site and engaged one JCB machine for alteration of legacy waste in order to enhance the decomposition rate of the waste through bio- culture process. This will eventually help in remediation of the legacy waste. The Municipality has now been allotted funds and technical support for Bio mining which shall be completed by an Agency to be selected through tender process. The entire exercise shall be completed in a time bound manner as assured by Executive Officer, Bargarh Municipality.



Bojn

[Signature]
EXECUTIVE OFFICER
BARGARH MUNICIPALITY

3. The Executive Officer, Bargarh Municipality has submitted a representation addressed to the Hon'ble NGT through the joint committee constituted by the Hon'ble NGT and prayed for exemption the penalty imposed by Hon'ble NGT of Rs. 1.00 lakh (One lakh) per month which will effect from 1st April 2020. (Copy enclosed as Annexure- V).

Recommendation:

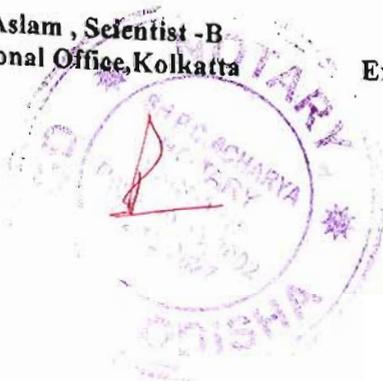
1. The Bargarh Municipality shall submit detail action plan regarding bio- mining of legacy waste. After bio- mining of the legacy waste the authority shall develop Eco- Park at the alleged site for public interest.
2. No further dumping of the solid waste at the alleged site is recommended.
3. The Municipality authority shall conduct mass public awareness campaign in the municipality area for better management and implementation of Solid Waste Management Rules, 2016 and Plastic Waste Management Rules, 2016.
4. The Municipality authority shall expedite the construction of adequate capacities of Sewage Treatment Plants (STPs) for treatment of wastewater generated in the municipality area.
5. It is observed during visit that the Bargarh Municipality has not yet completed remediation of legacy waste and failed to comply the time- line fixed by the Hon'ble NGT. Therefore, Bargarh Municipality is liable to pay environmental compensation of Rs. 30,000,00 (Rupees Thirty lakhs)only@ Rs 1.0Lakh per month with effect from 01.04.2020 to till date (30 months).However,it is to be noted that the Municipality has already established MRF, MCF and Septage treatment facilities which prevent further environmental damage to the area. Considering the fact that the quantity of legacy waste accumulated at the alleged site is huge and the Municipality did not possess the technical & financial resources to remediate it immediately, the Hon'ble NGT, EZ Bench Kolkata is requested to allow time to the Municipality to complete the process in a time bound manner.
6. Now after allotment of resources, Municipality has initiated the process of remediation and Bio mining of the alleged site and has assured that the same shall be completed in a time bound manner. Therefore, the Hon'ble NGT, EZ Bench Kolkata.is requested to kindly consider the request of the Municipality to grant them exemption from paying the compensation amount @ Rs. 1.0 lakh per month with effect from 1st April 2020.

Dr. Satya Narayana Nanda,
Dy. Environmental Scientist-Cum-
Nodal Officer, SPC Borad ,
Sambalpur

13/9/20
Smt. Monisha Banerjee, IAS ,
Collector & District Magistrate, Bargarh

Toufic Aslam , Scientist -B
CPCB, Zonal Office, Kolkatta

13/9/20
Sri Narayan Dandena, ORS,
Executive Officer, Bargarh Municipality
BARGARH MUNICIPALITY



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Attended
13/9/20*
COLLECTOR
BARGARH

JOINT ENQUIRY REPORT OF THE COMMITTEE ON DUMP SITE, AT-WARD NO. 15 OF BARGARH MUNICIPALITY IN THE MATTER OF O.A. NO.116/2022/EZ (RAMAKANTA ROUT & OTHERS Vs. STATE OF ODISHA & OTHERS) REGARDING DUMP SITE OF BARGARH MUNICIPALITY

Background:

In pursuance of the order dtd. 02.09.2022 of the Hon'ble NGT, EZ Bench, Kolkata in the matter of O.A. No.116/2022/EZ-Ramakanta Rout & Others & vs. State of Odisha & Others regarding dump site of Bargarh Municipality., the committee conducted the joint enquiry on 13.09.2022 as per the scheduled date fixed by Dy. Environmental Scientist-Cum- Nodal Officer, Regional Office, State Pollution Control Board, Sambalpur vide his letter No. 3463 dtd. 09.09.2022 and letter No-16276 dated 07 09.2022 of the Member Secretary, State Pollution Control Board, Odisha, Bhubaneswar

Following officers were present during joint committee visit.

1. Smt. Monisha Banarjee, IAS , Collector & District Magistrate, Bargarh
2. Dr. Satya Narayana Nanda, Dy. Environmental Scientist-Cum- Nodal Officer, SPC Board , Sambalpur
3. Toufic Aslam, Scientist-B, CPCB, Zonal Office, Kolkata.
4. Sri Narayan Dandsena, ORS, Executive Officer, Bargarh Municipality

Also, the following officials were accompanied the joint committee during their visit.

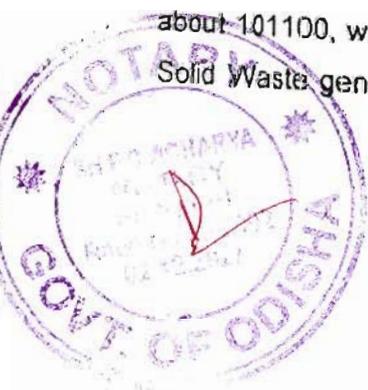
1. Er. Ramesh Kumar Ekka, Regional Officer, SPCB, Sambalpur.
2. Er. Biswakant Pradhan, DEE, SPC Board, Sambalpur
3. Sri. Manoranjan Pradhan, ASO, SPC Board, Sambalpur
4. Sri Sushanta Pradhan, Sanitation Expert, Bargarh Municipality.
5. Sri Partha Sarathi Sethi, Jr. Sanitation Expert, Bargarh Municipality
6. Sri Souma Ranjan Mallick, SSA, SPC Board, Bhubaneswar.

During visit, Sri. Rama Kanta Raut, applicant and others nearby habitants were contacted for interaction by the committee.

OBSERVATION OF THE COMMITTEE.

Following observations were made by the joint committee during enquiry: -

1. It is observed from the records and information submitted by the Bargarh Municipality (Population as per 2011 census is 80,625 and current population is about 101100, waste generation per capita is 350 gm per day) that the Municipal Solid Waste generation is about 35.50 MT per day (wet and dry waste), out of



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**COLLECTOR
BARGARH**

SB

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which wet waste of about 15 MT per day waste is being treated in 3 nos. of Micro Compositing Centre (MCC) each of having 5 TPD capacity. Dry waste of quantity about 20 TPD is being treated in 3 nos. of Material Recovery Facilities (MRF) each of having 10 TPD capacities. Rest of solid waste of quantity about 0.5 TPD plastic waste is being collected and stored separately at MRF area.

2. It was observed and estimated during visit to the alleged site at ward no: 15 that the Municipality has dumped about 51,476 MT of waste over a span of more than 10-15 years which is spread over an area of Ac. 1.59 dec. The Municipal Authority has not yet completed remediation of the legacy waste at the alleged site. However, the Municipality Authority has submitted detail estimation of legacy waste (Copy enclosed as Annexure- I). Also the Municipality has initiated the process of remediation.

3. It is observed from the records available in the State Pollution Control Board, Sambalpur there are 3 nos. of Govt. Health Care Establishments and 10 nos. of Private Health care establishments are operating in the Bargarh Municipality area. Bio-medical waste generated from the Govt. health care facilities are being lifted and transported by M/s. Nischinta Multi Services Pvt. Limited, Bhubaneswar and treatment of the waste is done by M/s. Biotech Solutions at VIMSAR, Burla, Dist.- Sambalpur. Similarly, the Bio- medical waste generated from the private health care establishment are being handled and disposed of by the operator of common waste disposal facility (CBMWTF) M/s. Mediad Marketing Service. The waste is being transported to the common waste disposal facility (CBMWTF) located at Amasranga, Sundargarh. Overall management practice of Bio medical waste generated from the Health Care facilities operating in the Municipality area is observed to be as per the provisions of the rule.

4. The plastic waste generated in the municipality area is being segregated and stored in designated site at MRF area. It is informed by the Municipality authority that they have made an agreement with M/s. ACC Limited, Bargarh Cement works, Bargarh for lifting of plastic waste from the municipality area in order to co-process in the cement kiln. Also, the municipality authority is sending their plastic waste to M/s. Dalmia Cement, Rajgangpur through third party agency namely M/s. GG Wastech Pvt. Limited, B-34/35, Sector- 2, Debendra Nagar, Raipur. It is observed from the available records with the municipality that they have sent



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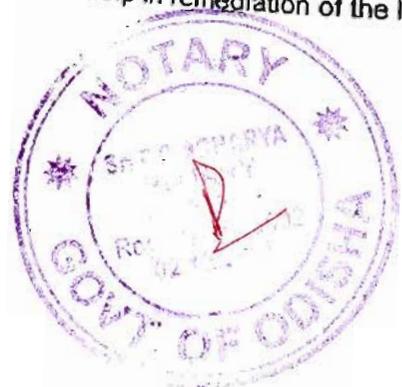
about 153.53 MT of plastic waste to the said cement plant on 13.07 2022 (copy of the agreement with cement plant and endorsement letter is enclosed for reference as Annexure-II).

5. During visit water sample was collected by the committee at Upstream of Jeera River of Bargarh Municipality near Bargarh Law College and Downstream of Jeera River of Bargarh Municipality near PHED Pada, with regard to pH, BOD, DO, COD, TC, FC and other parameters. The water samples have been analysed at Central Laboratory, State Pollution Control Board, Odisha, Bhubaneswar and the report thus obtained is enclosed as **Annexure- III** for kind reference.
6. The Bargarh Municipality has constructed and started operating a Septage Treatment Plant from January 2022 of capacity 30 KLD at Tentela, Bardol G.P, Bargarh for treatment of faecal sludge.
7. The Bargarh Municipality has proposed to establish 5 nos. of sewerage treatment plant of capacity (STPs). 125 KLD each at five different locations inside the Municipality area. The detail proposal has been sent to the Department of Housing and Urban Development (CSAP), Govt. of Odisha. Copy of the action plan enclosed as **Annexure- IV**.

Overall observations of the committee:

- a. The Municipality has obtained authorisation under the provision of Municipal Solid Waste (management and Handling) Rules, 2000 for setting up and operation of waste processing/waste disposal facility at Khata No. 453, Plot No. 1981, Village-Barahaguda, an area of Ac. 18.00 dec. which was valid up to 31.03.2020 vide Board's letter no. 13046 dt. 29.07.2015.
- b. However, historically waste has been dumped at the alleged site over a period of 10-15 years without valid permission from the State Pollution Control Board, Odisha. However, the dump site has been provided with boundary wall all around the alleged site of height about 15 feet. It was observed during visit that the municipality authority has stopped dumping of waste at the alleged site and engaged one JCB machine for alteration of legacy waste in order to enhance the decomposition rate of the waste through bio- culture process. This will eventually help in remediation of the legacy waste.

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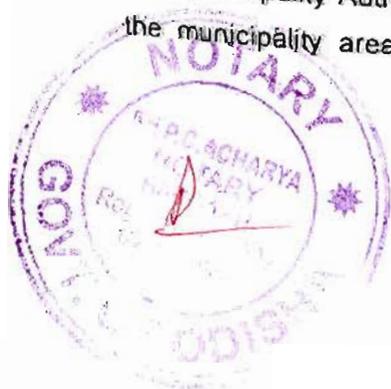
- c. The Executive Officer, Bargarh Municipality has submitted a representation addressed to the Hon'ble NGT through the joint committee constituted by the Hon'ble NGT and prayed for exemption the penalty imposed by Hon'ble NGT of Rs. 1.00 lakh (One lakh) per month which will be effects from 1st April 2020. (Copy enclosed as **Annexure - V**).
- d. It is observed during field visit that the Bargarh Municipality has not yet completed remediation of legacy waste and failed to comply the timeline fixed by the Hon'ble NGT. Therefore, Bargarh Municipality shall be liable to pay penalty of Rs. 30,00,000 (Rupees Thirty Lakhs) @ Rs. 1 lakh per month with effect from 01.04.2020 to till date (30 months).
- e. Also, in light of the un-remediated/unprocessed legacy waste being 51,476 MT, environmental compensation is assessed @ Rs. 300 per MT (at which approximate rate compensation has been awarded in the Hon'ble NGT order dated 15.09.2022 regarding O.A. No. 606/2018/PB in respect of State of Rajasthan for the reasons given therein). This works out to Rs. 1,54,42,800 (Rupees One Crore Fifty- Four Lakhs Forty- Two Thousands and Eight Hundred).

Recommendations:

Considering the observations w.r.t the field visit and violations mentioned above, the following suggestive remedial measures are recommended along with computation of Environmental Compensation (EC) –

- i) Bargarh Municipality shall be liable to pay the final amount of compensation of Rs.1,84,42,800/-(Rupees One Crore Eighty Four Lakh Forty-Two Thousand & Eight Hundred)only.
- ii) The Bargarh Municipality is required to submit detail action plan regarding bio-mining of legacy waste. After bio-mining of the legacy waste, the authority may develop Eco-Park at the alleged site for public interest.
- iii) No further dumping of the solid waste at the alleged site may be allowed.
- iv) The Municipality Authority may conduct mass public awareness campaign in the municipality area for better management and implementation of Solid

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Attested
Collector
Bargarh*

**COLLECTOR
BARGARH**

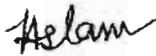
Waste Management Rules, 2016 and Plastic Waste Management Rules, 2016.

- v) The Municipality Authority shall expedite the construction of adequate capacities of Sewage Treatment Plants (STPs) for treatment of wastewater generated in the municipality area.



Dr. Satya Narayana Nanda,
Dy. Environmental Scientist-Cum-
Nodal Officer, SPC Borad ,
Sambalpur

Smt. Monisha Banerjee, IAS ,
Collector & District Magistrate, Bargarh

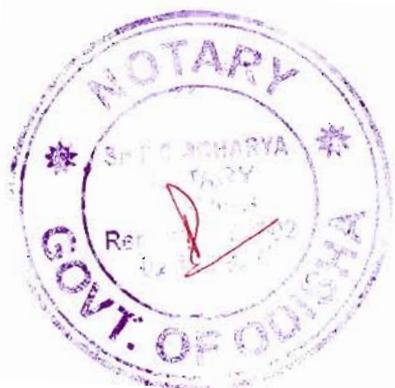


Toufic Aslam, Scientist-B,
CPCB, Zonal Office, Kolkata

Sri Narayan Dandsena, ORS,
Executive Officer, Bargarh Municipality

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**COLLECTOR
BARGARH**





e-Mail:

bargarhmunicipality.oo@gmail.com

Ph.: 06646-234347

Fax.: 06646-234347

HOUSING AND URBAN DEVELOPMENT DEPARTMENT
OFFICE OF THE MUNICIPAL COUNCIL: BARGARH
 At/PO/Dist.- Bargarh, Pin – 768028

Letter No. 1476 / Date : 17-03-2022

To,
 The Member Secretary,
 State Pollution Control Board
 Bhubaneswar, Odisha

Sub: - Submission of Annual Report on C& D Waste Management (SWM) Rules-2016 in form-(III) for the year of 2021-22.

Sir,
 With reference to the subject cited above, I am enclosing herewith the Annual Report of Bargarh Municipality on C&D Waste Management under (SW M) in form-(III) of SWM Rules-2016.

This is for favour of kind information and necessary action.

Yours Faithfully

Executive Officer
 Bargarh, Municipality

Memo No. 1477 Date 17 /Mar/2022

Copy submitted to the Director Municipal Administration, Additional Secretary & Additional Mission Director SBM(U) to Govt./ Project Director DUDA, Bargarh for favour of kind information and necessary action.

Executive Officer
 Bargarh, Municipality



Form -III

See [Rule 8(2)]

Format of Annual Report to be submitted by Local Authority to the State Pollution Control Board

- (i) Name of the City or Town..Bargarh Municipality
- (ii) Population...80625
- (iii) Name and address of local authority or competent authority

Telephone No: 06646-234347

Fax :. 06646-234347

Email ID:bargarhmunicipality.eo@gmail.com

Website: bargarhmunicipality.in

- (iv) Name of In-charge or Nodal Officer dealing with construction and demolition wastes management with designation.Susanta Pradhan(Sanitation Expert,Bargarh Municipality)

1. Quantity and composition of construction and demolition waste including any deconstruction waste

- (a) Total quantity of construction and demolition waste generated during the whole year in metric ton:400

Any figures for lean period and peak period generation per day .04

Average generation of construction and demolition waste

(TPD) Total quantity of construction and demolition waste collected per day.04

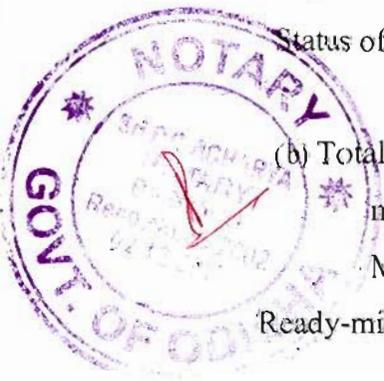
Any Processing / Recycling Facility set up in the city: 1 TON

Status of the facility: Functional

- (b) Total quantity of construction and demolition waste processed / recycled (in metric ton) Non-structural concrete aggregate:02

Manufactured sand: 02

Ready-mix concrete (RMC) 30



Pavingblocks: 15

GSB: 15

Others, if any, please specify : NA

(c) Total quantity of Construction & Demolition waste disposed by land filling without processing (last option) or filling low lying areas

No of landfill sites used : 01

Area used : 3.49 Acre

Whether weigh-bridge facility used for quantity estimation?: Yes

(d) Whether construction and demolition waste used in sanitary landfill (for solid waste) as per Schedule III: Yes No

2. Storage facilities

(a) Area or location or plot or societies covered for collection of Construction and Demolition waste: Yes

(b) No. of large Projects (including roadways project) covered: No

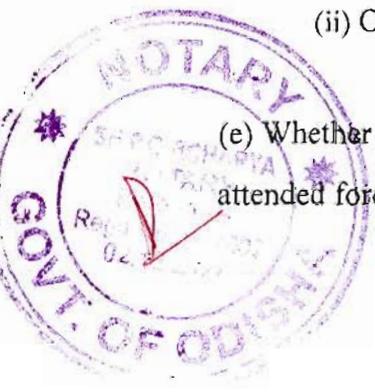
(c) Whether Area or location or plot or societies collection is Practiced (if yes, whether done by Competent Authority or Local Authority or through Private Agency or Non-Governmental Organization): 5 Nos

(d) Storage Bins	:	10 nos		
		Specifications	Existing	Proposed
		(Shape & Size)	Number	for future

(i) Containers or receptacle (Capacity) : 1 Ton

(ii) Others, please specify : No

(e) Whether all storage bins/collection spots are attended for daily lifting : Yes



6. **What provisions are available to check unauthorized operations of?**

Encroachment on river bank or wet bodies:

Unauthorized filling of lowline areas :

Mixing with solid waste :

Encroachment in Parks, Footpaths etc. :

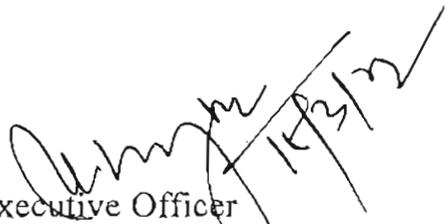
7. **How many slums are provided with construction and demolition waste receptacles facilities: 01**

8. **Are municipal magistrates appointed**

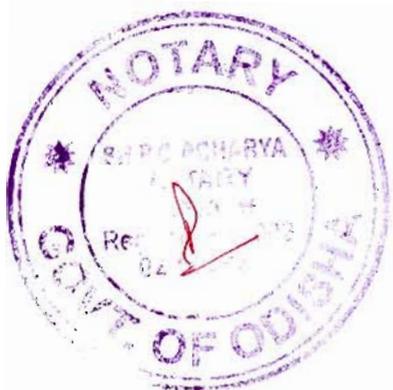
for taking penal action for non-compliance with these rules: Yes

[If yes, how many cases registered & settled during last three years (give year wise details)]

User Charges collected from Violators.


Executive Officer
Bargarh Municipality

Dated: 15/08/2022





e-Mail:

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Ph.: 06646-234347

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HOUSING AND URBAN DEVELOPMENT DEPARTMENT
OFFICE OF THE MUNICIPAL COUNCIL: BARGARH
 At/PO/Dist.- Bargarh, Pin – 768028

Letter No. 1478 / Date : 17.03.2022

To,
 The Member Secretary,
 State Pollution Control Board
 Bhubaneswar, Odisha

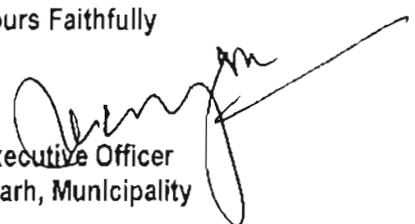
Sub: - Submission of Annual Report on Solid Waste Management (SWM) Rules-2016 in form- (IV) for the year of 2021-22.

Sir,

With reference to the subject cited above, I am enclosing herewith the Annual Report of Bargarh Municipality on Solid Waste Management under (SW M) in form-(IV) of SWM Rules-2016 for the year of 2021-22.

This is for favour of kind information and necessary action.

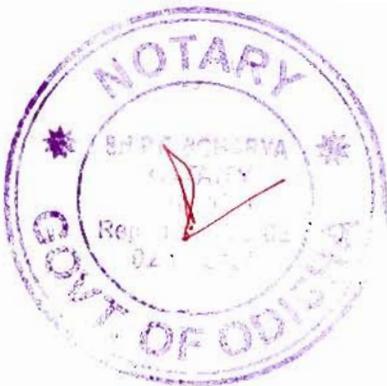
Yours Faithfully


 Executive Officer
 Bargarh, Municipality

Memo No. 1479 Date 17 /Mar/2022

Copy submitted to the Director Municipal Administration, Additional Secretary & Additional Mission Director SBM(U) to Govt./ Project Director DUDA, Bargarh for favour of kind information and necessary action.


 Executive Officer
 Bargarh, Municipality

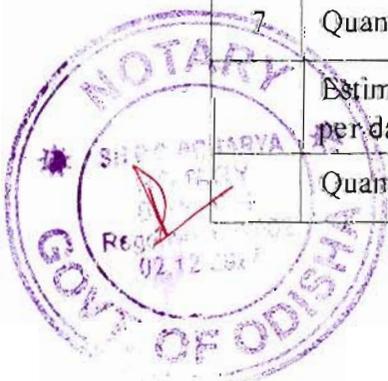


Form – IV
[see rules 15(za),
24(2)]

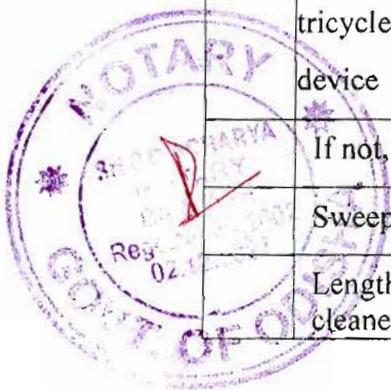
Format for annual report on solid waste management to be submitted by the local body

CALENDAR YEAR:2021	DATE OF SUBMISSION OF REPORT:15.03.2022
2021	

1	Name of the City/Town and State	Bargarh Municipality
2	Population	80625
3	Area in sq. kilometers	16.72
4	Name & Address of local body Telephone No. Fax No. E-mail:	Bargarh Municipality 06646234347 06646234347 bargarhmunicipality.in Bargarhmunicipality.co@gmail.com
5	Name of officer in-charge dealing with solid waste management (SOLID WASTE)Phone No: Fax No: E-mail:	Susanta Pradhan 7381789613 06646234347 bargarhmunicipality.in bargarhmunicipality.in
6	Number of households in the city/town Number of non-residential premises in the city Number of election/ administrative wards in the city/town	20595 63 19
7	Quantity of Solid waste (solid waste)	35.50
	Estimated Quantity of solid waste generated in the local body area per day in metric tones	35.50/tpd
	Quantity of solid waste collected per day	35.00/tpd



	Per capita waste collected per day	300/gm/day
	Quantity of solid waste processed	30/tpd
	Quantity of solid waste disposed at dumpsite/ landfill	5/tpd
8	Status of Solid Waste Management service	
	Segregation and storage of waste at source Whether SOLID WASTE is stored at source in domestic/commercial/ institutional bins, If yes,	Yes
	Percentage of households practice storage of waste at source in domestic bins	90%
	Percentage of non-residential premises practice storage of waste at source in commercial /institutional bins	70%
	Percentage of households dispose or throw solid waste on the streets	20%
	Percentage of non-residential premises dispose of throw solid waste on the streets	10%
	Whether solid waste is stored at source in a segregated form, If yes,	Yes
	Percentage of premises segregating the waste at source	90%
	Door to Door Collection of solid waste	
	Whether door to door collection (D2D) of solid waste is being done in the city/town	Yes
	if yes	
	Number of wards covered in D2D collection of waste	19
	No. of households covered	20595
	No. of non-residential premises including commercial establishments ,hotels, restaurants educational institutions/ offices etc covered	61
	Percentage of residential and non-residential premises covered in door to door collection through :	70%
	Motorized vehicle	
	Containerized	80%
	tricycle/handcart	20%
	Other device	0%
	If not, method of primary collection adopted	
	Sweeping of streets	Manually
	Length of roads, streets, lanes, bye-lanes in the city that need to be cleaned	425 km



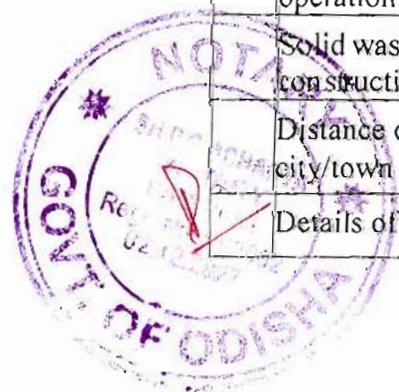
Frequency of street sweepings and percentage of population covered	frequency	Daily	Alternate days	Twice a week	Occasionally
90% of population covered					
Tools used	Broom /Khadga				
Manual sweeping			80%		
Mechanical sweeping			20%		
Whether long handle broom used by sanitation workers			Yes		
Whether each sanitation worker is given handcart/tricycle for collection of waste			Yes		
Whether handcart / tricycle is containerized			Yes		
Whether the collection tool synchronizes with collection/ waste storage containers utilized			Yes		
Secondary Waste Storage facilities					
No. and type of waste storage depots in the city/town	No.	Capacity in m ³			
Open waste storage sites	1	30 654			
Masonry bins	Yes				
Cement concrete cylinder bins	50				
Dhalao/covered rooms/space	0				
Covered metal/plastic containers Upto 1.1 m3 bins	0				
2 to 5 m3 bins	150				
Above 5m3 containers	35				
Bin-less city	20				
Bin/ population ratio	NA				
	73/30				



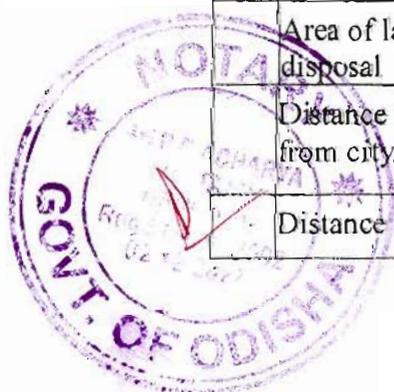
Ward wise details of waste storage depots (attach) : Ward No: Area: Population: No. of bins placed Total volume of bins placed	Attached in separate sheet	
Total storage capacity of waste storage facilities in cubic meters	35.50	
Total waste actually stored at the waste storage depots daily	12	
Give frequency of collection of waste from the depots Number of bins cleared	Frequency	No. of bins
	Daily	500
	Alternate day	50
	Twice a week	15
	Once a week	02
	Occasionally	0
Whether storage depots have facility for storage of segregated waste in green, blue and black bins	Yes (if yes, add details) No. of green bins:8000 No. of blue bins:8000 No. of black bins:0	
Whether lifting of solid waste from storage depots is manual or mechanical. Give percentage (%) of Manual Lifting of solid waste (%) of Mechanical lifting	100% 100%	
If mechanical – specify the method used	front-end loaders/ Top loaders	
Whether solid waste is lifted from door to door and transported to treatment plant directly in a segregated form	Yes (if yes, specify) Door to Door to MCCs/MRFs	



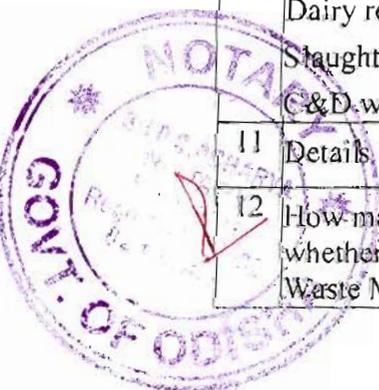
Waste transportation per day Type and Number of vehicles used	No. Trips made waste transported
Animal cart Tractors Non tipping Truck Tipping Truck Dumper Placers Refuse collectors Compactors Others/vBOV JCB/loader	4X12 (4TPD) 19X38(12TPD) 01X20(02 TPD) 01X10(6TPD) 7X14(7.5 TPD) 1X02(4.0TPD)
Frequency of transportation of waste	Frequency (95%) of waste transported Daily:95% Alternate day Twice.a week Once a week Occasionally
Quantity of waste transported each day	35.0/tpd
Percentage of total waste transported daily	95.0%
Waste Treatment Technologies used	MCCs/MRFs
Whether solid waste is processed	Yes
If yes, Quantity of waste processed daily	30.0/tpd
Whether treatment is done by local body or through an agency	NA (ULB Have own processing plants)
Land(s) available with the local body for waste processing (in Hectares)	3.6
Land currently utilized for waste processing	3.6
Solid waste processing facilities in operation	YES
Solid waste processing facilities under construction	NA(Completed)
Distance of processing facilities from city/town boundary	02 KM
Details of technologies adopted	Aerobic Composting



Composting ,	Qty. raw material processed:15 TPD Qty. final product produced:02 TPD Qty. sold Quantity of residual waste land filled
Vermi composting	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
Bio-methanation	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
Refuse Derived Fuel	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
Waste to Energy technology such as incineration, gasification, pyrolysis or any other technology (give detail)	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
Co-processing	Qty. raw material processed:300TPD
Combustible waste supplied to cement plant	300 TPD
Combustible waste supplied to solid waste based power plants	0
Others	0
Solid waste disposal facilities	MCCs/MRFs
No. of dumpsites sites available with the local body	01
No. of sanitary landfill sites available with the local body	1(Identified)
Area of each such sites available for waste disposal	3.49
Area of land currently used for waste disposal	1.56
Distance of dumpsite/landfill facility from city/town	1 KM
Distance from the nearest habitation	500 Mtr.



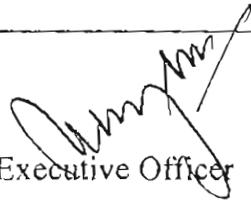
	Distance from water body	1kms
	Distance from state/national highway	1kms
	Distance from Airport	0kms
	Distance from important religious places or historical monument	1kms
	Whether it falls in flood prone area	No
	Whether it falls in earthquake fault line area	No
	Quantity of waste landfilled each day	08tpd
	Whether landfill site is fenced	No
	Whether Lighting facility is available on site	Yes
	Whether Weigh bridge facility available	Yes
	Vehicles and equipments used at landfill (specify)	Bulldozer, Compacters etc. available
	Manpower deployed at landfill site	No
	Whether covering is done on daily basis	Yes
	If not, Frequency of covering the waste deposited at the landfill	1Month
	Cover material used	Black Polythene
	Whether adequate covering material is available	Yes
	Provisions for gas venting provided	Yes
	Provision for leachate collection	Yes(through Lechate Chamber)
9	Whether an Action Plan has been prepared for improving solid waste management practices in the city	Yes
10	What separate provisions are made for : Dairy related activities : Slaughter houses waste : C&D waste (construction debris) :	Attach details on Proposals,Steps taken, Yes Yes Yes
11	Details of Post Closure Plan	No
12	How many slums are identified and whether these are provided with Solid Waste Management facilities :	Yes(81 slums)



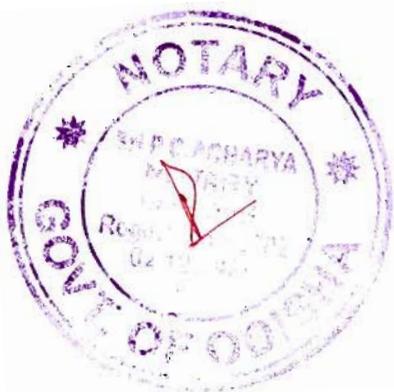
13	Give details of: Local body's own manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of waste	98
14	Give details of: Contractor/ concessionaire's manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of waste	198
15	Mention briefly, the difficulties being experienced by the local body in complying with provisions of these rules	Sweeping Machines/Dumper/JCB required
16	Mention briefly, if any innovative idea is implemented to tackle a problem related to solid waste, which could be replicated by other local bodies	Tracking through GPS System Revenue Augmentation/Public Awareness/Implementation Provisions under SWM Rules-2016.

Date: 18/3/22

Place: Bargarh


Executive Officer

Bargarh Municipality





e-Mail:

bargarhmunicipality.oo@gmail.com

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Fax.: 06646-234347

HOUSING AND URBAN DEVELOPMENT DEPARTMENT
OFFICE OF THE MUNICIPAL COUNCIL: BARGARH
 At/PO/Dist.- Bargarh, Pin – 768028

Letter No. 1480 / Date : 17-03-2022

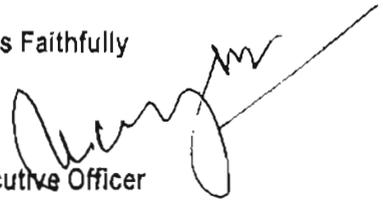
To,
 The Member Secretary,
 State Pollution Control Board
 Bhubaneswar, Odisha

Sub: - Submission of Annual Report on Plastic Waste Management (SWM) Rules-2017 in form-(V) for the year of 2021-22.

Sir,
 With reference to the subject cited above, I am enclosing herewith the Annual Report of Bargarh Municipality on Plastic Waste Management under (OWM) In form-(V) of PWM Rules-2017 for the year of 2021-22.

This is for favour of kind information and necessary action.

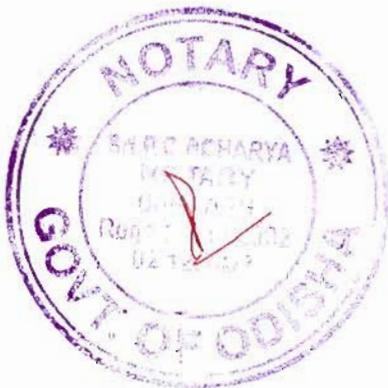
Yours Faithfully


 Executive Officer
 Bargarh, Municipality

Memo No. 1481. Date 17 /Mar/2022

Copy submitted to the Director Municipal Administration, Additional Secretary & Additional Mission Director SBM(U) to Govt./ Project Director DUDA, Bargarh for favour of kind information and necessary action.


 Executive Officer
 Bargarh, Municipality

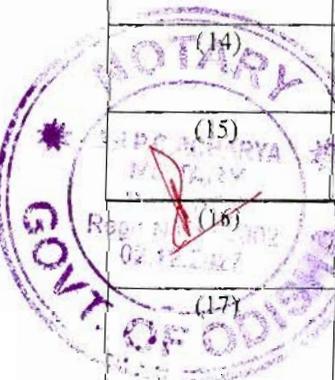


Form - V
[See rules 17(2)]

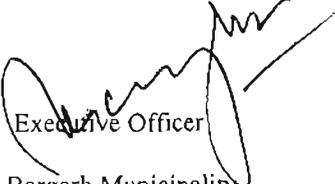
**FORMAT FOR ANNUAL REPORT ON PLASTIC WASTE MANAGEMENT TO BE SUBMITTED
BY THE LOCAL BODY**

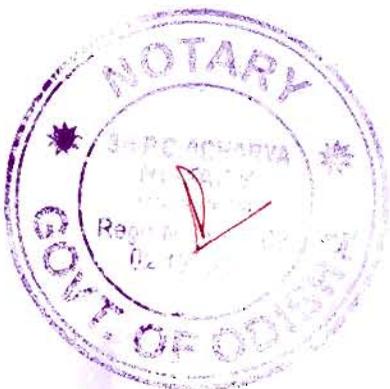
Period of Reporting: January-2021 to December-2021

(1)	Name of the City or Town and State:	Bargarh Municipality
(2)	Population(2011)	80625
(3)	Area in sq. kilometers	16.72 Sq. K.M
(4)	Name & Address of Local body Telephone No. Fax No. E-mail:	Bargarh Municipality 06646234347 06646234347 bargarhmunicipality.in bargarhmunicipality.eg@gmail.com
(5)	Total Numbers of the wards in the area under jurisdiction	19
(6)	Total Numbers of Households in the area under jurisdiction	20595
(7)	Number of households covered by door to door collection	20595
(8)	Total number of commercial establishments and Institutions in the area under jurisdiction -Commercial establishments - Institutions	868 15
(9)	Number of commercial establishments and Institutions covered by door to door collection -Commercial establishments - Institutions	868 15
(10)	Summary of the mechanisms put in place for management of plastic waste in the area under jurisdiction along with the details of agencies involved in door to door collection	Non Combustible Plastic waste Transported to ACC Cement Factory, Bardol, Bargarh and G WESTECH, Chattishgarh For kinley process.
(11)	Attach details of infrastructure put in place for management of plastic waste generated in the area under jurisdiction	3 No's of MRFs Constructed/Established(with Installation of Bailing Machine/Shredding Machine) in Bargarh Municipality area for managing of plastic wastes .
(12)	Attach details of infrastructure required, if any along with justification	Already setup the plants(MRFs)
(13)	Quantity of Plastic Waste generated during the year from area under jurisdiction (in tons)	600
(14)	Quantity of Plastic Waste collected during the year from area under jurisdiction (in tons)	600
(15)	Quantity of plastic waste channelized for recycling during the year (in tons)	550
(16)	Quantity of plastic waste channelized for use during the year (in tons)	550
(17)	Quantity of inert or rejects sent to landfill sites during the year (in tons)	30



(18)	<p>Details of each of facilities used for processing and disposal of plastic waste</p> <p>Facility-I</p> <p>i) Name of operator ii) Address with Telephone Number or Mobile iii) Capacity iv) Technology Used v) Registration Number vi) Validity of Registration (up to)</p> <p>Facility-II</p> <p>i) Name of operator ii) Address with Telephone Number or Mobile iii) Capacity iv) Technology Used v) Registration Number Validity of Registration (up to)</p>	<p>MRFs Established for processing and disposal of Plastic waste generated in Municipality area.</p> <p>Bharat Tandi(9692156580) Amulya Kumbhar(8073120002), Trilochan Nayak(6371733343) 10 TPD3(30TPD) Mechanized BGR/BGH/MRF/001,002,003 Permanent (Departmental)</p>
(19)	<p>Give details of: Local body's own manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of waste.</p>	<p>Total 68 no's Municipality Regular Staff, 32 No's DLR/NMR staff</p>
(20)	<p>Give details of: Contractor or concessionaire's manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of Waste.</p>	<p>198 Nos</p>
(21)	<p>Mention briefly, the difficulties being experienced by the local body in complying with provisions of these rules including the financial constraints, if any</p>	<p>Only Financial Constraints</p>
(22)	<p>Whether an Action Plan has been prepared for improving solid waste management practices in the city? If yes (attach copy) Date of revision:</p>	<p>Action Plan and submitted to the Deptt.</p>


Executive Officer
Bargarh Municipality



- 55 -

ANNEXURE-2

185

ANNEXURE-2

The Odisha Gazette

EXTRAORDINARY
PUBLISHED BY AUTHORITY

No. 6, CUTTACK, TUESDAY, JANUARY 03, 2017/PAUSA 13, 1938

HOUSING & URBAN DEVELOPMENT DEPARTMENT

NOTIFICATION

The 30th December, 2016

S.R.O. No. 5/2017— Government of Odisha is pleased to notify “**Odisha Urban Sanitation Policy, 2017**” with an objective of transforming urban Odisha into 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 Sewage Management, Solid Waste Management infrastructure and service delivery in urban areas of the State.

This shall come into force from the date of publication in the Official Gazette.

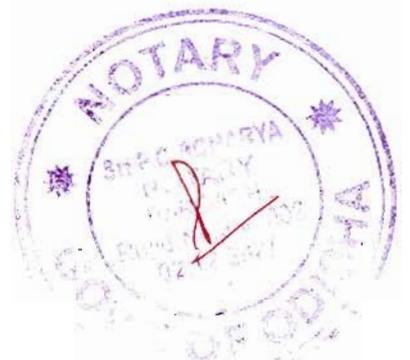
[No. 30586-HUD-SAN-41/2016/ HUD.]

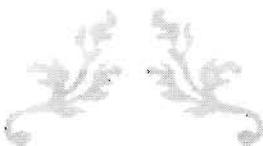
By Order of the Governor

G. MATHI VATHANAN

Commissioner-cum-Secretary to Government

*True Copy
Attested
Gair.*
COLLECTOR
BARGARH





ODISHA URBAN SANITATION POLICY, 2017



DECEMBER 30, 2016
 GOVERNMENT OF ODISHA, HOUSING & URBAN DEVELOPMENT DEPARTMENT
 1st floor, State Secretariat, Annex-B, Bhubaneswar - 751001



List of Abbreviation

BMC	Bhubaneswar Municipal Corporation
FSM	Faecal Sludge Management
FSTP	Faecal Sludge Treatment Plant
GOI/Gol	Government of India
JMP	Joint Monitoring Programme of the WHO and UNICEF
JNNURM	Jawaharlal Nehru National Urban Renewal Mission
HRD	Human Resource Development
HRM	Human Resource Management
HUDD	Housing & Urban Development Department, G/o Odisha
IEC	Information, Education and Communication
M&E	Monitoring & evaluation
M/o UD	Ministry of Urban Development, Government of India
MDGs	Millennium Development Goals
MHM	Menstrual Hygiene Management
MIS	Management Information System
MLD	Million litres per day
MSA	The Prohibition of Employment as Manual Scavengers and their Rehabilitation
2013	Act, No. 25 of 2013
MSW	Municipal Solid Waste
MSWM	Municipal Solid Waste Management
NAC/s	Notified Area Council/s
NUSP	National Urban Sanitation Policy, 2008
NGO/s	Non-Government Organisation/s
O&M	Operations and Maintenance
OUSP	Odisha Urban Sanitation Policy
OSPCB	Odisha State Pollution Control Board
PCB	Pollution Control Board
SBM	Swachh Bharat Mission
SBM(U)	Swachh Bharat Mission (Urban)
SDGs	Sustainable Development Goals
SFD	Sludge-flow Diagram
SHG/s	Self-help Group/s
STP	Sewage Treatment Plant
OD	Open Defecation
ODF	Open Defecation Free
ODF+/++	Open Discharge Free
OWSSB	Odisha Water Supply and Sanitation Board
PPCP	Public-Private-Community Participation
ST/s	Statutory Town/s
ULB/s	Urban Local Body/ies
UNICEF	United Nations Children's Education Fund

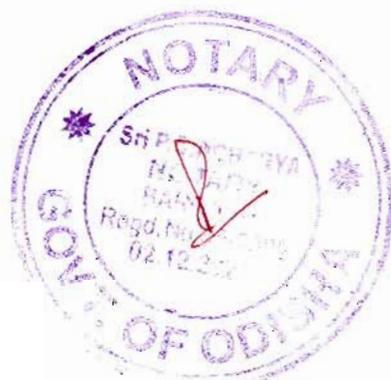


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Message 2 (if any)..... **Error! Bookmark not defined.**

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IMPLEMENTATION OF THE POLICY 18



INTRODUCTION

In 2011, the Housing & Urban Department, Government of Odisha notified an Urban Sanitation Strategy, with the goal of transforming urban Odisha into community-driven, totally sanitised, safe, healthy, and livable cities and towns, and outcomes in line with the National Urban Sanitation Policy (NUSP), 2008, the National Water Policy, 2002, the National Environment Policy, 2006, the State Water Policy, 2007.

Since the development of this strategy, there have been a number of national and international developments that have arisen that necessitate the revision of this strategy.

First, in 2011, the Census of India released household level sanitation data for the country. While this will be detailed under the situational analysis section, at the outset it is important to point out that Odisha is among the top three States contributing to urban open defecation in the country: the other two States being Chhattisgarh and Jharkhand.

Second, on 2nd October 2014, the Government of India launched the Swachh Bharat Mission (SBM) in urban and rural areas of India with a vision to ensure hygiene, waste management and sanitation across the nation. In his address to both houses of Parliament in May, 2014, the Hon'ble President of India stated that "**Swachhata is an article of faith for my government.** Swachhata will have an overarching impact on the quality of life and wellbeing of a person, particularly the poor. Swachh Bharat Mission has been launched to achieve a Clean and Open Defecation Free India by October, 2019".

Third, in September, 2015, India became signatory to the Sustainable Development Goals (SDGs). Goal 6 demands universal access to clean water and sanitation. Within this, Target 6.2 aims at achieving **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.** The SDGs are a follow-up to the Millennium Development Goals (MDGs), which aimed at extending improved sanitation coverage to the un-served households. The difference between the SDGs and the MDGs is that where the latter focused on household-level infrastructure provision within an understanding of "improved sanitation", the SDGs cover the whole sanitation service chain, infrastructure and service provision, and aim to mitigate the adverse effects of public health due to poor sanitation.

Finally, while sewerage has been the traditional response to household and city-based sanitation needs, there is a growing realisation that depending on it as the only solution for sanitation negates the existing non-networked, on-site sanitation prevalent in the State, and for which strategies need to be devised.

These four developments have prompted the State Government to revise the existing strategy, bringing it in line with these national and international goals, both for infrastructure and services provision, as well as behaviour change and capacity development of cities for sanitation service delivery





SITUATIONAL ANALYSIS

1. Uneven spread of urbanisation in the State

While Odisha remains the least urbanised (17 per cent) State in the country, it has registered a significantly high decadal urban growth rate of 27 per cent with the urban population growing from 37 million to 42 million between 2001 and 2011. There is considerable inter-district variation in urbanization levels. Of the nearly 7 million urban residents in Odisha, nearly half (3.32 million) are concentrated in four districts- Khorda, and Cuttak (coastal Odisha), and Ganjam and Sundargarh (in southern and northern Odisha respectively). Further, the 2011 Census indicates that the number of towns in the State have increased from 138 to 223 over the last decade. This increase has been primarily attributed to a significant increase in the number of Census Towns¹ from 31 in 2001 to 116 in 2011. The number of Statutory Towns, on the other hand, has remained the same at 107; however between 2011 and 2015, the State Government conducted a review exercise revising the current total of statutory towns to 110.

2. High Urban Open Defecation underlines the need for immediate action

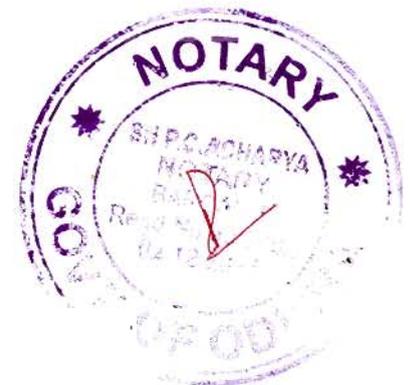
The Census (2011) data on the urban water and sanitation situation in Odisha provides a somewhat dismal picture: it indicates that access to safe drinking water is a major issue for almost half the urban households as only 42 percent have access to treated tap water for drinking and less than 57 per cent have sources within their premises. In the case of sanitation, more than 35 per cent of the

urban households do not have access to toilets – a marginal 5 percent improvement over the decade- and only a little over a 58 percent have water closets, with the remaining using pit or other kind of toilets.

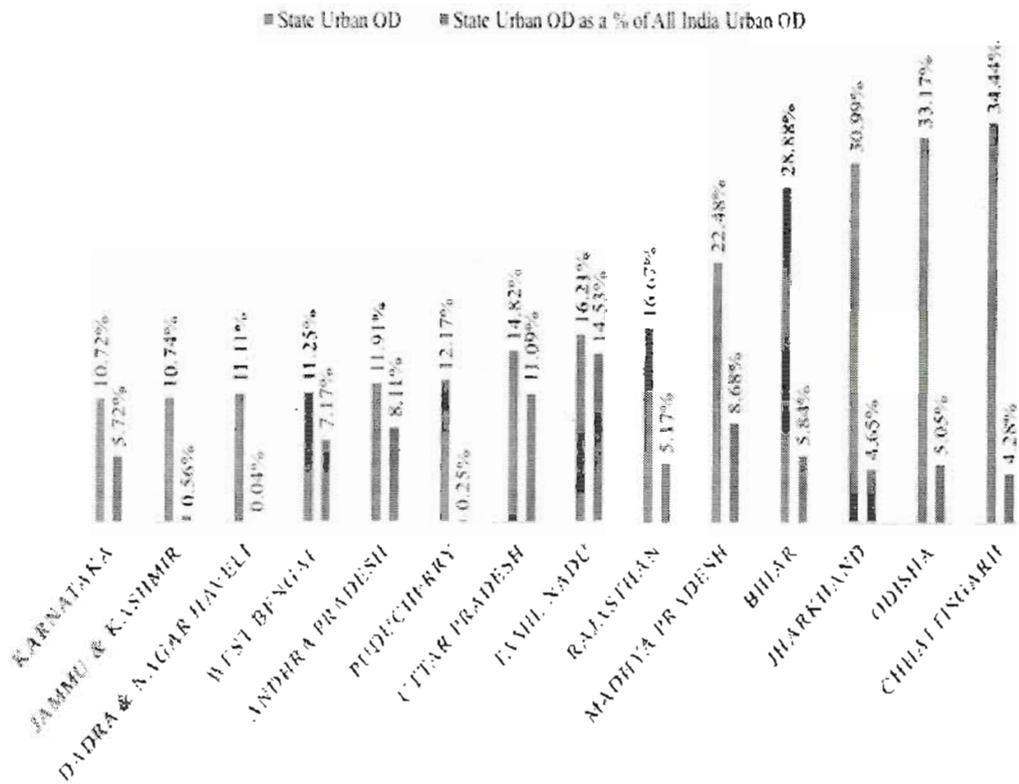
This has an impact on Odisha's sanitation situation vis-à-vis the rest of the country. In the graph below comparing percentage of urban open defecation in States, Odisha figures as second in the five most critical States (Chhattisgarh, Odisha, Jharkhand, Bihar, and Madhya Pradesh) with very high urban open defecation.

However, simply looking at the proportion of urban population in a district will not help strategize action for urban sanitation. As is evident from Table 1, even in districts such as Subarnapur with less than 1 per cent of the State's urban population, there is a high proportion of people defecating in the open in the district (65 per cent).

¹The Census Towns in Odisha have a population ranging between 5000-20,000.



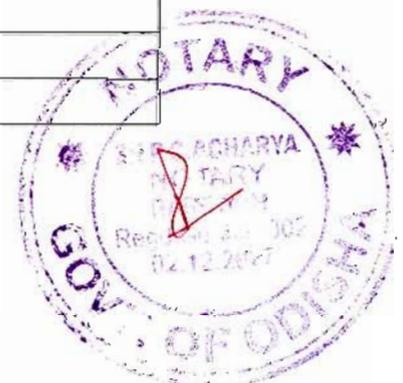
Graph 1: 14 States with more than 10 Urban Open Defecation in India, 2011



[Source: Census of India, 2011, CPR Analysis]

Table 1: District Urban Population and Urban Open Defecation, 2011 Census

S. No.	District Names	Average Urban OD (%) to District urban population	Proportion of District urban population to total urban population in Odisha
1	Khordha	53%	15.51%
2	Ganjam	54%	10.98%
3	Sundargarh	43%	10.52%
4	Cuttack	55%	10.47%
5	Sambalpur	50%	4.41%
6	Puri	50%	3.79%
7	Baleshwar	43%	3.62%
8	Kendujhar	47%	3.62%
9	Jharsuguda	37%	3.31%
10	Koraput	38%	3.23%
11	Anugul	36%	2.95%
12	Mayurbhanj	44%	2.76%



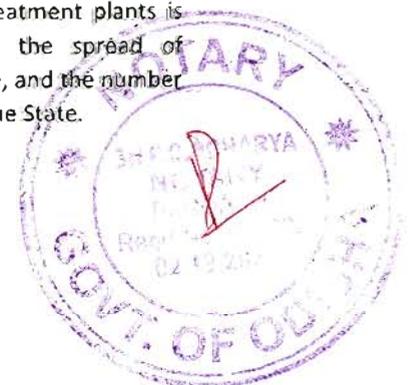
S. No.	District Names	Average Urban OD (%) to District urban population	Proportion of District urban population to total urban population in Odisha
13	Balangir	52%	2.75%
14	Bhadrak	55%	2.66%
15	Bargarh	56%	2.15%
16	Rayagada	47%	2.10%
17	Jajapur	52%	1.93%
18	Kalahandi	45%	1.74%
19	Dhenkanal	55%	1.68%
20	Jagatsinghapur	44%	1.66%
21	Nabarangapur	46%	1.25%
22	Kendrapara	42%	1.19%
23	Nayagarh	46%	1.14%
24	Kandhamal	48%	1.03%
25	Gajapati	61%	1.01%
26	Subarnapur	65%	0.71%
27	Malkangiri	53%	0.71%
28	Nuapada	50%	0.49%
29	Debagarh	45%	0.32%
30	Boudh	46%	0.29%

[Source: Census of India, 2011]

3. The full sanitation value chain needs to be covered in the policy

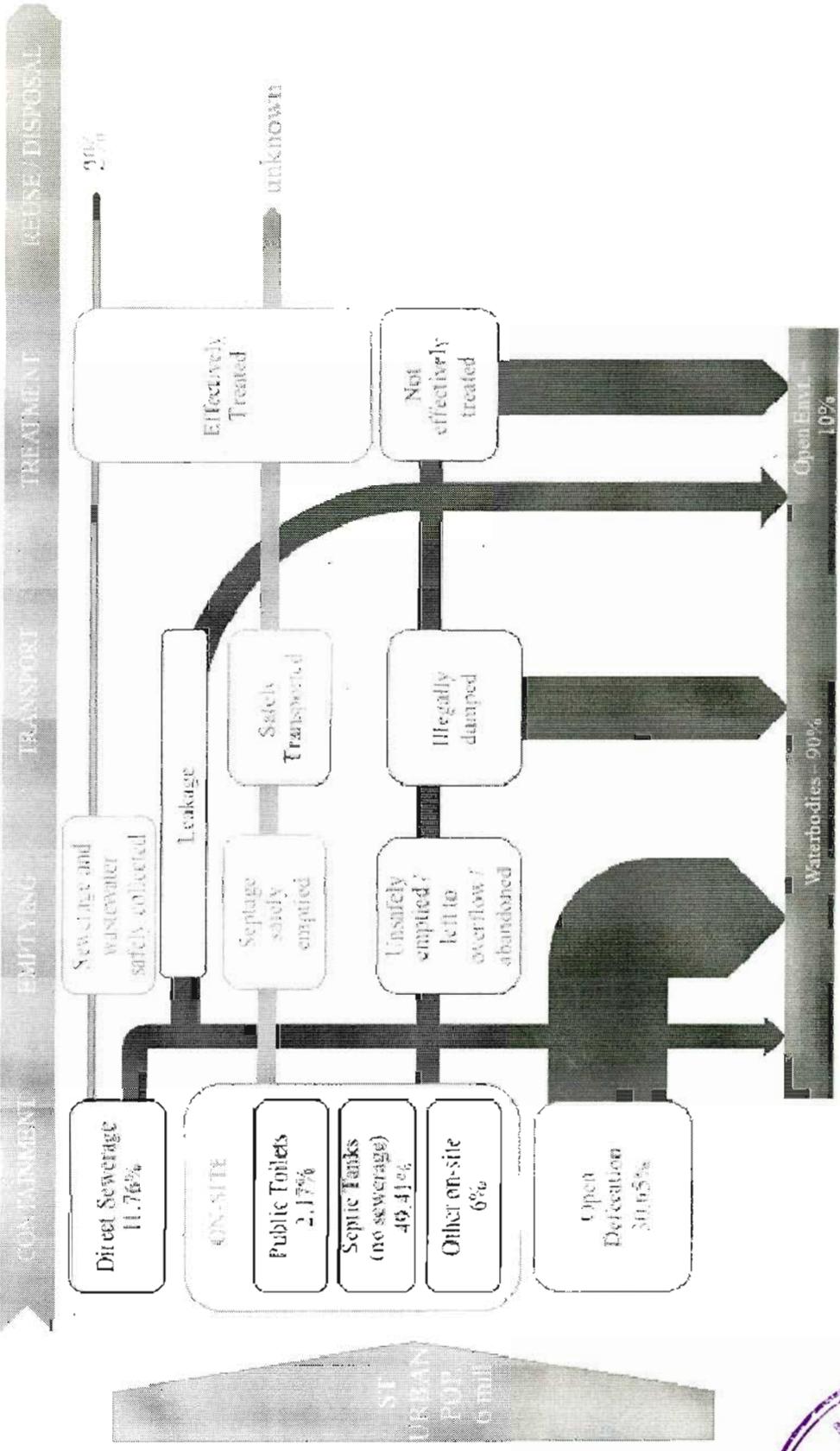
Rates of open defecation do not tell the whole story. If the full sanitation value chain is examined, then *the lack of safe containment, transportation and treatment or disposal also become significant factors in the poor sanitation outcomes of the State*. The figure below is a sludge flow diagram (SFD) constructed on the basis of Census 2011 figures for Odisha. While it is obvious that at 30.65 per cent, open defecation in statutory urban areas is very high, treatment facilities for waste water and septage, even from sanitary latrines, is negligible. The practice of constructing septic tanks and connecting it to open drains is rampant and most of the septic tanks are reportedly poorly constructed. Sludge disposal systems, largely consists of disposal directly into open drains or use of cesspools services on payment provided by the municipalities or private service providers,

both of which are in short supply. Of more concern is the method of sludge disposal, which is generally dumped into an unsecured pit in a designated open area. With the growing number of toilets now being constructed and a lack of available urban land, sludge disposal is a major issue of concern. The State is concerned that it is constructing facilities and infrastructure without paying much paying attention to appropriate low cost technologies. Two sewage treatment plants (STPs) are operational in Cuttak (capacity 33mld) and Puri (15mld); a further three STPs are currently under construction in Cuttak (2) and Bhubaneswar (1) under JICA funding. Sewerage systems covering a sewer network, pumping stations and STPs of 40 MLD for Rourkela West district, 8 MLD for Rourkela East District, and 42 MLD for Sambalpur district have also been planned. The number of treatment plants is woefully inadequate given the spread of urbanisation across the State, and the number of statutory towns (110) in the State.





Graph 2: Sludge Flow Diagram (SFD) for Odisha



[Source: SFD developed using figures from Census of India, 2011]

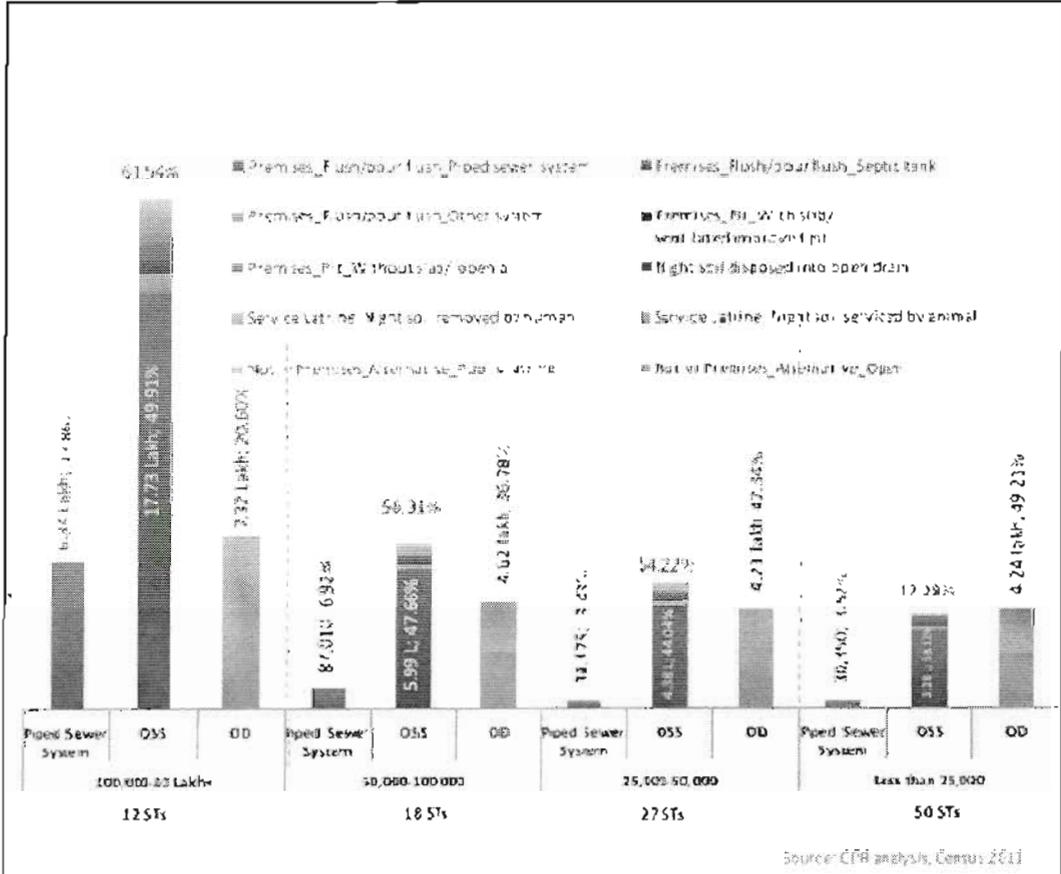


4. A clear policy for FSM / Septage management in addition to conventional underground sewerage systems is needed for small and medium towns

Cities in Odisha with a population of more than 1 lakh are above the State average in access to household toilets. Many of the households in this group are serviced by septic tanks, indicating greater private investment in these structures. In smaller cities, open defecation is far more prevalent; and the existence of underground drainage is negligible.

Data from Census 2011 on types of latrines by city size, (see Graph 3 below), indicates that *as city sizes decreases, the dependence on on-site sanitation and open defecation increases*. This underlines the importance of going beyond traditional sewerage solutions, and moving towards faecal sludge management (FSM) / septage management. In this regard, the Government of Odisha has already initiated action to procure cesspool trucks. The strategy, however must place this action within a wider policy of septage management across the urban areas of Odisha, particularly for smaller towns.

Graph 3: On-site sanitation and open defecation vs. Access to piped sewer system in Odisha by city size



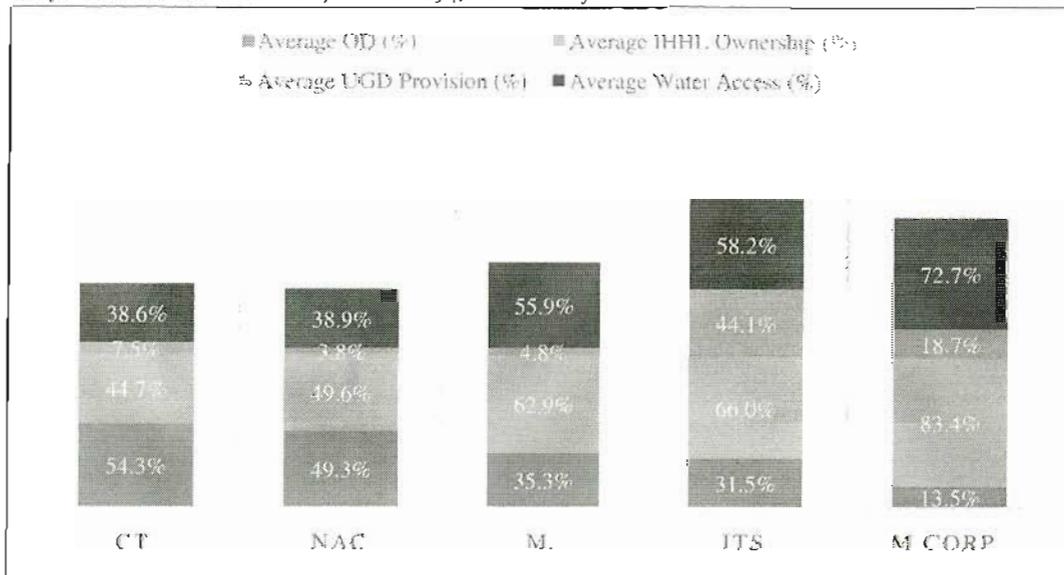
5. Census towns are likely to be areas of future concern for sanitation

Census Towns as per Census 2011 exhibit urban characteristics, but have not been formally declared urban by statute / law. Across all census towns the sanitation profile is observed to be worse than the statutory towns in the State. While Statutory Towns display a more traditional picture of decreased sanitation infrastructure as city

sizes reduce, Census Towns are mostly smaller in size and have uniformly high levels of open defecation, low levels of household latrine ownership and low drinking water provision (See Graph 4).

As the urban population grows and more census towns will be incorporated as urban areas by the State Government, sanitation in these areas will also fall under the purview of the urban sanitation policy in the State.

Graph 4: Water and Sanitation provision by governance of cities

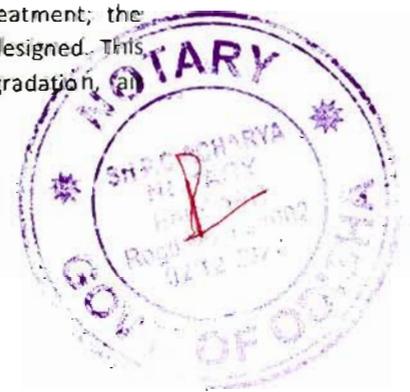


[Source: Census of India, 2011]

6. As urban growth in Odisha increases, Municipal Solid Waste Management (MSWM) must form part of the core policy for sanitation in the State

Until very recently, the collection of Municipal Solid Waste (MSW) from market places and community bins, street sweeping, bush cutting and drain cleaning, transportation and disposal at the dump yard had been carried out by most ULBs on their own. However,

beginning with the Bhubaneswar Municipal Corporation (BMC) (and now being replicated in many other towns of the State for about last five years), door-to-door collection of waste is being carried out by engaging private operators and BMC sanitation workers. It has been a gradual transition from a fully ULB-operated model to a Public-Private-Community-Participation (PPCP) model. However, scientific disposal of waste is yet to occur and the waste is dumped at the dump yard without processing or treatment; the dump yard is not scientifically designed. This has led to environmental degradation, air



pollution, ground water table pollution and poses grave health hazards. The MSW Rules 2016 designates the ULBs as solely responsible for managing solid waste in their area and states that "within the territorial area of the municipality, [ULBs are] responsible for the implementation of the provisions of these rules, and for any infrastructure development for collection, storage, segregation, transportation, processing and disposal of municipal solid wastes". However, the ULBs in Odisha are yet to fully comply with MSW Rules, 2000 and their 2016 successor. Amongst the ULBs, Puri is the first town to have arrangements since 1998 for scientific disposal and mechanized processing of solid waste into bio-fertilizer in a scientific manner. Under the Indo-Norwegian Development Corporation support and with the active participation of ULBs, a 100 TPD bio-compost plant is operational in Puri. A private firm is engaged to manage the plant. But this plant is facing difficulty for lack of source segregation of the MSW.

Site Authorization for SWM Projects The State Government has initiated various steps for implementation of integrated Solid Waste Management projects in various ULBs as per MSW Rules, 2000. As a first step towards it, land was allotted to ULBs to gradually implement the SWM projects involving processing of bio-degradable waste and scientific disposal of processed and inert non-recyclable waste. Most ULBs have secured the site with a compound wall. However, processing facility has not been set up in any of the ULBs. At present, 100% of the sanitation budget is utilized for collection and transportation. Many of the ULBs have obtained site authorization from Pollution Control Board for setting up processing plant and sanitary land fill. At present, waste is directly dumped in these sites without processing.

7. The urban sanitation policy must incorporate a river basin pollution abatement policy

The State of Odisha is host to a number of river systems consisting of the main rivers, its tributaries and distributaries. The major river basins in Odisha are:

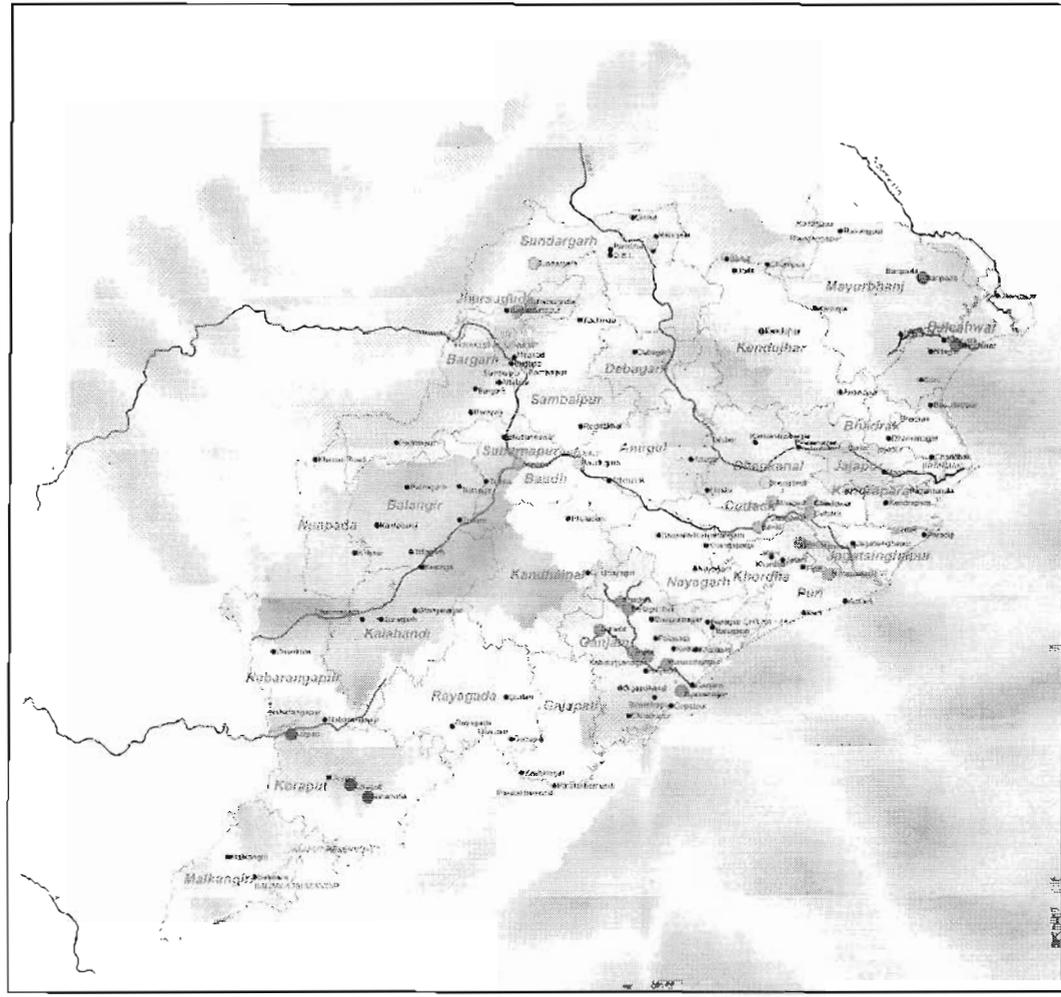
1. Subranekha
2. Buddha Balanga Basin
3. Baitrani Basin
4. Brahmani:
 - a. Upper Brahmani Basin
 - b. Lower Brahmani Basin
5. Mahanadi
 - a. Upper Mahanadi
 - b. Mahanadi (Hirakund- Khairmal)
 - c. Mahanadi (Khairmal- Barmul)
 - d. Mahanadi (Barmul- Naraj)
 - e. Mahanadi Delta
6. Tel Basin
7. Rushikulya Basin
8. Vanshadhara
9. Indrabati Basin
10. Nagavali Basin
11. Kolab Basin

Map 1 below shows the 11 river basins in Odisha and with the statutory towns marked per river basin. Nearly 90 per cent of urban areas in Odisha directly affect rivers in the state; the rest fall within existing river basins. With the open discharge of raw sewage into drains so dire, it is necessary for the sanitation policy to also consider action of cities within the wider ecosystem of river basin systems in the State.



67.

Map 1: River Basins in Odisha with statutory towns affecting these systems

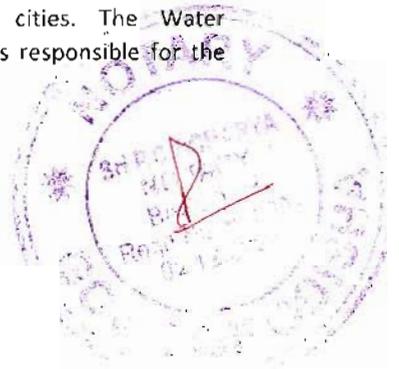


[Source of Map: D/o Water Resources, G/o Odisha || List of Statutory Towns: HUDD, G/o Odisha]

8. The governance of urban sanitation must be aligned to outcomes and should be supported by capacity building of institutions

The primary institution for governance of each urban area are the Urban Local Bodies (ULBs) in Odisha which comprise Municipal Corporations, Municipalities, and Notified Area Councils (NACs). Statutory towns (STs) with a population greater than 300,000 are deemed as large urban areas and are administered by Municipal Corporations.

Statutory towns with population between 300,000 and 25,000 are deemed small urban areas and are administered by Municipalities. Those STs with population between 10,000 and 25,000 are deemed as transitional urban areas and are administered by NACs. The Municipalities and the NACs are governed by the Municipal Act, 1950, and the Municipal Corporation Act, 2003. Besides the local bodies, there are other State department subdivisions which are responsible for the water and sanitation in all cities. The Water Resources Department is responsible for the



allotment of water to different sectors like drinking water, irrigation, hydropower, industry, etc., flood control and drainage, and maintenance of water quality. The Public Health Engineering Organisations (PHEO) and the Odisha Water Supply and Sewerage Board (OWSSB), are responsible for water supply and sewerage services in all ULBs. The Odisha Pollution Control Board (OPCB) is responsible to ensure standards and guidelines produced under the CPCB are followed in the State. The Directorates of Town Planning are responsible for the preparation of Master plans, monitoring of programs, provision of technical assistance, and regulation of the work of development authorities. The Directorate of Municipal Administration (DMA) regulates the functioning of ULBs, and monitors their development functions. In addition to these, the Odisha Urban Infrastructure Development Fund (OUIDF) provides support in policy formulation, project development activities, and funding of WATSAN projects. Additionally, from July, 2015 onwards, the newly formed Water Corporation or WATCO has taken over the functions of PHEO for the towns of Bhubaneswar, Khurda and Jatni.

According to the 74th amendment all functions related to sanitation conservancy are the responsibilities of the ULB. However, in practice more than one institution is responsible for the functions for sanitation. Even some clauses of certain state statutes allow supersession of these tasks by the State Government. There are eight different functions related to sanitation. For each of these functions there are multiple institutions responsible, both in policy as well as in practice.

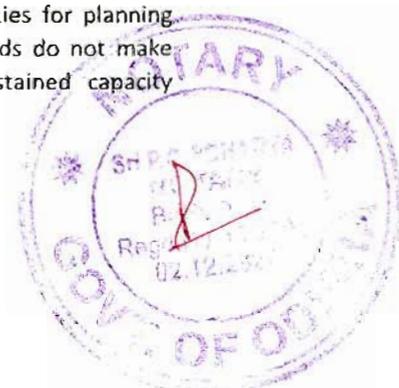
Capacities of ULBs in Odisha to manage an expanding need for sanitation and FSM

The capacity constraints of ULB include a lack of clarity in roles and responsibilities of various stakeholders and institutions, the overarching responsibilities and functions, and the mixed system of personnel

deployment followed in the State; the shortage of skilled staff for adequate coverage as well as enforcement; and both technical and financial shortfalls that do not allow for corrective infrastructural or management interventions. The problems of management are compounded by the need for ULBs to coordinate with multiple agencies.

There is a shortfall of engineers and other staff in the ULBs, which have not been filled-up in years because of a freeze on recruitments. However, a system of Municipal Cadres has been recently approved by the State Cabinet, although it is yet to be operationalized. ULBs will be grouped into categories depending on the size of the population and human resources will be allocated to each ULB on the basis of those categories. In addition to the cadres, the frontline sanitation workers also need to be sourced, organized and trained to deliver faecal sludge / septage management services at the city level (in each ward).

There are also issues related to a lack of adequate data for better planning and management, across the sanitation cycle; to ensuring access to the un-served urban poor and the floating population; to the lack of awareness amongst communities, service providers and city managers on the consequence of poor sanitation; to the need for enhanced community participation and above all to building adequate capacities of all stakeholders, especially the ULBs; and to the need for an integrated city-wide approach and adequate and sustained investments for both asset and facility creation as well as O&M. ULBs are especially constrained by 'inadequate personal and systemic capacities' for social mobilization and implementing user-participatory programs. Finally, the ULBs' almost complete dependence on government grants and schemes prevents them from developing their own capacities for planning and management as the funds do not make adequate provisions for sustained capacity building of this kind.

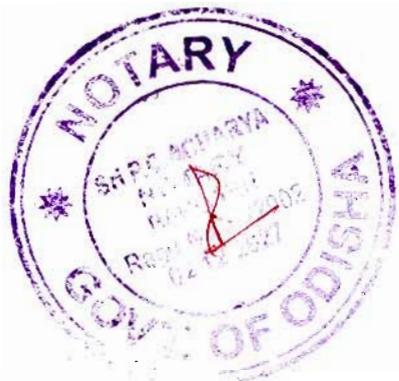




In short, the major shortcomings of the sector are weak and inadequate institutional structures and poor policy frameworks; lack of political will due to low prestige of the sector; inadequate and poorly utilised resources; inappropriate approaches, standards and regulations; and neglect of consumer preferences. This lack of capacity is reflected in both the elected and the executive wings of the ULBs.

Currently capacity building is limited to routine departmental trainings on various thematic and functional issues through the

State Urban Development Agency and its training partners, which also includes water and sanitation interventions. The capacity building interventions are limited to structured trainings and exposure visits within the framework of programmes like JNNURM, AMRUT, and SBM, and are standardised on the lines of the guidelines provided by GoI. Seldom do they respond to the needs of specific ULBs or its staff. And most often they are also limited to the elected representatives and the senior officials of the ULB and as such are of little relevance to the issues on ground.



VISION, GOALS & PRINCIPLES OF THE POLICY

Vision

All cities and towns in Odisha 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.

Goal

All cities and towns in Odisha become totally clean, sanitized (safe), healthy, and liveable cities / towns that are managed by ULBs with citizen and stakeholder participation.

Principles

The policy will be based on the following principles:

1. **Sanitation will be treated as a basic service:** The State Government shall create opportunities and provide necessary support through which, all citizens can have access to sanitation services as their basic entitlement.
2. **Equity and safety of access and use, particularly to the vulnerable and un-served populations:** The State shall endeavour to ensure that no urban citizen, irrespective of socio-economic status, caste, gender, age, or legal status of land/status of migration is denied access to and the use of sanitation services in Odisha's cities. In the case of residents with no tenure security, the State will make effort to resolve tenure issues in providing individual household sanitation facilities or community sanitation facilities. However, where sanitation services are provided in areas

without tenure security, the provision of these services will not entitle the individual/household any legal right to the land. In addition to this, the State and ULBs will ensure that access to such facilities (especially community and public) are maintained with an adequate level of cleanliness, and safety of access, especially for women. Adequate arrangements for access for the differently abled will also be made at these facilities (new / upgraded facilities).

3. **Increased awareness of the collective goal of sanitised cities:** The causal linkages of sanitation with public and environmental health need to be made more explicit to citizens, communities and institutions. In addition to the provision of facilities, sustained improvements in the quality of life are possible when supplemented by hygiene and behaviour change. The State will aim to generate demand for safe sanitation, especially among the un-served households. Citizens, communities, institutions, and cities as a whole will be encouraged to play an active role in both behaviour change towards safe sanitation, and ensuring the adoption and use of safe technology to protect the environment.
4. **Institutional roles, responsibilities and capacity development:** The policy will hinge on progressive articulation in policy and law followed-up by operations that are in line with the spirit of the 74th Constitutional Amendment Act, 1994. Devolution of functions, funds and functionaries will need to be progressively ensured to the ULB with adequate support for building planning, and



management capacities. The quality of city sanitation planning will depend upon the vibrancy of sub-city representative institutions that draw on civil society to ensure active citizen engagement.

5. Emphasis on operations and maintenance of sanitation infrastructure:

One of the key reasons for poor sanitation infrastructure as well as high capital expenditure on sanitation is the lack of operations and maintenance of existing sanitation infrastructure. ULBs will be responsible to ensure that existing sanitation infrastructure is maintained at adequate operational levels, either through official funds, or in partnership with the private sector.

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

The environment (land, air, and water resources) must be considered in all development activities for sanitation provision and management. All planning and implementation will seek to ensure that adverse risks to public health and the environment are adequately minimised at all stages in the sanitation chain – containment, collection, transportation or conveyance, treatment and re-use or disposal. Appropriate protection of the environment shall be applied, including prosecution under the law as required. The State Government will prioritise those cities that directly or indirectly affect rivers or river basins in the state due to discharge of untreated domestic wastewater for setting up pollution abatement systems.

solutions will be contingent upon the needs of that context. For example, if, in the course of evaluation, decentralised and on-site technologies and solutions are context appropriate, then those should be chosen as opposed to blindly applying the choice of networked sewerage systems.

Outcomes

Under the policy, over the next 10 years, the policy will concentrate on achieving the following 6 outcomes:

1. Urban areas are Open-defecation (ODF) and open discharge free (ODF+/+++)
2. Solid waste is safely managed & treated
3. Sewage, septage / faecal sludge and liquid waste is safely managed, treated, and disposed
4. Safety standards and guidelines are followed in the physical handling and management of waste
5. Women and girls have access to safe menstrual hygiene management
6. Cities/towns do not discharge untreated waste (water and faecal waste) into the water bodies of Odisha

These are detailed out in the subsequent section.

7. Choosing technology and solutions appropriate to the context:

Under the policy, the choice of technology and



OUTCOMES OF THE POLICY

1. Urban areas are open-defecation and discharge free

This shall be a key outcome of the sanitation policy. In addition to infrastructure provision, this outcome requires behaviour change at the individual, household, community, institutional and city levels. It is therefore the most crucial and challenging to achieve.

Open defecation free under this policy is understood as the termination of faecal-oral transmission determined by:

- A. No observed open defecation;
- B. All city residents have access to and use of 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
- E. 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:

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

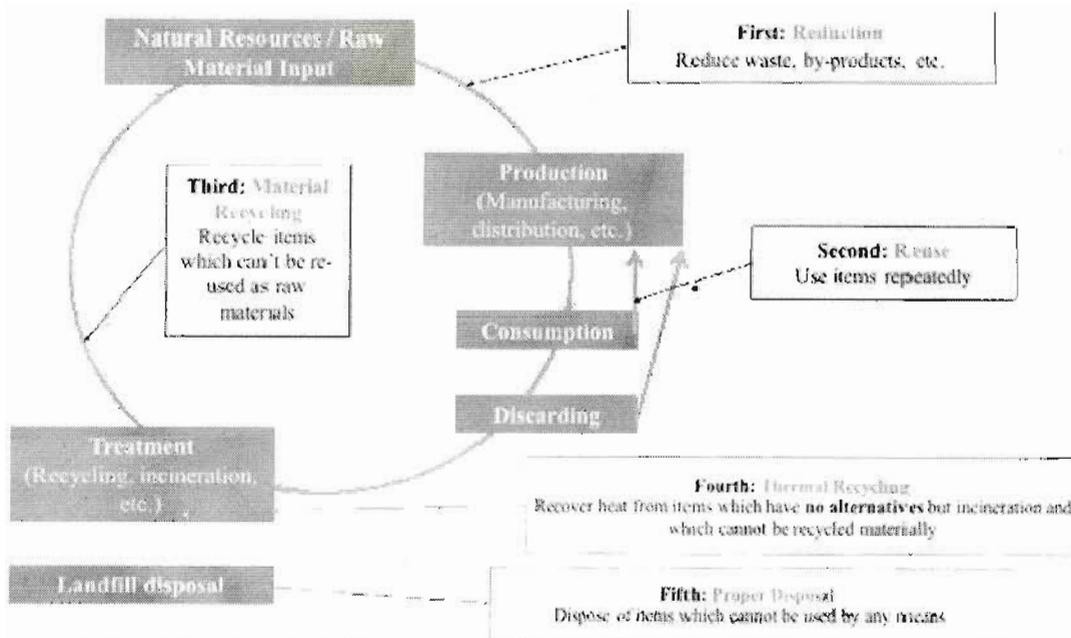
2. Municipal Solid Waste is safely managed and treated

Between March and April, 2016, the Ministry of Environment, Forest and Climate Change, Government of India notified the following rules: (1) Solid Waste Management Rules, 2016; (2) E-Waste (Management) Rules, 2016; (3) Plastic Waste Management Rules, 2016; (4) Construction and Demolition Waste Management Rules, 2016; (5) Bio-Medical Waste Management Rules, 2016; and (6) Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016.

According to the SWM Rules, 2016, solid waste includes solid or semi-solid domestic waste, sanitary waste, commercial waste, institutional waste, catering and market waste, and other non-residential waste, street sweeping, silt removed or collected from surface drains, horticultural waste, agriculture and dairy waste, treated bio-medical waste. This excludes industrial hazardous waste, untreated bio-medical waste and e-waste, battery waste, and radio-active waste. Municipal Solid Waste Management (MSWM) refers to a systematic process that comprises of waste segregation and storage at source, primary collection, secondary storage, transportation, resource recovery, processing, treatment, and final disposal of solid waste.

Odisha will follow a policy whereby minimal amount of waste is sent to landfills by following the three Rs, 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'.





Source: CBR Presentation on "Zero Waste" at Open Seminar Series, New Delhi, 20 June 2015

The aim of this policy is to ensure cleaner streets and neighbourhoods, improved quality of life by reducing health risks (such as vector-at affordable rates. In order to effect this, the state will, in the next 10 years aim to drastically improve the efficiency of waste processed, and eventually move to a decentralised system for processing waste.

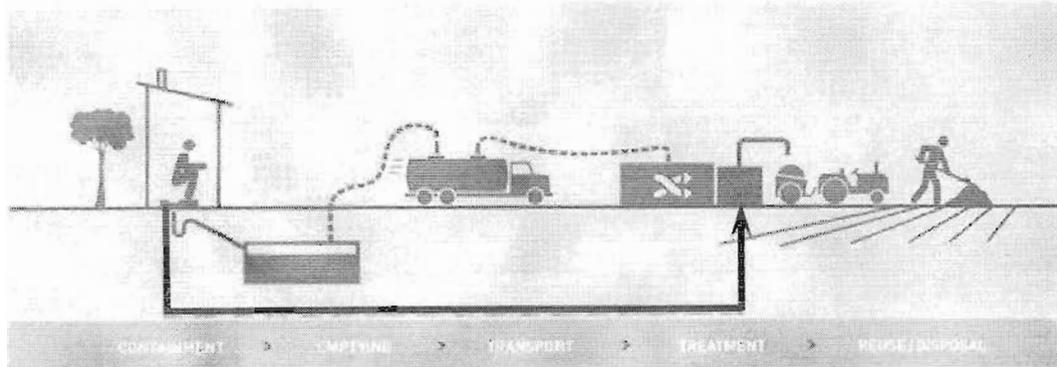
3. Sewage, septage / faecal sludge and liquid waste is safely managed, treated, and disposed

This outcome shall aim to ensure that wherever faecal waste is generated in the urban environment, it is safely confined, regularly collected, safely transported, and

borne diseases like dengue and malaria) associated with garbage piles, and ensure segregation of waste and doorstep collection disposed after adequate treatment; with due care being taken of persons, machinery, materials and surroundings involved in the process. In Odisha, where the majority of households and institutions have access to on-site sanitation, the focus in these 10 years of the policy will be on septage/ faecal sludge management (FSM). In the large cities (population of 100,000 or more) with increasing urban density, the state government may, based on context and demand, bring out a separate action plan for sewerage systems in the city



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



Here toilet construction technologies will ensure safe containment of human faeces from the environment

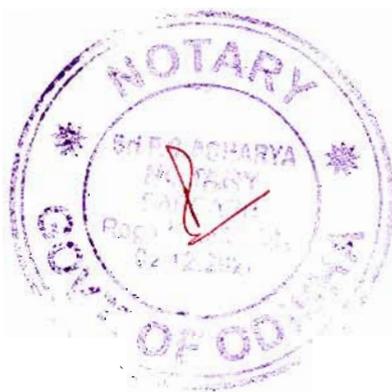
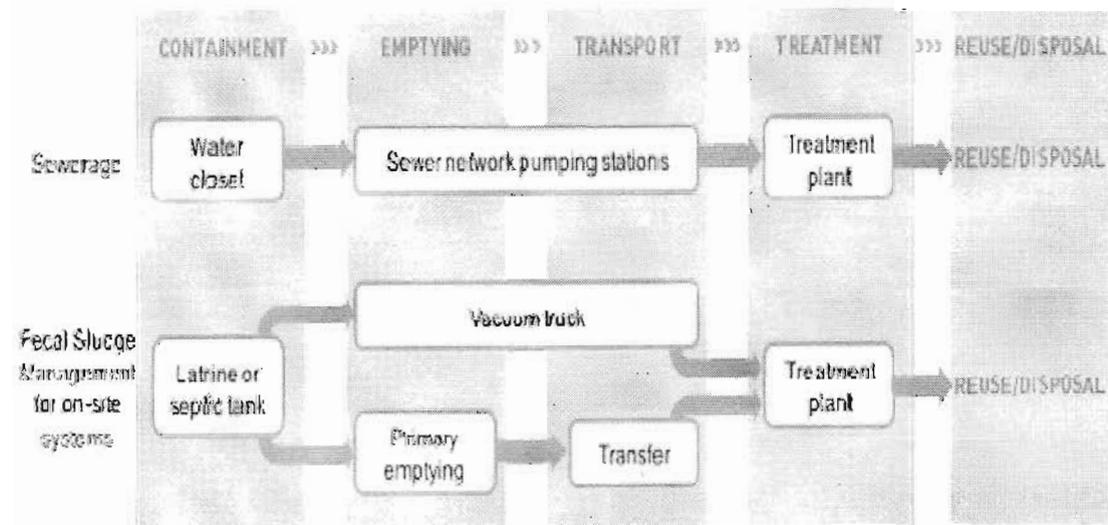
Regular de-sludging of septic tanks and other on-site systems will be undertaken in a safe and scientific manner

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

The State Government will cover the entire sanitation chain as follows:



The State Government will strive to create opportunities and provide necessary support through which all the citizens can have access to septage management services; while enjoining the household to be responsible for maintaining sanitation facilities and ensuring safety as declared by the ULBs.

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 Act was passed by the Union Government on 19th September, 2013 (MSA 2013). While the list of definitions is exhaustive under the MSA 2013, the following definitions are important for the current Policy and have been reproduced below for ready reference:

- **"manual scavenger"** means a person engaged or employed, at the commencement of this Act or at any time thereafter, by an individual or a local authority or an agency or a contractor, for manually cleaning, carrying, disposing of, or otherwise handling in any manner, human excreta in an insanitary latrine or in an open drain or pit into which the human excreta from the insanitary latrines is disposed of, or on a railway track or in such other spaces or premises, as the Central Government or a State Government may notify, before the excreta fully decomposes in such manner as may be prescribed, and the expression "manual scavenging" shall be construed accordingly
- **"hazardous cleaning"** means cleaning by an employee, in relation to a sewer or septic tank, means its manual cleaning by such employee without the employer fulfilling his obligations to provide protective gear and other cleaning devices and ensuring observance of safety precautions, as may be prescribed or

provided in any other law, for the time being in force or rules made thereunder

- **"insanitary latrine"** means a latrine which requires human excreta to be cleaned or otherwise handled manually, either in situ, or in an open drain or pit into which the excreta are discharged or flushed out, before the excreta fully decomposes in such manner as may be prescribed. Provided that a water flush latrine in a railway passenger coach, when cleaned by an employee with the help of such devices and using such protective gear, as the Central Government may notify in this behalf, shall not be deemed to be an insanitary latrine.

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

In 2012, the Joint Monitoring Programme (JMP) of the WHO and UNICEF defined Menstrual Hygiene Management as follows: "Women and adolescent girls are using a **clean menstrual management material** to absorb or collect menstrual blood, that can be **changed in privacy as often as necessary** for the duration of a menstrual period, **using soap and water for washing** the body as required, and having **access to safe and convenient facilities to dispose** of used menstrual management materials. They **understand the basic facts** linked to the menstrual cycle and **how to manage it with dignity and without discomfort or fear.**"

The key challenges faced by women and girls during their periods of menstruation include:





1. A lack of sanitary protection materials leading to embarrassment and stress due to leakage and malodour.
2. A lack of menstrual hygiene-friendly facilities in the home, workplace, and common/community areas, which results in a number of women being unable to change materials in dignity and safety. This results in absence from work and schools.
3. A fear of using the latrine due to staining, the lack of privacy, inadequate disposal facilities, or unsafe location of latrine facilities.

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:



The strategy document will outline the activities that the State Government undertakes to ensure that safe and effective MHM is available to all who need it.

To ensure effective and timely action under the policy, the State Government may bring out appropriate instructions for phasing of cities under each outcome on a yearly basis, and the budget for this may be based on context-specific technologies being proposed/ considered for those cities.

6. Cities/towns do not discharge untreated waste (solid, liquid, and faecal waste) into the water bodies of Odisha

The aim of this outcome is the elimination of urban pollutants – septage / faecal sludge, and municipal solid waste – into the rivers and river basins of Odisha from urban and peri-urban areas thus ensuring the protection, conservation restoration, regeneration and integrated development of rivers and river basins in 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.

IMPLEMENTATION OF THE POLICY

The Housing & Urban Development Department (HUDD) of the Government of Odisha will be responsible for developing a strategy to implement the policy covering all the 6 outcomes, along with the necessary institutional framework, provisions and guidance for planning, monitoring, evaluation, capacity building and funding.

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COLLECTOR BARGARH

ANNEXURE-3

The Odisha  Gazette

EXTRAORDINARY
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HOUSING & URBAN DEVELOPMENT DEPARTMENT

NOTIFICATION

The 30th December, 2016

S.R.O. No. 4/2017— Government of Odisha is pleased to notify “Odisha Urban Sanitation Strategy 2017” aligning with “Odisha Urban Sanitation Policy 2017” notified vide Notification No.30586, dated the 30th December, 2016 for ensuring 100% ODF, strengthening of sanitation chain, Fecal Sludge and sewage Management, Solid Waste Management infrastructure and service delivery and for transforming urban Odisha into community driven, sanitized, safe, healthy and livable towns as mandated in Swachh Bharat Mission (SBM)-Urban and other relevant policies of the Government.

Odisha Urban Sanitation Strategy 2011 notified earlier is hereby superseded.

[No. 30593-HUD-SAN-41/2016/ HUD.]

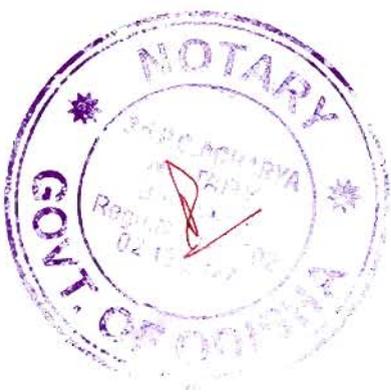
By Order of the Governor

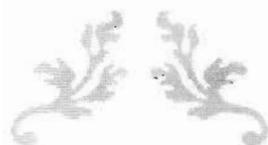
G. MATHI VATHANAN

Commissioner-cum-Secretary to Government

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Bair

COLLECTOR
BARGARH





ODISHA URBAN SANITATION STRATEGY

2017



DECEMBER 30, 2016

GOVERNMENT OF ODISHA, HOUSING & URBAN DEVELOPMENT DEPARTMENT 1ST FLOOR, STATE SECRETARIAT, ANNEX-B, BHUBANESWAR - 751001



List of Abbreviations

ARI	Acute Respiratory Infections	MSW	Municipal Solid Waste
BCC	Behaviour-change Communication	MSWM	Municipal Solid Waste Management
BMC	Bhubaneswar Municipal Corporation	NAC/s	Notified Area Council/s
BSUP	Basic Services for the Urban Poor (JNNURM)	NUSP	National Urban Sanitation Policy, 2008
CBO/s	Community-based Organisation/s	NGO/s	Non-Government Organisation/s
CMD	City Mission Directorate	O&M	Operations and Maintenance
CSP/s	City Sanitation Plan/s	OUSP	Odisha Urban Sanitation Policy
CSTF	City Sanitation Task Force	OPCB	Odisha State Pollution Control Board
DA/s	Development Authority/ies	PCB	Pollution Control Board
DLRMC	District-level Review and Monitoring Committee	PMU	Project Management Unit
DPR/s	Detailed Project Report/s	PHED	Public Health Education Department
DUDA	District Urban Development Authority	PPP/s	Public Private Partnership/s
DUSC	District Urban Sanitation Committee	RAY	Rajiv Awas Yojana
FSM	Faecal Sludge Management	RIT/s	Regional Improvement Trust/s
FSTP	Faecal Sludge Treatment Plant	SBM	Swachh Bharat Mission
GOI/GoI	Government of India	SBM(U)	Swachh Bharat Mission (Urban)
JMP	Joint Monitoring Programme of the WHO and UNICEF	SDGs	Sustainable Development Goals
JNNURM	Jawaharlal Nehru National Urban Renewal Mission	SFD	Sludge-flow Diagram
HPC	High Powered Committee	SHG/s	Self-help Group/s
HRD	Human Resource Development	SSD	State Sanitation Directorate
HRM	Human Resource Management	STP	Sewage Treatment Plant
HUDD	Housing & Urban Development Department, G/o Odisha	SUSF	State Urban Sanitation Fund
IEC	Information, Education and Communication	TNA	Training Needs Assessment
ILCS	Integrated Low-Cost Sanitation Scheme	OD	Open Defecation
M&E	Monitoring & evaluation	ODF	Open Defecation Free
M/o UD	Ministry of Urban Development, Government of India	ODF+/++	Open Discharge Free
MDGs	Millennium Development Goals	OWSSB	Odisha Water Supply and Sanitation Board
MHM	Menstrual Hygiene Management	PPCP	Public-Private-Community Participation
MIS	Management Information System	ST/s	Statutory Town/s
MEO	Mosquito Larvicidal Oil	ULB/s	Urban Local Body/ies
MSA 2013	The Prohibition of Employment as Manual Scavengers and their	UNICEF	United Nations Children's Education Fund
		WASH	Water, Sanitation, and Hygiene
		WHO	World Health Organisation



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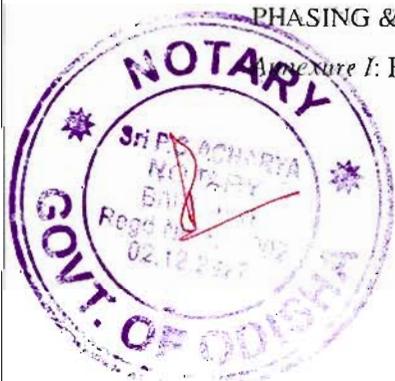
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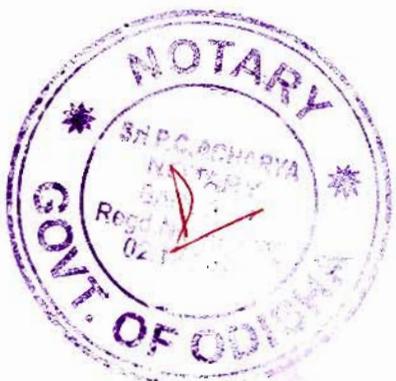
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INTRODUCTION

The Government of Odisha has introduced a new Urban Sanitation Policy 2017. This policy defines a clear vision and goal to make all cities and towns in the State totally clean, sanitised, safe, healthy and liveable, managed by ULBs with active citizen and stakeholder participation.

The policy is based on the following principles:

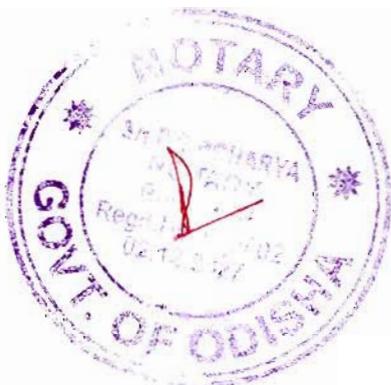
1. Sanitation will be treated as a basic service;
2. Equity and safety of access and use shall be ensured, particularly to the vulnerable and unserved populations;
3. Efforts shall be undertaken to increase the awareness of the collective goal of sanitised cities;
4. Institutional roles and responsibilities will be defined and capacity will be developed;
5. There shall be emphasis on operations and maintenance of sanitation infrastructure;
6. Integration of broader environmental concerns in the provisions of urban sanitation service delivery; and
7. Technologies and solutions shall be chosen based on their appropriateness to the context of

the cities and towns where they are to be implemented.

Over the next 10 years, the policy will concentrate on achieving the following 6 outcomes:

1. Urban areas are Open-Defecation (ODF) and Open-Discharge Free (ODF+++)
2. Solid waste is safely managed and treated
3. Sewage, septage / faecal sludge, and liquid waste is safely managed, treated, and disposed
4. Safety standards and guidelines are followed in the physical handling and management of waste.
5. Women and girls have access to safe menstrual hygiene management
6. Cities / towns do not discharge untreated waste (water and faecal waste) into the water bodies of Odisha.

The policy has been notified on date 30.12.2016 vide Notification No. 30586. This document presents the Government of Odisha's strategic actions to achieve the policy.



OUTCOMES

1. Urban areas are open-defecation and discharge free

Under the policy, open defecation free (ODF) is understood as the termination of faecal-oral transmission determined by:

- A. No observed open defecation;
- B. All city residents have access to and use of 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
- E. All city residents are engaged in safe hygiene practices, including hand washing;

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:

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

For this, all ULBs shall ensure that:

- 1. **All households have adequate household or community sanitation infrastructure:** In dwelling units where space is not a constraint, all individuals within a household should have access to a functional household toilet connected either to a household

or community septic tank / sanitary on-site systems, or to a sewerage system as per the norms laid out by the State Government. If, for constraints of space, tenure security, or economic constraints in constructing household-level infrastructure, the ULB should promote access to functional community-level toilets, connected either to a septic tank / sanitary on-site systems, or to a sewerage system as per the norms laid out by the State Government.

- 2. **Adequate and equitable public sanitation infrastructure:** ULBs will ensure that all city residents and the floating population within cities have access to functional sanitation infrastructure. This may be determined by a city-wide survey which will identify un-served and under-served areas of the city (funds may be sourced from Government / private sources for this). ULBs will take particular care to ensure that this access is not denied to vulnerable populations such as women, children, the aged, the poor / slum dwellers, the differently-abled, or any other attributes such as caste, which may be used to deny people access to functional sanitation infrastructure. In the case of the differently-abled, necessary design provisions, such as ramps, rails, wheel-chair access, and even braille signage may be provided at the site of community / public toilet blocks.





- 3. **Safe technology is used in the construction, maintenance and management of sanitation infrastructure:** This means that technology used in the construction of toilet infrastructure in all urban areas is such that there is:
 - a. no contamination of surface soil, ground water or surface water;
 - b. that excreta are inaccessible to flies, animals, or other vectors of contamination and disease;
 - c. that there is no handling of fresh excreta; and
 - d. the environment is free from malodour and sight of human faeces and liquid waste;
 - e. the technology must be culturally suitable / acceptable

To ensure this, all ULBs in the State will take necessary measures to ensure that existing and new sanitation infrastructure meets these conditions. The State Government and ULBs should bring out necessary technical guidelines in this regard, ensure that building codes also include these provisions in their notifications and procedures for construction approval. In addition to guidelines, notifications and building codes, ULBs will ensure functional sewerage and septage management, depending on the local contexts. The competent authority within the jurisdictional area of the ULB will bring out necessary bye-laws covering this, and other guidelines for household-based sanitation infrastructure.

outcomes is the lack of basic services such as water, electricity, and waste management, and the maintenance of the infrastructure created. ULBs shall therefore ensure that all sanitation infrastructure, whether privately managed or not, is functional and does not result in open discharge of waste into the environment. Necessary arrangements for water supply for sanitation must also be made, especially to un-served areas.

- 5. **Behaviour Change Communication:** Open defecation is as much a function of poor and/or non-operational infrastructure (supply-side), as a function of a socio-cultural behaviour choice to defecate in the open (demand-side). In urban areas, as a function of density, this choice can translate into poor public health due to faecal-oral transmission. As a result, generating increased awareness about sanitation, public health and hygiene, and environmental pollution and protection should be undertaken by the ULB: this may be undertaken in conjunction NGOs, and civil society groups.

This outcome shall be closely monitored by the State. In light of the current situation, funding available under various programs, and the time that will be needed to construct and operationalisethe treatment infrastructure, the State will look at a three stage achievement of open defecation and discharge city-wise as follows:

- 4. **Operations & Maintenance:** One of the key reasons for poor sanitation



Stage	Definition
Stage 1 - Basic ODF	<ol style="list-style-type: none"> 1. No OD within city limits; 2. All city residents have access to household, community or public latrines 3. All insanitary latrines converted to sanitary latrines, and no incidence of Manual Scavenging observed in any form: <p><i>[This definition is the first stop for a city in it's efforts towards improved sanitation. It is also a measure of the successful implementation of the SBM(U) as all the necessary components of it's achievement are funded under the mission]</i></p>
Stage II: ODF +	<ol style="list-style-type: none"> 1. Stage 1 + 2. No undesignated discharge of septage, sewage and black water <p><i>[ODF + goes beyond the basic access to sanitation to a more desired level of access, and brings into consideration aspects of environmental sanitation.]</i></p>
Stage III: ODF ++	<ol style="list-style-type: none"> 1. Stage I+ 2. No open discharge of human faecal and liquid waste, and safe containment, transport, treatment, and disposal of all human faecal waste, and waste water (black and grey) <p><i>[ODF++ matches national and global standards, including Target 6.2 of the SDGs, and the National Urban Sanitation Policy (NUSP) 2008 which envisages 100% sanitised cities. It covers the entire sanitation chain, and attempts to target the environmental and public health impacts of poor and inadequate sanitation characterised by OD]</i></p>

While cities/towns may differ in the time taken to reach the third stage, it is expected that all areas defined as statutory towns by the G/o Odisha at the time the policy is notified, will reach ODF++ status by the end of the policy period. The 10-year time-frame to reach ODF++ status has been developed based on the consideration that it will take time for all urban areas to get the desired treatment infrastructure and ensure the desired level of behavioural change. The detailed framework of these three stages, the related indicators and measurements of success are provided in *Annexure 1*.

2. Municipal Solid Waste is safely managed and treated

create value out of waste and produce a paradigm shift from garbage as 'disposable' to 'renewable resource'.

The policy's stated aim is to ensure minimal amount of waste is sent to landfills by following the three Rs, namely reduce, reuse, and recycle. The ultimate goal will be to

The proposed strategic interventions under MSWM for Odisha will include:





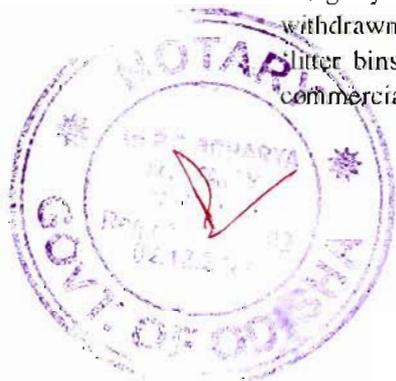
1. **Reduction of solid waste:** The State Government and ULBs shall treat waste as potential resources and take necessary action to encourage the re-use of waste material. For example, the reuse of plastics could be encouraged through a system of incentives and fines in shops, or even a reduction in food waste could be encouraged through innovative tie-ups with hotels, restaurants, and social functions to provide excess food to homeless shelters. This is an important step in the zero-waste policy of Odisha.

2. **Door-to-door collection of MSW and segregation at source:**

- a. ULBs will encourage all households and institutions (waste generators) to segregate their waste at source, and store this waste in a segregated manner. Door-to-door collection will ensure that only segregated waste is collected from all households and institutions, and transported in its segregated form to the secondary storage points / depots / transfer stations.
- b. MSW will be segregated into groups as follows – bio-degradable waste (wet and dry waste), non-biodegradable waste (including plastics), electronic waste (eWaste), bio-medical waste, and hazardous waste.
- c. Community-level large and unsightly garbage bins will be withdrawn from the streets and 'litter bins' will be limited to busy commercial areas and public places.

Areas that generate bulk waste such as markets, including natural markets of street vendors, shall be monitored to ensure that safe storage and collection of waste is regularly undertaken such that there is no littering. It shall be the responsibility of the vendors to ensure that waste generated shall not be disposed of in any other location except in the bins.

- d. The ULB shall be responsible for daily collection of waste from all areas – residential areas, including slums and open squatter areas, institutions such as hotels, restaurants, office complexes, vending markets and other commercial areas.
- e. Households and institutions should take special care to ensure that construction & demolition (C&D) waste is stored and disposed of in the manner specified by the State Government, in accordance with the C&D Waste Rules, 2016.
- f. Street sweeping is to be organised by ULBs across all areas of the city on a daily basis. Those persons or institutions organising events (e.g. weddings, processions, and other events) should ensure that during and after the event, adequate arrangements are made to collect and store the waste for collection by the ULB.
- g. The State Government and ULBs should institute a system of incentives and fines to ensure that people, households and institutions

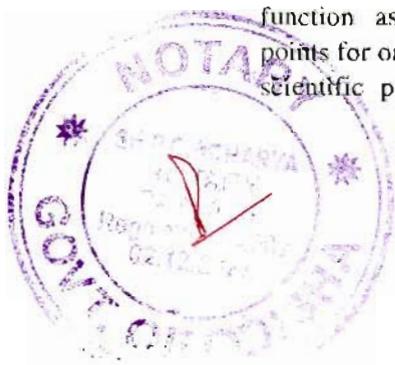


do not litter the open environment, including in constructed and natural drains.

- h. Special care is to be taken with crematoria and other institutions dealing with the disposal of human and / or animal bodies (e.g. slaughter houses) to ensure that such disposal is properly monitored, follows set norms, and does not result in pollution of water bodies of the State.
3. **Secondary storage points / depots / transfer stations:**
 - a. After collection from households and institutions, waste shall be transported and stored in secondary storage points / depots / transfer stations
 - b. These secondary storage points / depots / transfer stations should have facilities to store waste in a segregated form – bio-degradable waste (wet and dry waste), non-biodegradable waste (including plastics), electronic waste (eWaste), bio-medical waste, C&D waste, and hazardous waste.
 - c. These facilities should be constructed in accordance with the respective 2016 rules for temporary storage of waste prior to treatment and/or disposal.
 - d. At these storage points / depots / transfer stations, rag-pickers and other social entrepreneurs shall be encouraged to remove constituents such as plastic, glass and paper for recycle and reuse.
 - e. Care should be taken to ensure that these secondary storage points / depots / transfer stations only function as temporary collection points for onward transportation for scientific processing and disposal
 4. **Scientific transportation of MSW to a processing site:**
 - a. The waste shall be transported in a segregated manner by vehicles to appropriate sites for scientific processing.
 - b. Waste is to be handled mechanically across the MSW value chain with minimum human contact. Modern fleet management services with covered transportation systems to be adopted for the transportation of waste.
 - c. The ULB shall ensure that all those handling waste through the MSW chain, whether Government or non-government players, should have access to and use adequate safety gear, including protective clothing, tools and tackles. State Government shall evolve guidelines and rules for this from time-to-time.
 5. **Scientific processing of MSW:** For waste which cannot be recycled or re-used, it shall be processed using common technologies. Some indicative technologies include composting, waste-to-energy, anaerobic biomethanisation, and Refuse-derived Fuel (RDF). However, the State Government and ULBs shall be free to evolve innovative scientific and ecologically

and do not become permanent dumping sites.

- f. For waste being dumped in secondary storage points / depots / transfer stations without any removal or processing over many years. ULBs will reclaim these spaces in a time-bound manner. This process shall be completed within one year from setting up of processing plant and scientific land fill facility.



safe technological options for processing of MSW particular to the context of Odisha as long as these options conform to the rules for processing of the waste (by type of waste) set out by Government of India from time-to-time.

6. **Disposal through common Sanitary Landfill Sites (SLF):**The final inert material will be disposed in the common sanitary landfill facility.

- a. Landfill sites shall be used sparingly and only as a last resort in waste management hierarchy. Land filling of mixed waste must be avoided, unless the waste is found unsuitable for waste processing. Under unavoidable circumstances or till installation of alternate facilities, land-filling shall be done following proper norms.
- b. From time-to-time, the State Government will develop norms for clustering of ULBs for this purpose and review these norms and the implementation of this policy on an annual basis. As per the SWM Rules 2016, Commissioner-cum-Secretary, HUDD, (as the Secretary i/c of urban development), shall be the competent authority for a clustering strategy for SWM. In the event that it is strategically efficient to geographically cluster cities across districts, a committee of District Collectors may be formed. This committee will be chaired by the DC where the cluster facility is being proposed. The committee will consider all strategic options and suggest a cluster strategy to Commissioner-cum-Secretary, HUDD for approval.

c. For clustering, a site assessment considering the norms set out under

SWM Rules 2016, and in consultation with all stakeholders, will be undertaken, before proposing a clustering strategy for approval of Commissioner-cum-Secretary, HUDD. Payments to the cluster facility shall be on the basis of volume and weight, and not distance from the facility.

- d. Old landfill sites that are non-functional or insanitary are to be identified and closed as per the provisions of the Solid Waste Management Rules, 2016 or as amended from time-to-time.

7. **The informal sector as a service provider under MSWM in Odisha:**

The State Government acknowledges that the informal sector, including rag pickers play a very important role in the segregation of waste. This is particularly so in Odisha where urbanization is dispersed across the State in pockets of low density, and clustering of waste collection and setting-up waste collection plants is not a viable option. Therefore, a decentralised system of composting biodegradable waste, and recycling of non-biodegradable waste through a network of rag-pickers is to be promoted throughout the State. ULBs will network with the rag pickers and *kabadiwallas* in the MSW system, thus promoting their livelihood. Wherever possible existing rag-pickers will be used in the door-to-door collection system, thus eliminating the need for community waste bins. They will also be given access to secondary collection points so that segregation of plastic, glass and paper can be recycled by them through existing networks. ULBs will ensure the availability of necessary safety clothing and gear for the rag-





pickers / *kabadiwallas* in this process. Stringent steps will be taken by ULBs to ensure that the rag-pickers / *kabadiwallas* are not exploited in the course of their work.

8. Engaging the public as responsible citizens for MSWM:

The successful implementation and management of MSW is dependent on community participation involving the local residents.

- a. Through effective IEC programmes awareness needs to be created regarding sanitation amongst households, industries, elected body representatives and various other stakeholders. State Government shall roll out such IEC programs across ULBs in a phased manner in the next one year.
- b. Through NGOs, SHGs, and other citizens' groups such as RWAs segregation shall be strengthened. Further revenue generation through segregation of recyclables and sale of same thereby providing livelihood for rag pickers shall be encouraged.
- c. The State Government shall encourage sound contracting practice. In order to do this, the state government shall evolve model templates for ULBs to contract NGOs, CBOs and SHGs/federations of SHGs with clear operational goals, and service-level benchmark standards.

9. Enforcement of SW Rules: The State Government shall promote the enforcement of SWM Rules 2016 (or as amended by the Government of India from time to time). ULBs are expected to submit rules periodically regarding

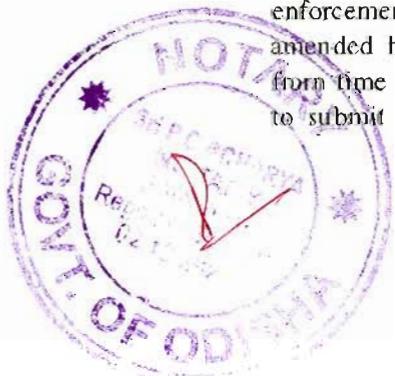
practice and compliance. The State Government shall enforce compliance by holding the Executive Officers of the ULBs accountable. The State Government shall also extend all technical, institutional and financial support for assisting the ULBs in SWM in compliance with SWM Rules 2016.

A tabular representation of the activities and corresponding responsibilities as outlined by the SWM Rules 2016 is described in *Annexure III*.

As per clause 23 of the SWM Rules 2016, an *inter-departmental advisory body for SWM* in the State is being formed under the chairpersonship of Commissioner-cum-Secretary, Housing & Urban Development Department, Government of Odisha; membership details may be seen in *Annexure IV*.

Inter alia, this advisory body shall:—

- i. Meet at least once in six months
- ii. Review matters related to the implementation of this implementation plan vis-à-vis the provisions of the Solid Waste Management Rules 2016 and the Odisha Urban Sanitation Policy 2017 (and subsequent revisions).
- iii. Advise the Government of Odisha to take measures that are necessary for the expeditious and appropriate implementation of this plan.
- iv. Shall produce a review report covering the implementation plan. This shall be submitted to OPCB, G/o Odisha for necessary action under the SWM Rules 2016. It shall also be placed before the High Powered Committee (HPC) Constituted under the Odisha Urban



Sanitation Policy 2017 for their perusal and consideration.

As per clause 22 of the SWM Rules 2016, the following should be *incorporated into the SWM plans of the local bodies*:—

- a. ULBs will encourage all households and institutions (waste generators) to segregate their waste at source, and store this waste in a segregated manner. Door-to-door collection will ensure that only segregated waste is collected from all households and institutions, and transported in its segregated form to the secondary storage points / depots / transfer stations.
 - b. MSW will be segregated into groups as follows – bio-degradable waste (wet and dry waste), non-biodegradable waste (including plastics), electronic waste (eWaste), bio-medical waste, and hazardous waste. ULBs will issue necessary guidance to citizens for procedures for segregation and collection of segregated waste.
 - c. Community-level large and unsightly garbage bins will be withdrawn from the streets and 'litter bins' will be limited to busy commercial areas and public places. Areas that generate bulk waste such as markets, including natural markets of street vendors, shall be monitored to ensure that safe storage and collection of waste is regularly undertaken such that there is no littering. It shall be the responsibility of the vendors to ensure that waste generated shall not be disposed of in any other location except in the bins designated by ULBs.
 - d. The ULB shall be responsible for daily collection of waste from all areas – residential areas, including slums and open squatter areas, institutions such as hotels, restaurants, office complexes, vending markets and other commercial areas.
 - e. Households and institutions should take special care to ensure that construction & demolition (C&D) waste is stored and disposed of in the manner specified by the State Government, in accordance with the C&D Waste Rules, 2016. ULB shall develop a standard operating procedure for C&D Waste Management within 90 days from the issue of this policy.
 - f. Street sweeping is to be organised by ULBs across all areas of the city on a daily basis. Those persons or institutions organising events (e.g. weddings, processions, and other events) should ensure that during and after the event, adequate arrangements are made to collect and store the waste for collection by the ULB.
 - g. The State Government and ULBs should institute a system of incentives and fines to ensure that people, households and institutions do not litter the open environment, including in constructed and natural drains.
- Special care is to be taken with crematoria and other institutions dealing with the disposal of human and / or animal bodies (e.g. slaughter houses) to ensure that such disposal is properly monitored, follows set norms, and does not result in pollution of water bodies of the State. ULB bye-laws should cover rules for crematoria and burial grounds, slaughter house and waste and disposal of animal carcasses.

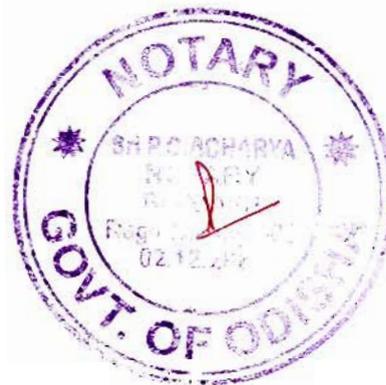
10. **Monitoring:** ULBs shall ensure the systematic training of sanitation staff to delivery public services efficiently and improve their communication skills. ULBs shall report to the State Government (HUDD) on a monthly basis about the actions taken under this. The State will look at a three-stage achievement of zero waste across the SW chain as follows:—



STAGES	COLLECTION	TRANSPORTATION	PROCESSING	DISPOSAL
<p>Stage 1 [Target Wards (TW): At least 50% of ULBs' wards]</p>	<ul style="list-style-type: none"> Target wards are fully serviced for daily door-to-door collection & segregation of waste at source Community dumping bins from undesignated spaces in all TWs are eliminated, except from designated secondary points 100% Institutions segregate waste at source Rag-pickers' associations in the city are formally incorporated into the MSW Plan of the city IEC for SWM targets the whole city. Intensive action in TWs for segregation at source and re-use 	<ul style="list-style-type: none"> Waste from TWs transported in a segregated form by vehicles to bulk collection systems Waste workers handle waste mechanically and with full safety gear From Non-TWs, non-segregated waste is transported to secondary collection sites for segregation 	<ul style="list-style-type: none"> Identification of suitable sites for solid waste processing facilities complete (cluster-based approach may be used in line with the 2016 rules) All waste workers are provided with and use adequate safety gear in processing of waste For SW being dumped in ULB dump yards without processing, ULBs reclaim these dump yards. If necessary, new secondary collection sites are identified Possible processing technologies for different kinds of waste are explored in line with the 2016 rules. Rag-pickers' Associations have access to recyclable material (plastic / paper etc.) at secondary collection sites 	<ul style="list-style-type: none"> Only inert matter reaches the sanitary landfill sites Minimal MSW reaches the sanitary landfill sites as inert matter.
<p>Stage 2 [Target Wards (TW): At least 80% of ULBs' wards]</p>	<ul style="list-style-type: none"> TWs are fully serviced for daily door to door collection & segregation of waste at source 100% institutions segregate waste at source Community dumping bins from undesignated spaces in all TWs are eliminated, except from designated secondary points Engagement of Rag-pickers' associations are piloted in TWs IEC for SWM targets the whole city for intensive action in TWs for segregation at source and re-use The ULB institutes a system of fines (for individuals and households) and rewards (for wards and communities) 	<ul style="list-style-type: none"> Waste from TWs transported in a segregated form by vehicles to bulk collection systems Waste workers handle waste mechanically and with full safety gear From Non-TWs, non-segregated waste is transported to secondary collection sites for segregation 	<ul style="list-style-type: none"> SW processing facilities constructed Secondary collection sites are in use No ULB dump yards have old, unprocessed solid waste All waste workers use adequate safety gear in the processing of waste Rag-pickers' Associations have access to recyclable material (plastic / paper etc.) at secondary collection sites 	



STAGES	COLLECTION	TRANSPORTATION	PROCESSING	DISPOSAL
<p>Stage 3 [Target Wards (TW): 100% of ULBs' wards]</p>	<ul style="list-style-type: none"> • TWs are fully serviced for door to door collection & segregation of waste at source • 100% institutions segregate waste at source • No community dumping bins are available • Engagement of rag-pickers' associations are scaled up in TWs • IEC for SWM targets the whole city • The system of fines (for individuals and households) and rewards (for wards and communities) is operational 	<ul style="list-style-type: none"> • Waste from TWs transported in a segregated form by vehicles to bulk collection systems • Waste workers handle waste mechanically and with full safety gear • From Non-TWs, non-segregated waste is transported to secondary sites for segregation 	<ul style="list-style-type: none"> • Rag-pickers' Associations have access to recyclable material (plastic / paper etc.) at secondary collection sites • All SW generated in the ULB (minus the recyclable material) reaches the processing facilities 	



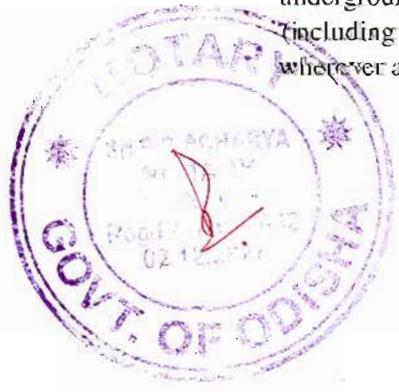
3. Sewage, septage / faecal sludge and liquid waste is safely managed, treated, and disposed

This outcome shall aim to ensure that wherever faecal waste is generated in the urban environment, it 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.

The State Government and ULBs will undertake the following activities under this outcome:

- 1. *City sanitation plans (CSPs)* will include septage management / FSM plans. These CSPs will include elements of the guidelines released by the State Government as below, and will cover the entire built environment of the city i.e. both households and non-household institutions within the city.
- 2. The State Government will draft *sewerage and septage management guidelines* for cities which will cover:
 - a. *Safety standards* for septic tanks and other on-site systems conforming to Government of India and State Government standards as issued from time-to-time.
 - b. *Safe Transportation of sludge*, including a checklist of tools and equipment to be kept with the transportation vehicle, and norms for maintenance of piped underground sewerage systems (including pumping stations) wherever applicable.

- c. *Setting standards and norms for safely treated septage/sewage and effluent, and safety and public health.* This will cover environmental standards (not already set by the Government of India) for discharge/disposal of effluent and sludge, post-treatment, into water bodies and land, norms for site selection of treatment facilities, and safety standards for workers involved in safe sanitary disposal and management, including identification of hazards and minimum-worker safety and process standards to be maintained.
- d. *Service delivery standards* for both sewerage and septage management at the city level,
- e. *Engagement of non-government stakeholders* including the public through TEC campaigns by the ULB, the private sector in infrastructure provision and operations and maintenance (O&M) through public-private-partnerships (PPPs), and the private informal sector in service delivery of FSM at the city / district levels.
- f. *Regulation, coordination and ULB primacy:* this will cover strategies for cost recovery (e.g. user charges) of service delivery, and clear planning and implementation roles for ULBs in this process.
- g. *O&M and Monitoring & evaluation (M&E):* these guidelines must prioritise not just construction of these facilities, but the O&M of these facilities for a minimum of 10 years post construction. CSPs must take into



consideration the O&M cost, and how these will be met (whether through existing ULB funds, or in partnership with the private sector, NGOs / CBOs or SHGs. The ULBs will ensure close monitoring of the infrastructure creation and O&M thereof; the State Government will have a half-yearly review of these facilities and their operationality.

- h. **IEC and BCC:** This will be expected at three levels – the general public, septic tank masons, and septage transporters and other private operators. At the level of the general public, this includes the need for proper construction of on-site systems, and the public health effects of poor sanitation. *Inter alia*, targets for this will be resident welfare associations (RWAs), CBOs, SHGs, and schools (with a specific focus on hygiene behaviour and public health impact). The ULBs will identify septic tank masons that are involved in the construction of on-site systems and sensitize them on environmental norms and train them in the guidelines. Wherever feasible, ULBs may consider ground-verification and spot checks on such constructed infrastructure. Finally, IEC campaigns will also cover septage transporters and other private operators to ensure safe handling of septage at the time of desludging and transportation. The State Government will develop these IEC campaigns and training programs, train the master trainers in this regard and ensure all urban areas are covered for this.

- i. **Capacity building and training:** The State Government will sensitise ULB staff and elected representatives. In order to do this, master trainers will be identified, and training of trainer sessions will be conducted for these master trainers. A calendar year of training will then be devised. The ULBs shall ensure that the relevant officials / representatives are mandated to attend these meetings.

- 3. The State through the ULBs, will ensure provision of these services to both **household, and non-household facilities** – public, community and establishment - where they exist in the city.
- 4. **The district administration will ensure the following:**
 - a. Provision land for development of sanitation infrastructure for ULBs, either individually, or in a cluster as per the plan for each district.
 - b. Land is to be identified based on technological and environmental considerations. This selection shall be approved by the competent authority identified by the State. The competent authority shall, among other considerations specified under the law, consider quantity of waste generated, and compliance with environmental laws.
 - c. Ensure monitoring and evaluation for septage / sewage management of all ULBs within the district.
- 5. **ULBs will ensure the following:**
 - a. Nomination of a nodal officer for septage / sewage management in the city.
 - b. Extension of full support for capacity building initiatives,



including ensuring that the appropriate officials / elected representatives are mandated to attend trainings

- c. Ensure that all sanitation infrastructure (already created and planned under the CSP) is operated and maintained.
- d. Engagement of the general public under this plan
- e. Facilitation of engagement of the private and informal sector in infrastructure creation, O&M, and service delivery in the city.
- f. Ensure adequate budgetary provision for city-wide sanitation delivery under the CSP

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 Act was passed by the Union Government on 19th September, 2013 (MSA 2013). The State Government, in particular the Housing & Urban Development Department (HUDD), will take necessary action to ensure the successful implementation of this act, in collaboration with the relevant department of the State responsible for implementation of the MSA 2013.

This strategy will support that implementation by taking the following action at the State and ULB level:

- 1. Ensure that the State rules under the MSA 2013 are passed with clear indications of responsibilities and roles for the State Government departments and ULBs.
- 2. Ensure that all relevant State Government and ULB officials (including law enforcement), as well as

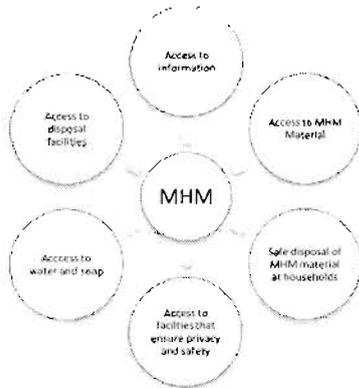
elected representatives are familiar with the provisions of the MSA 2013 and the relevant rules.

- 3. Identify insanitary latrines in the State for conversion into sanitary latrines. These may be prioritised under SBM(U) action.
- 4. Ensure that the urban public are sensitised as to the provisions of the law and come forward voluntarily to convert insanitary latrines into sanitary latrines, and refrain from employing manual scavengers.
- 5. Take necessary steps (including legislation, resolutions and fines) to ensure that in the future no insanitary latrines are no longer constructed in the State, and manual scavengers are not engaged for these latrines.
- 6. Ensure that guidelines for sanitation infrastructure at the household and non-household institutional levels covers the construction of sanitary and ecologically safe toilets (and sub-structures) that require neither manual scavenging, nor hazardous cleaning.

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

In order to promote safe and dignified MHM in urban areas, the State Government and ULBs shall have a five-pronged approach to public, community, and private institutional sanitation facilities as follows:





1. ULBs shall ensure that all IEC and BCC programmes for sanitation in the State are also designed to include sessions on MHM that provide access to accurate and pragmatic information on menstruation for women and girls. Additionally, these programmes shall also target sensitization of men, with a view to dispelling myths surrounding menstruation and ensuring the safety of women in accessing public and community facilities at all times. Particular attention must be paid to MHM for young women and the State Government will work with the education, and women and child, and health departments to devise and roll-out MHM and sanitation programmes in urban schools and colleges across Odisha.
2. ULBs shall ensure that hygiene materials such as sanitary napkins are widely available to women at public and community facilities. ULBs can explore tie-ups with NGOs to provide sanitary materials to women at/near these facilities at affordable rates.
3. ULBs to promote household-level safe disposal of hygiene material such as used sanitary napkins.
4. ULBs will ensure that all facilities for sanitation provide dignity and safety to

menstruating women and girls. For example, entrances to public/community toilets for women should be at a distance from those for men. This entrance should be well lit, and adequate safety precautions should be taken to avoid loitering by men around public / community toilets. Additionally, disposal bins for sanitary napkins should be located within the toilet stalls itself, and disposal material should be made available to women and girls inside the toilet block for women. In community toilets, and in the event that women choose to use cloth napkins, a separate area for washing, drying, and disposal of these napkins must be made within the toilet block; not outside in the compound, or any area visible to the outsiders.

5. ULBs are to ensure that all sanitation facilities have access to water and soap within the toilet blocks for women and girls.
6. Finally, all ULBs are to ensure that sanitation facilities will have access to disposal facilities for used menstrual material. This includes:—
 - a. Bins being placed within the toilet stalls itself to allow for privacy when changing
 - b. Bins are emptied regularly and the disposed menstrual waste is also regularly collected by the ULB.
 - c. Disposed menstrual material may be treated as bio-medical / hazardous waste and disposal of this waste must follow the rules for treatment and disposal of bio-medical / hazardous waste accordingly.

ULBs will also ensure that institutional toilets built by private entities (for example, work places, etc.), or public entities (e.g. schools, hospitals) also follow this five-pronged policy. Regular monitoring will be undertaken by



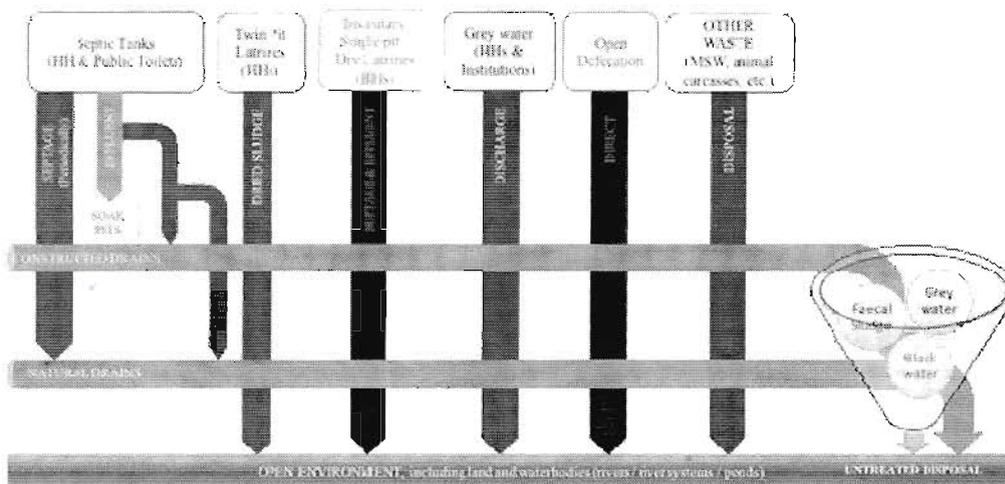
ULBs to ensure that this system is functional across the city. State guidelines for community and public toilets will include these provisions.

6. Cities/towns do not discharge untreated waste (solid, liquid, and faecal waste) into the water bodies of Odisha

At present, (See graph 1) 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.

Graph 1: Current flow of septage and waste water into the open environment

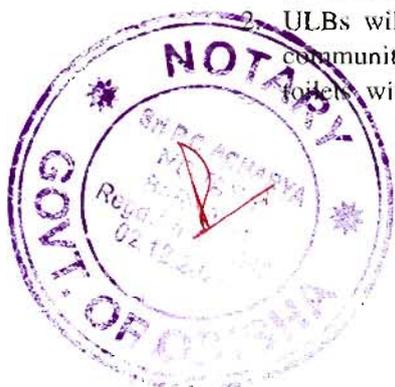


1. As an immediate strategy, and as has been stated above, *open defecation and insanitary latrines will be eliminated*. Insanitary latrines will be converted to sanitary latrines as per the MSA 2013, households defecating in the open because of a lack of household latrines will be provided access either to an individual household latrine (under SBM, or other relevant programmes of the State or Central Government), or to a community toilet.

ULBs will ensure that household, community, public and institutional toilets with on-site sanitation will

be provided with and follow *safe standards of FSM / septage management* as specified in this Policy. (See Graph 2 for details)

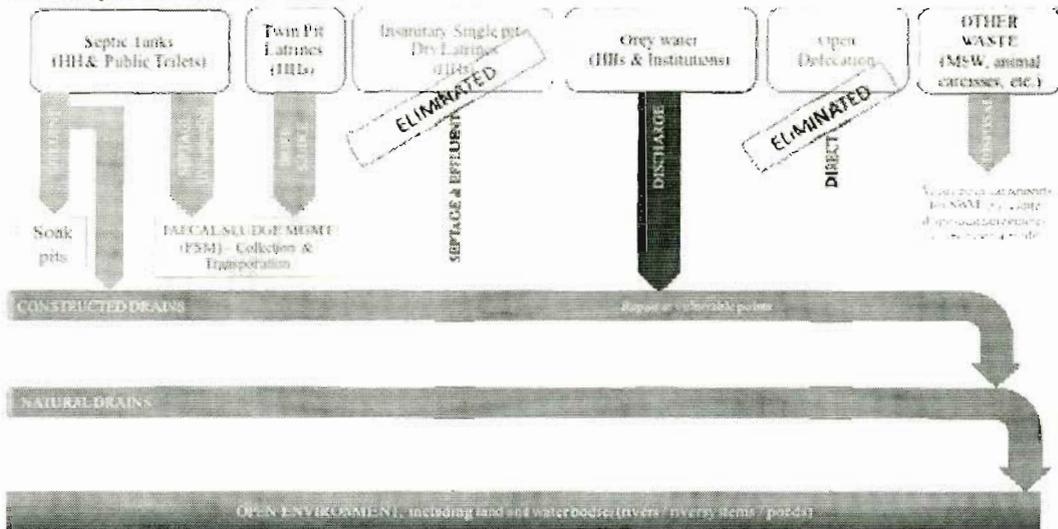
3. ULBs will also ensure that all constructed drains are repaired at vulnerable points to prevent leakages into the environment.
4. Waste water treatment facilities at community and city-levels will be explored to ensure that no waste water (grey or black) reaches the open environment untreated.
5. All MSW dumped into constructed and/or natural drains will be cleaned, and the waste collected will be scientifically treated and



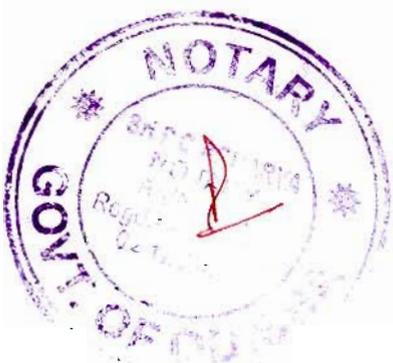
- disposed as specified above. All new (storm water) drains should be constructed as per approved norms.
6. Special care is to be taken with crematoria and other institutions dealing with the disposal of human and / or animal bodies (e.g. slaughter houses). ULBs are to ensure that such disposal is properly monitored, follows set norms, and does not result in pollution of water bodies of the State.
 7. Eventually the waste management in cities and towns of Odisha must be such that no solid and/or liquid waste is disposed of into the water

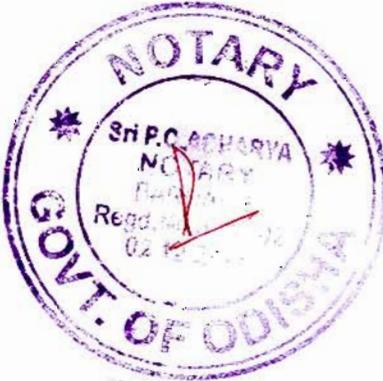
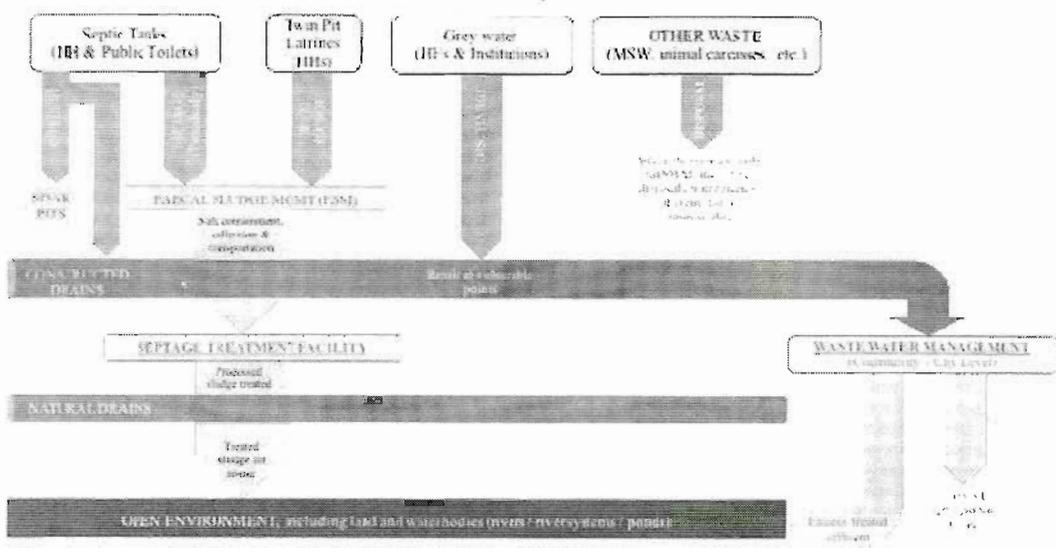
bodies. Such waste is scientifically processed, and only treated effluent that meets environmental discharge norms may be released into water bodies. The State Government will bring out technical guidance notes from time-to time to specify standards, processes and technologies that may be used for this purpose within the context of Odisha. ULBs and the State Government will take necessary steps – regulatory or legal – to ensure enforcement of these norms.

Graph 2: Intermediate actions to ensure that cities do not discharge untreated wastewater and septage into the open environment.



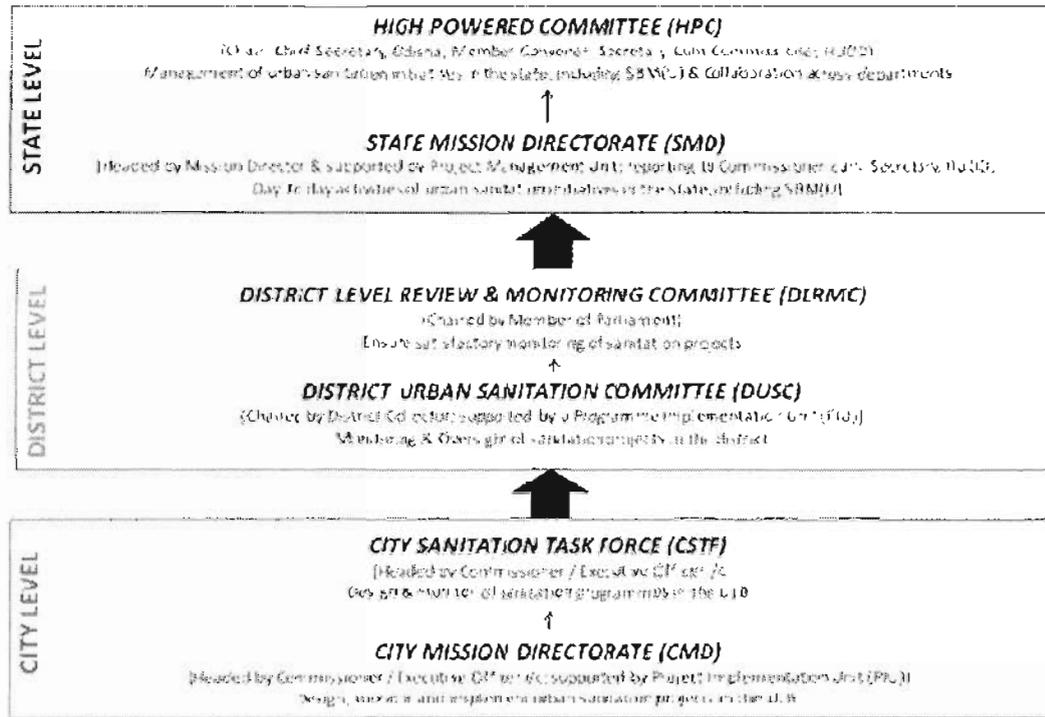
Graph 3: End-stage establishment of treatment facilities to ensure no waste water and septage pollution of the open environment.





INSTITUTIONAL FRAMEWORK

The existing multi-tier (State-District-City/Town) institutional arrangement shall be oriented within the scope of increased devolution initiated, with clear assignment of roles, responsibilities to the institutions as detailed below:



State level institutional set up

The Housing & Urban Development Department (HUDD), Government of Odisha shall assign clear roles to its subsidiary organisations and capacitate and empower cities to implement this policy. It shall also be responsible for monitoring the policy across all urban areas of the State. For this, the HUDD Department will develop appropriate legislation for septage and sewerage management, and ensure that rules / regulations for solid waste in line with the Government of India provisions are brought

out in a timely manner. These legislations and rules / regulations will be binding on all ULBs in the State. This parent department will be responsible for the implementation of the State Urban Sanitation Policy. The State institutional platform needs to also provide scope for convergence between the ULB and line department functions further strengthening the devolution initiatives and also build partnerships with private/NGO sector to leverage technical expertise in sanitation and social mobilisation. The institutional arrangement at the State level is thus, a three-tier arrangement as follows:—





High Powered Committee (HPC):

The HPC will be the apex body chaired by the Chief Secretary, providing overall guidance and policy direction to urban sanitation initiatives in the State, and overseeing the planning and implementation of the State policy. The Mission will direct all departments and agencies, for the successful implementation of the Odisha Urban Sanitation Policy. It will consist of an inter-departmental-executive set up to ensure successful execution of the State Policy by periodic evaluation of progress across Departments. (The composition of the HPC is detailed in Annexure- II). The HPC will:

1. Guide the actions of the State Sanitation Directorate (SSD) and ensure convergence with other departments for optimising efforts towards successful outcomes
2. Prepare, approve and ensure online publication of the State Sanitation Policy, and City Sanitation Plans (CSP), if not already done so.
3. Ensure comprehensive collection of city-wide data on sanitation, covering the whole sanitation service chain – containment, collection, transportation, treatment, reuse/disposal, and wherever possible, link this information to health outcomes in the State.
4. Finalise the Concept note on the urban sanitation situation in the State before submission to the SBM National Mission Directorate.
5. Empanel consultants of repute and experience for preparation of DPRs for urban sanitation projects, including under SBM(U) and conducting independent reviews and monitoring during execution of projects.
6. Empanel reputed institutes like IITs, NITs, State Technical Universities, etc., for the appraisal of DPRs.
7. Sanction projects related to urban sanitation service delivery.
8. Plan for fund flow in the short, medium and long-terms and plan for additional resource mobilisation as needed.

9. Recommend proposals for release of instalments of funds for sanitation projects, including under SBM(U)
10. Monitor outcome and O&M arrangements of projects sanctioned and completed.
11. Review the progress of capacity building, IEC, public awareness activities and approve annual action plans for these.
12. Ensure convergence of action for urban sanitation in the State, and bring about inter-departmental coordination and cooperation for this.
13. Ensure timely audits of funds released and review action taken reports on various audit reports and other similar reports.
14. Address violation of norms and conditions and review legal issues, if any.

State Sanitation Directorate (SSD):

The SSD is the core HUDD line agency set up to provide implementation support under the policy; and to ensure successful implementation of the State Policy by periodic review of progress across line agencies. The SSD shall function as the State Mission Directorate for SBM(U) as well and shall be headed by the Mission Director SBM(U). The Director, SSD shall be supported by a Project Management Unit (PMU) or equivalent with experts and support staff on an outsourced basis covering the verticals of project management, IEC and media, information technology, and monitoring & evaluation. The SSD will:—

1. Supporting the HPC in the implementation of sanitation programmes and policy in the State
2. Decide the framework for appropriate and effective MIS, HRM, and M&E systems, implementation of the Urban WASH Communication Strategy, engagement with support organisations, and partnerships (PPP or otherwise) required for the sanitation initiatives, especially the SBM(U).
3. Set out guidelines for ULBs to operationalise different components of the sanitation policy; including third party roles, etc.



4. Provide strategic direction to the State Sanitation Nodal Agency for development, procurement and application of appropriate technology options and service standards for higher environmental and public health outcomes.
5. Shall be responsible for the development and deployment of appropriate MIS & M&E systems to monitor progress under the policy.
6. Liaise with other line departments and agencies (like Health & Family Welfare Dept., SPCB, etc.) to finalise outcome indicators, enable data capture, etc.
7. Create / notify a uniform structure across the State for planning, designing, project preparation, appraisal, sanction and implementation of sanctioned projects, including under SBM(U) at the ULB level.
8. Review and appraise DPRs / project proposals received for urban sanitation under various programmes / schemes, including SBM and recommend them to the HPC. Wherever necessary, the SSD may engage empanelled appraisal agencies for the appraisal of these proposals/DPRs.
9. Bring in successful experiences / best practices in other cities, develop collaborations and suitable models for technical options and social mobilisation, including making use of available expertise within Government, and disseminate these to other ULBs in the State through the capacity building mechanism.
10. Advise the state to strategically implement the best available technology for sanitation service delivery as per the context of the urban sanitation situation in the State.
11. Guiding ULBs in the preparation of City Sanitation Plans, channelling financial resources from State, Central and externally aided sources and providing technical assistance required by ULBs.
12. Examine the need and possibilities of improving and securing (making safe) the work conditions of *SafaiKarmacharis*, the sanitation needs of the urban poor, examine the sanitation situation in schools,

especially the situation of girl children, with the idea of using this platform also, to trigger behavioural change in the community, design and implement suitable reward schemes that provide incentives to ULB to achieve positive sanitation outcomes, and promote demand-based sanitation while ensuring that suitable protocols for maintenance are set up.

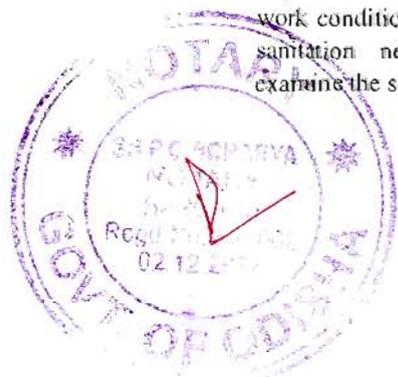
13. Advising the State Government on necessary modifications/notifications required by law to affect the sanitation policy, examine the updates made to the Development Control Regulations, and provide other technical know-how for effective management.

District level institutional set up

In the current devolution scenario, most of the ULBs may have considerable deficits in capacities to plan, implement and monitor urban sanitation programs. While it is expected that ULBs will develop these capacities over the medium term (next three to five years), a district level mechanism will be the appropriate institution for guiding and assisting ULBs in urban sanitation, in coordination with different line departments and their frontline units at the district and the ULB levels. This will also enable leveraging on capacities and programs on-going in the nearby rural areas. Wherever possible and effective, the State Government may direct districts to follow a clustering policy where cities within a district are clustered on the basis of geographical proximity to implement the sanitation policy and share relevant sanitation infrastructure.

District-level Review & Monitoring Committee (DLRMC):

The DLRMC will be constituted with a view to fulfil the objective of ensuring satisfactory monitoring of projects under the Chairpersonship of a Member of Parliament. The DLRMC will monitor SBM(U) projects in a given district as per the guidelines issued by the SBM(U) National Mission Directorate. *(The composition of the DLRMC is detailed in*



*Annexure- II).*The District Nodal Officer for implementation, monitoring and oversight, will be the District Collector, or an officer nominated by the District Collect. In the event that the District Collector nominates a representative, that representative shall report to the District Collector, who in turn shall report to the State Government in the normal procedure outlined in the institutional framework of the policy.

District Urban Sanitation Committee (DUSC at DUDA):

Chaired by the District Collector, it will be the District-level monitoring and implementing agency for urban sanitation programmes, schemes and strategies with Mayors/ Chairpersons and Commissioners/ Executive Officers of ULBs, heads of line departments, and representatives from local industries associations, NGOs, etc. The DUSC shall:—

1. Remain in constant contact with the SSD for implementation of the State Urban Sanitation Policy and coordinate between the ULBs in the District and the State for timely and proper flow of information;
2. Direct the Integration of city sanitation planning in the ULBs according to the directions of the State level nodal agency.
3. Monitor the progress of preparation of CSPs, and implementation of sanitation promotion, health and environment outcomes, in urban areas of the district and report as required by the SSD;
4. Plan for emergency requirements (floods, cyclones, etc.) of sanitation and also seasonal requirements (festivals, fairs, etc.) and approve the arrangement;
5. Direct the coordination of the activities of line department frontline personnel towards enabling planned sanitation outcomes;
6. Assist the ULBs in carrying out their tasks as provided for in the City Sanitation Task Force (below) in the initial phase;
7. Oversee the clustering strategy in the district and its successful implementation;

8. Review DPRs for urban sanitation developed by the City PMU under various programmes, including SBM(U). In particular the DUSC shall ensure no duplication of efforts / resources (physical and financial) across clusters wherever applicable; and
9. All sanitation projects, except for large capital projects on composting, septage / FS Treatment Plants, or STPs, will be approved at the level of the DUSC. The SSD and HPC may amend the limits of these approvals from time-to-time, and issue instructions accordingly.

For this, the DUSC shall be supported by a Project Implementation Unit (PIU).OWSSB and PHEO will nominate representatives for each district to serve as members of the DUSC and attend meetings.

The ULB level institutional set up

City Sanitation Task Force (CSTF):

This will be created within the ULB under the leadership of the Commissioner/ Executive Officer to design, implement and monitor the sanitation promotion programs in the respective ULBs. The CSTF will be responsible for:

1. Preparation of baseline database and situation analysis;
2. Design of city sanitation plan (CSP) emphasizing participatory approaches;
3. Ensuring use of sanitary latrine by all and ensuring safe disposal of sewage and liquid waste;
4. Monitoring progress of the campaign and make periodic corrections as needed and regular reporting to district and State coordination agencies;
5. Working with support organisations, line departments and civil society formations in setting up systems that enable community level monitoring and management of common sanitary facilities;
6. Developing systems that enable community-based monitoring of public health and environmental outcomes;



7. Working with the appropriate line departments and civil formations to identify and develop suitable citizen-interaction platforms as a hub for the communication and also monitoring;
8. Design and implement incentive schemes for ward or suitable sub-city administrative territory and other identified units – schools, slums, shopping areas; etc.
9. Review DPRs for urban sanitation developed by the CMD under various programmes, including SBM(U) and recommend them to the DUSC consideration.
10. The CSTF will also make necessary sub-committees (e.g. solid waste, septage, etc.) to ensure ward-level monitoring of the implementation the policy across all wards.

The CSTF will have membership of the relevant elected representatives heading the standing committees and also of women members. *(The composition of the CSTF is detailed in Annexure-II).*

City Project Implementation Unit (PIU) will be headed by the Commissioner / Executive Officer to implement the sanitation programmes in the respective ULBs. The SSD will notify the technical support to be provided. The City PIU will be responsible to:

1. Conduct the baseline survey
2. Provide necessary inputs for the CSP
3. Conduct the city-wide communication campaign;
4. Work with the community to ensure citizen engagement for sanitation service delivery across all categories, including the vulnerable
5. Develop DPRs for urban sanitation under various programmes/schemes, including SBM(U) for consideration by the State Government.
6. Provide necessary support the CSTF for implementation of sanitation programmes / schemes in the city.

While initially, the PIUs can function as technical cells for the ULBs, eventually, the functions performed by the PIU must be absorbed into the ULB such that it is an essential function performed by the ULB as the local authority for sanitation in the city.

Additionally, the local authority responsible for faecal sludge / septage management in the city will ensure that there is adequate sourcing, organisation, and capacity building of a team of frontline sanitation workers that will deal with on-ground requests for FSM in the city.

Sub-city level institutional set up

Ward Committees/Area Committees:

These will be constituted to be responsible for oversight and implementation of the CSP within the ward and report to CSTF. It will also be responsible for monitoring the progress of the campaign and school sanitation initiatives.

Other Support Organisations:

CSTF may involve identified committed NGOs and CBOs by allocating clear roles and outcomes. **Private sector engagement** is to be encouraged through voluntary efforts, financial contributions or the PPP route.

Planning

ULB level

City Sanitation Plans (CSPs) will need to be prepared in a participatory manner through consultations with urban citizens, especially the poor and women. The goal of making cities open defecation free and moving towards a safe disposal system for sewage as well as faecal sludge will be the main thrust of CSP. The phasing of the plan, its operational elements, choice of technology options and finances will feature in the plan. This plan will be integrated in to the overall development plan of the ULB and will also be reviewed by the DUSC to dovetail it with other urban infrastructure development initiatives. The CSPs need to be readied within a definite time frame.



State level

The SSD will consolidate CSPs into a State level plan specifying the time frame, finances, operational components and guideline-sets for these components, to enable the State to earmark resources. The ULB will align to the State Plan. Special emphasis will need to be given to urban centres that attract floating population seasonally (tourism) or sporadically (religious/cultural occasions) for planning. Also, appropriate environment-friendly solutions would need to be incorporated for these locations.

A communications strategy evolved at the State level would guide the awareness generation and Behaviour Change Communication components at the ULB level.

Implementation

Setting the standards

The SSD will draft and issue guidelines for the ULBs in sanitation management covering:-

1. Environmental standards (like PCB effluent standards for discharge to land and water).
2. Technical standards and guidelines for on-site / off-site technologies and its management.
3. Public Health indicators and standards (like incidence of diarrhoea, ARI, Water Quality standards – faecal coliform).
4. Safety standards for workers involved in safe sanitary disposal and management including identification of

hazards and minimum worker-safety and process-safety standards to be maintained.

Service delivery

1. The ULB concerned will be accountable with regard to service delivery and for assets created and managed as part of the initiative.
2. All service providers will confirm to the SLB standards stipulated by the GoI. & report accordingly.
3. All asset-creation that results from the CSP will be clearly inventoried and ownership made clear. Service delivery could be through agencies contracted by the ULB. However, all non-household assets would be owned by the ULB with clear lease arrangements for users.

Regulation, coordination & ULB primacy

Strengthening existing State level institutions that are charged with ensuring compliance of ULBs to environmental standards (e.g. State Pollution Control Boards), health outcomes (e.g. Health Departments), and Service Delivery Standards (e.g. State Urban Departments). Wherever these responsibilities or action on deviance are not spelt out clearly, the SSD would examine and advise the State Government on making these clear. The policy also identifies the ULB as having the key regulatory role over all properties and agencies/households in the city in respect of outcomes and stipulated process standards, subject to due cognisance of law.

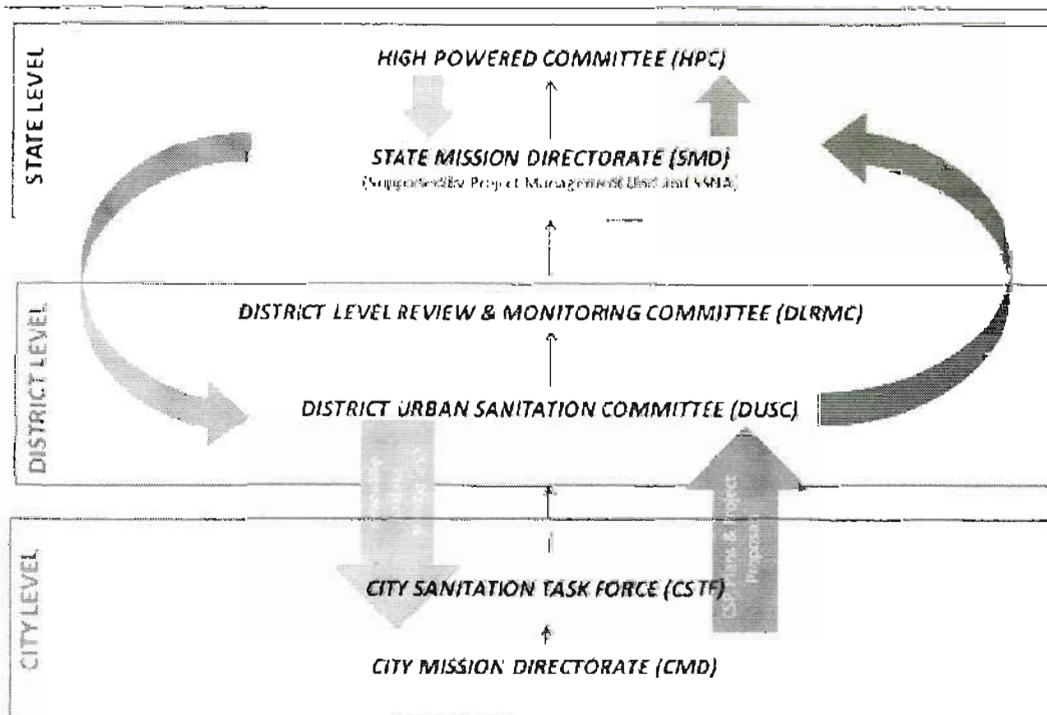


PLANNING, MONITORING & EVALUATION

The institutional set up at the city-district-state will be responsible for operating the M&E system detailed by the SSD. The out puts of this will be reported and reviewed by the Government of Odisha. The key guiding principles would be:—

1. SSD will be responsible for M&E of cities' performance through the DUSC;
2. ULBs in turn need to track compliance of households (establishments, etc.)
3. Supplementary features like introducing citizens' report cards, citizens' monitoring committees, self-assessment system, inter-city competitions, etc. will be considered as part of the overall State Policy. The roles of third party agencies - NGOs and CBOs - in this process will be made clear.

Flow of reporting, project proposals, sanction and M&E



- Flow of requests for approval / sanction of project proposals (DPRs) and CSPs
- Flow of approval / sanction of project proposals (DPRs) & CSPs
- Flow of M&E and oversight of operations
- Flow of reporting



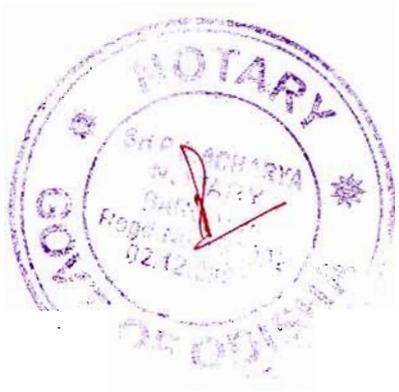
Incentives for ULBs to make progress in sanitation

The State will institute an assessment scheme to encourage competition and transparency in sanitation actions, amongst the towns/cities in Odisha. HUDD will ensure that all ULBs ensure detailed and timely monitoring of sanitation services and outcomes in their respective cities. HUDD will evolve a monitoring framework for ULBs for this purpose.

The goal of the reward is to encourage ULBs to strive for 100 per cent access to sanitation facilities to all residents and 100 per cent safe disposal of all waste generated within the urban environs. The assessment and award is based on the premise that improved public health and environmental standards are two outcomes that

ULBs must ensure for urban citizens. In doing so, city governments must adopt a holistic, city-wide approach while incorporating processes that help reach outputs pertaining to goals of this policy.

The State reward scheme would be designed in consultation with the ULBs, for incentivising city performance in sanitation aspects. It would consist of an assessment format with weighted indicators (this would enlarge on the ODF/++ framework specified in *Annexure I*), and would also provide basis for performance based financial incentives for cities making progress on the sanitation front. The cost for this will be borne out of the performance grant available under the 14th Finance Commission, where the State Government will include suitable performance indicators for sanitation in the overall performance grant framework.



CAPACITY BUILDING & TRAINING

It is understood that the capacities of the existing ULB structure – political and executive – are rather limited, to proactively take up and manage the list of activities envisaged under this policy. Suitable institutions that are equipped to build capacities in these local bodies are imminent and a state training institute for urban leaders and managers is urgently recommended. In the interim, the SSD could make use of the training capacities already built up within the State and districts for the rural sanitation campaign and utilise these to create the pool of local trainers necessary for the implementation of the policy with necessary urban adaptations. This pool of master trainers will conduct cascaded training sessions to ensure coverage of all stakeholders, within the ULB. ULBs will need to provide training on sanitation to their own staff – using these identified State level resource agencies. They will need to utilize Govt. of India (including NUSP) and State Government Schemes for training and capacity building in order to achieve this. Additionally, frontline sanitation workers may be organised

by functionality e.g. solid waste workers, sewerage workers, FSM works, and the like. in each ULB to ensure that in addition to planning and monitoring, ULBs ensure adequate staff for service delivery.

The SSD would develop the content-needs document and TNA for this HRD exercise. This will also need to focus on capacity building, i.e. not just training but also development of systems and capacities of ULBs in sanitation (including both internal and external communication), in line with the Urban Sector Reforms that the State may be implementing. This will not be limited to Government functionaries, but also to frontline sanitation workers who may or may not be on government payrolls, and will be capacitated for service delivery at the city, ward, and household-levels. Where needed, the SSD would identify, select and engage specialised agencies of the Government, and/or NGOs and private sector organizations.



PHASING & FUNDING THE POLICY

To ensure effective and timely action under the policy, the State Government may bring out appropriate instructions for phasing of cities under each outcome on a yearly basis, and the budget for this may be based on context-specific technologies being proposed / considered for those cities.

The Housing & Urban Development Department (HUDD) of the Government of Odisha will be responsible to ensure that the necessary funds to implement the Policy are made available. This may be through an outlay from the State Government and may be supplemented with funds as applicable from the Central Government, or other sources such as donor funds. The State Government may choose to notify a suitable nodal agency to manage the funds under the supervision of the State Government if deemed necessary. The HUDD should specify a minimum five-year time horizon for budgeting under the policy and the expenditure and budgets must be reviewed against outcomes on an annual basis."

In addition to this, Districts and ULBs are free to leverage additional funding for action under the Policy like fees, fines, penalties, user charges, etc.



Framework of the ODF++ Cities Definition [Three levels of success]

DEFINITION	INDICATOR	SUCCESS MEASURED AS
(Stage I) BASIC ODF: This definition is the first step for a city in its efforts towards improved sanitation. It is also a measure of the successful implementation of the SBM(U) as all the necessary components of its achievement are funded under the mission		
1) No open defecation within city limits	1) No. of wards where, at the time of survey: (A) no person is found defecating in the open; and (B) no visible human faeces observed	1) 80% of the wards where conditions IA & IB are true (Survey)
2) All city residents have access to latrines: (A) within the household; OR (B) community toilets; or (C) public toilets	2) Output 2 indicators: a) Latrine access measured as [2A(i)+2A(ii)]: i) HH with IHL ii) HH with community toilets b) Public toilet seats cover 5% of population	2) Measures: a) HH OD \leq No. New Latrine + New ¹ CT Seats * 6 ² (HH OD: 2014 baseline from SBM Concept note; New figures: SBM MIS) b) 5% of 2014 population \leq public toilet seats * 100 ¹ (Population: baseline from SBM Concept note; PT seats: SBM MIS)
3) All insanitary latrines converted to sanitary latrines, and no incidence of Manual Scavenging observed in any form	3) Output 3 indicators: a) All dry latrines converted to sanitary latrines b) All pit latrines converted to sanitary latrines c) No incidence of MS observed in any form	3) Measures: a) 2014 Baseline of dry latrines \leq conversion into sanitary latrines. (insanitary latrines: 2014 baseline from SBM Concept note; New figures: SBM MIS) b) Conversion of pit into sanitary latrines \geq 60% of 2014 Baseline of pit latrines (pit latrines: 2014 baseline from SBM Concept note; New figures: SBM MIS) c) No MS is observed i) 80% of the wards where no MS is observed (Survey) ii) 80% of sanitation conservancy workers use safety gear when dealing with waste (survey)

¹ By "New CTs", we also mean older non-functional CTs that have been revived and made functional as per the SBM(U) guidelines
² Presuming an average of 30 people per community toilet seat (Average of 25 men and 25 women per seat as per SBM(U) guidelines) and divided by 5 presuming 5 people per HH i.e. new CT seats / 6 Presuming an average of 300 people per public toilet seat (Avg. Of 1 per 100 for men and women as per SBM(U) guidelines)



DEFINITION	INDICATOR	SUCCESS MEASURED AS
(Stage II) ODF +: goes beyond the basic access to sanitation to a more desired level of access, and brings into consideration aspects of environmental sanitation.		
1) No open defecation within city limits	1) No. of wards where, at the time of survey: (A) no person is found defecating in the open; and (B) no visible human faeces observed	1) <u>100%</u> of the wards where conditions 1A & 1B are true (Survey)
2) All city residents have access to latrines: (A) within the household; OR (B) community toilets; or (C) public toilets	2) Output 2 indicators: a) Latrine access measured as [2A(i)+2A(ii)]: i) HH with IHL ii) HH with community toilets b) Public toilet seats cover 5% of population	2) Latrine Access: a) Success indicator 2 (Basic ODF); AND b) <u>No. New Latrine \geq 80% HH OD (HH OD: 2014 baseline from SBM Concept note; New figures: SBM MIS)</u> c) Success indicator 2B (Basic ODF)
3) <u>Adequate latrine access in all institutions, especially educational institutions</u>	3) <u>All educational institutions have access to adequate number of functional toilets</u>	3) <u>Educational Institutions:</u> a) <u>All students have access to toilets within the educational institution [Max: 25 students per toilet seat]</u> b) <u>Educational institutions have separate toilets for boys and girls</u>
4) All insanitary latrines converted to sanitary latrines, and no incidence of Manual Scavenging observed in any form	4) All dry latrines converted to sanitary latrines 5) All pit latrines converted to sanitary latrines 6) No incidence of MS observed in any form	4) Success indicator 4 (Basic ODF) 5) Success indicator 5 (Basic ODF) 6) MS: a) <u>100%</u> of the wards where no MS is observed (Survey) b) <u>100%</u> of sanitation conservancy workers use safety gear when dealing with waste (survey)
5) <u>No open discharge of human faecal and liquid waste</u>	7) <u>Safe containment of faecal matter</u> 8) <u>Safe transport and/or disposal of faecal matter</u>	7) <u>All latrines should be connected, either to a sewerage system, or to an on-site system /survey]</u> 8) <u>No open dumping of human faeces or liquid waste in non-designated areas (survey)</u>



DEFINITION	INDICATOR	SUCCESS MEASURED AS
(Stage III) ODF ++: matches national and global standards, including Target 6.2 of the SDGs, and the National Urban Sanitation Policy (NUSP) 2008 which envisages 100% sanitised cities. It covers the entire sanitation chain, and attempts to target the environmental and public health impacts of poor and inadequate sanitation characterised by OD		
1) Definition 1 as per ODF+ above	1) Indicators 1 as per ODF+ above	1) 1 as per ODF+ (Stage II) above
2) Definition 2 as per ODF+ above	2) Indicator 2 as per ODF+ above	2) 2 as per ODF+ (Stage II) above
3) Adequate latrine access in all institutions, <u>especially educational institutions</u>	3) Indicators a) All educational institutions have access to adequate number of functional toilets	3) Success measured as: a) Educational Institutions: i) All students have access to toilets within the educational institution [Max: 25 students per toilet seat] ii) Educational institutions have separate toilets for boys and girls
	b) <u>All other institutions have access to adequate number of functional toilets</u>	b) <u>Success measured as (Other Institutions): All institutions within the ULB limit comply with building rules that specify latrine provision in institutions</u> [Survey]
4) Definition 4 as per ODF+ above	4) Indicator 4 as per ODF+ above	4) 4 as per ODF+ above
5) No open discharge of human faecal and liquid waste, and safe containment, transport, treatment and disposal of all human faecal and liquid waste, and waste water (black and grey)	5) Safe containment of all human faecal and liquid waste	5) All latrines should be connected, either to a functional sewerage system or to a safe on-site system [Functional: Transect inspection of sewerage system, and citizen feedback; safe OSS: Periodicity of de-sludging the on-site system]
	6) Safe transport, treatment, and/or disposal of all human faecal and liquid waste, and waste water (black and grey)	6) Success measured as: a) All sewage and faecal waste is safely transported to a treatment site [Survey to observe leakages, malfunctions, no open transportation of sludge] b) No open dumping of septage in non-designated areas [Survey: whether all faecal matter is reaching a designated treatment site]



DEFINITION	INDICATOR	SUCCESS MEASURED AS
		<p>c) All faecal matter is adequately treated at designated treatment plants [Survey]</p> <p>d) Waste water is safely conveyed to a treatment site [Survey to observe conditions of drains conveying water from household to treatment site; or adequacy of household level treatment (if any)]</p> <p>e) Waste water is safely treated [Survey to observe whether waste water conveyed to treatment facility is being treated as per the norms laid out by the Government of India and the State Government from time to time].</p>



State, District, and City-level Institutions for Sanitation Management

**High Powered Committee (HPC):
Composition**

1. The Chief Secretary (Chairman)
2. The Development Commissioner
3. Principal Secretary, Finance Department
4. Principal Secretary, Water Resources Department
5. Secretary, Housing & Urban Development Department
6. Secretary, Dept. of Health & Family Welfare
7. Secretary, Dept. of School & Mass Education
8. Secretary, Women & Child Development Department
9. Secretary, Department of Forest & Environment
10. Secretary, Department of Tourism
11. Secretary, Works Department
12. Secretary, Dept. of Commerce & Transport
13. General Manager, East Coast Railway
14. CEO, Odisha Urban Infrastructure Development Fund (OUIDF)
15. Mission Director, SBM(U), Housing & Urban Development Department (Member-Secretary)
16. Executive Director, Odisha Water Supply & Sewerage Board (Nodal Officer & State Programme Officer, Urban Sanitation)
17. Director, Municipal Administration
18. Member Secretary, State Pollution Control Board
19. Chief Engineer, Odisha State Water and Sanitation Mission
20. Chief Engineer, PHEO-Urban
21. Chief Engineer, Odisha Water Supply and Sewerage Board
22. Secretary, Odisha State Housing Board
23. Vice Chairman, Bhubaneswar Development Authority

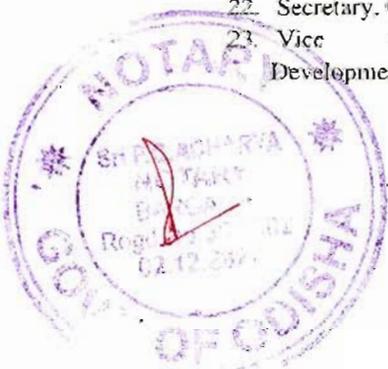
24. Representative of leading NGOs/CBOs- Nominated by HUDD
25. Representative from Corporate Bodies/ Industries Associations- Nominated by the HUDD.
26. Representative, Ministry of Urban Development, Government of India

District-level Review & Monitoring Committee (DLRMC): Composition

1. Member of Parliament in the district (Chairperson)
2. Members of Legislative Assembly in the district (Members)
3. Mayors of ULBs in the district (Members)
4. Chairpersons of the ULBs in the district (Members)
5. District Collector of the district (Member-Secretary)
6. Commissioners / EOs of ULBs in the District

District Urban Sanitation Committee (DUSC – Part of DUDA): Composition

1. District Collector (Chairperson)
2. Mayors/ Chairpersons of ULBs in the district (Members)
3. Commissioners/ Executive Officers of the ULBs in District (Members)
4. Project Officer, DUDA/ ADM (Member Secretary)
5. Representative, PHEO (nominated by PHEO)
6. Representative, OWSSB (nominated by OWSSB)
7. Chief District Medical Officer (CDMO)
8. District Social Welfare Officer (DSWO)
9. District Project Coordinator (DPC); SSA
10. Circle Inspector of Schools (CI)
11. Regional/District Officer, OSPCB
12. Officer in charge of CDS, DUDA
13. One invitee from Mission Shakti
14. One invitee from Industries



15. One invitee from NGOs active in District (preferably from health or sanitation sectors)

**City Sanitation Task Force (CSTF):
Composition**

1. Mayor/ Chairperson of the ULB Council concerned (Chairperson)
2. Commissioner/ Executive Officer of ULB (Member Convenor)
3. City Health Officer
4. Officer, Social welfare/ development; WCD Department
5. Officer, Engineering Dept.
6. Chairperson of relevant Standing Committees

7. One member from the PHEO
8. One women self-help group/ community representative
9. One NGO/CBO representative working on slums, urban poverty, water & sanitation
10. One Women member from the ULB Council
11. One representative of *safai karamcharis*, sewerage and sanitation workers etc.
12. One representative of private firms/ corporate agencies working in the sanitation sector



Table summarising actions across State Government department and in cities under the MSW Rules 2016

SL. NO.	ACTIVITY	RESPONSIBILITIES					TIME-LIMIT
		HUDD*	RD ⁵	OPCB ⁶	DISTRICT COLLECTOR	URBAN & RURAL LOCAL BODIES	
1.	<p>Identification of suitable sites for setting up solid-waste processing facilities</p>	<ul style="list-style-type: none"> • Direct the Town Planning Directorate to ensure that <ul style="list-style-type: none"> ○ The Master Plan of every city has provisions for setting up of MSW processing & disposal facilities, either individually, or linked to regional facilities. ○ The Metropolitan and District Planning Committees reflect these provisions. ○ Separate space for segregation, storage, decentralised processing of solid waste is demarcated in the development plan for group housing or 	<p>Facilitate identification of sites in rural areas (including census towns)</p>	<ul style="list-style-type: none"> • Issue guidelines for selection of sites and consideration of buffer zones • Notify application formats for authorisation to process, recycle, and treat solid waste in line with SWM 2016 Rules 	<p>Facilitate identification and allocation of suitable sites</p>	<ul style="list-style-type: none"> • Study the quantity and character of solid waste being generated in the local body to determine the nature of technology and site for solid waste processing facility • Suggest suitable sites for setting up solid waste processing facilities in the implementation plans 	1 year



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SL. NO.	ACTIVITY	RESPONSIBILITIES					TIME-LIMIT
		HUDD*	RD ⁵	OPCB ⁷	DISTRICT COLLECTOR	URBAN & RURAL LOCAL BODIES	
		<p>commercial or institutional or any other non-residential complexes exceeding 200 dwellings or having a plot area exceeding 5,000 m².</p> <ul style="list-style-type: none"> ○ Buffer zone for solid waste processing and disposal facilities of more than 5 tons per day are duly notified. This may be done in consultation with OPCB • Facilitate identification and selection of sites with ULBs and Panchayats (the latter in collaboration with RD, G/o Odisha). • Ensure that SEZ, Industrial Estates, Industrial Parks, etc., earmark at least 5% of the total area of the plot or minimum five plots or sheds for recovery and recycling facilities 					



SL. NO.	ACTIVITY	RESPONSIBILITIES					TIME-LIMIT
		HUDD*	RD ^s	OPCB ^r	DISTRICT COLLECTOR	URBAN & RURAL LOCAL BODIES	
2.	<p><i>Identification of suitable sites for setting up common regional SLF facilities for suitable clusters of local authorities under 0.5 mill population and for setting up common SLF sites or stand-alone SLF Sites by all local authorities having a population of 0.5 million or more</i></p>	<p>In the event that it is strategically efficient to geographically cluster cities across districts, a committee of District Collectors may be formed. This committee will be chaired by the DC where the cluster facility is being proposed. The committee will consider all strategic options and suggest a cluster strategy to Commissioner-cum-Secretary. HUDD for approval.</p> <p>Direct the Town Planning Directorate to ensure notification of a buffer zone for solid waste processing and disposal facilities of more than 5 tons per day in consultation with OPCB</p>	<p>Facilitate identification of sites in rural areas (including census towns)</p>	<ul style="list-style-type: none"> Issue guidelines for selection of sites Notify application formats for authorisation to process, recycle, treat, and dispose solid waste in line with SWM 2016 Rules 	<ul style="list-style-type: none"> Facilitate identification of suitable sites Committee of DCs to study and recommend suitable sites for cluster facilities 	<ul style="list-style-type: none"> Study the quantity and character of solid waste being generated in the local body to determine the nature of technology and site for solid waste processing facility Suggest suitable sites for setting up solid waste processing facilities in the implementation plans 	1 year
3.	<p><i>Procurement of suitable sites for setting up of solid waste management</i></p>	<p>Facilitate state government approvals for procurement of land for solid waste processing facilities and SLF</p>	<p>Facilitate state government approvals for procurement of land for solid waste processing facilities and</p>	<p>Review and approve / suspend proposals for sites</p>	<p>Facilitate allocation of suitable sites</p>	<p>Obtain statutory clearances for solid waste processing</p>	2 years



SL. NO.	ACTIVITY	RESPONSIBILITIES					TIME-LIMIT
		HUDD*	RD ⁵	OPCB ⁶	DISTRICT COLLECTOR	URBAN & RURAL LOCAL BODIES	
	processing facilities and SLF facilities	sites in urban areas	SLF sites in rural areas			facilities and SLF sites.	
4.	Enforcing waste generators to practice segregation of bio-degradable, recyclable, combustible, sanitary waste, domestic hazardous waste, and inert solid waste at source	<ul style="list-style-type: none"> Review existing laws to ensure a suitable legislative framework for enforcement under the SWM Rules 2016 Provide necessary guidance to ULBs for enforcement under the rules Monitor and evaluate performance of local bodies (rural local bodies in collaboration with RD, G/o Odisha) for outcomes under the SWM Rules 2016, and Odisha Urban Sanitation Policy and implementation plan for SWM. Develop a scheme for waste-pickers and informal-sector waste workers 	<ul style="list-style-type: none"> Review existing laws to ensure a suitable legislative framework for enforcement under the SWM Rules 2016 Provide necessary guidance to Panchayats and Census towns for enforcement under the rules Monitor and evaluate performance of rural local bodies for outcomes under the SWM Rules 2016, and implementation plan for SWM. 	<ul style="list-style-type: none"> Develop guidance for state and local bodies on the standards and outcomes under the SWM Rules 2016 Review implementation at least twice a year in collaboration with HUDD, including monitoring adherence to environmental standards Regulate interstate movement of solid waste Report to Solid Waste Management Advisory Body, Government of Odisha on a regular basis and for corrective action, if any 	<ul style="list-style-type: none"> Review enforcement in the local bodies and provide guidance and arbitration where necessary 	<ul style="list-style-type: none"> Develop and enforce suitable bye-laws that reflect the standards under SWM Rules 2016. These bye-laws should include both administrative charges, fines and penalties, as well as incentivising zero-waste Identification of waste pickers and informal sector waste workers Involvement of NGOs wherever feasible 	2 years



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SL. NO.	ACTIVITY	RESPONSIBILITIES					TIME-LIMIT
		HUDD*	RD ⁵	OPCB ⁶	DISTRICT COLLECTOR	URBAN & RURAL LOCAL BODIES	
5.	Ensure door-to-door collection of segregated waste and transportation in covered vehicles to processing or disposal facilities	Monitor and evaluate performance of local bodies (rural local bodies in collaboration with RD, G/o Odisha) for outcomes under the SWM Rules 2016, and Odisha Urban Sanitation Policy and implementation plan for SWM.	Monitor and evaluate performance of rural local bodies for outcomes under the SWM Rules 2016, and implementation plan for SWM	<ul style="list-style-type: none"> Notify a format for annual report of local bodies Review implementation at least twice a year in collaboration with HUDD, including monitoring adherence to environmental standards Regulate interstate movement of solid waste Report to Solid Waste Management Advisory Body, Government of Odisha on a regular basis and for corrective action, if any 	Review segregation, collection, and transportation of waste in the local bodies and provide guidance and arbitration where necessary	Local bodies to ensure that their implementation plans specify actions for segregation, collection, and transportation of waste. The provisions for this should also be specified in the bye-laws. This should be reported annually on notified formats.	2 years
6.	Ensure separate storage, collection and transportation of C&D waste	Monitor and evaluate performance of local bodies (rural local bodies in collaboration with RD, G/o Odisha) for outcomes under	Monitor and evaluate performance of rural local bodies for outcomes under the SWM Rules 2016, and implementation plan for	<ul style="list-style-type: none"> Notify a format for annual report of local bodies for C&D waste Review 	Review segregation, collection, and transportation of waste in the local bodies and provide	Local bodies to ensure that their implementation plans specify actions for segregation, collection,	2 years



121.

121.

SL. NO.	ACTIVITY	RESPONSIBILITIES					TIME-LIMIT
		HUDD*	RD ³	OPCB ²	DISTRICT COLLECTOR	URBAN & RURAL LOCAL BODIES	
		the SWM Rules 2016, and Odisha Urban Sanitation Policy and implementation plan for SWM.	SWM	implementation at least twice a year in collaboration with HUDD, including monitoring adherence to environmental standards <ul style="list-style-type: none"> Regulate interstate movement of solid waste Report to Solid Waste Management Advisory Body, Government of Odisha on a regular basis and for corrective action, if any 	guidance and arbitration where necessary	and transportation of waste. The provisions for this should also be specified in the bye-laws. This should be reported annually on notified formats.	
7.	Setting up solid waste processing facilities by all local bodies having 100,000 or more population	<ul style="list-style-type: none"> Provide guidance to Local Bodies for PPP arrangements for these facilities In certain cases may help / facilitate private sector participation Develop a policy for re-use / recycle of solid 	<ul style="list-style-type: none"> Provide guidance to Local Bodies for PPP arrangements for these facilities In certain cases may help / facilitate private sector participation Develop a policy for re-use / recycle of solid 	<ul style="list-style-type: none"> Notify a format for annual report of operations of facilities to be submitted by operator to local bodies Monitor the environmental 	Review set-up and operation of facilities at least once every quarter in the local bodies and provide guidance and arbitration where necessary	<ul style="list-style-type: none"> Ensure that the operator of the facility, designs and sets-up the facility as per the technical guidelines issued Ensure that all statutory clearances are obtained by the 	2 years
8.	Setting up solid waste processing facilities by all local						3 years



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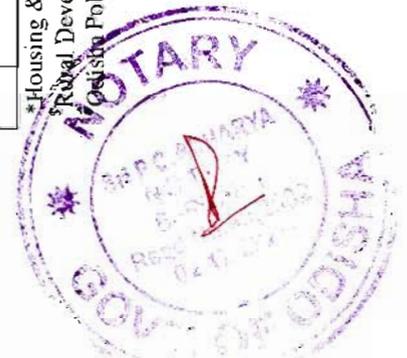
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RESPONSIBILITIES						TIME-LIMIT	
SL. NO.	ACTIVITY	HUDD*	RD ⁵	OPCB [#]	DISTRICT COLLECTOR	URBAN & RURAL LOCAL BODIES	
9.	<p>bodies and census towns below 100,000</p> <p>Setting up common/stand-alone SLF by or for all local bodies having 0.5 million or more population for the disposal of only such residual waste from the processing facilities as well as inert waste as permitted under SWM 2016 rules</p>	<p>waste by-products in government projects and by the private sector e.g. use of plastic waste in road construction, compost by-back, and cost incentive for power purchase agreements whereby electricity generated from WTE plants may be fed back into the grid.</p>	<p>waste by-products in government projects and by the private sector e.g. use of plastic waste in road construction, compost by-back, and cost incentive for power purchase agreements whereby electricity generated from WTE plants may be fed back into the grid.</p>	standards of operating the facilities		<p>operator</p> <ul style="list-style-type: none"> Ensure that operations of facilities are safe and environmentally sound, and in compliance with guidelines issued Ensure monthly monitoring of and reporting on the operations and maintenance of facilities 	3 years
10.	<p>Setting up common/stand-alone SLF by or for all local bodies and census towns under 0.5 million population for the disposal of permitted waste under SWM 2016 rules</p>						



SL. NO.	ACTIVITY	RESPONSIBILITIES					TIME-LIMIT
		HUDD*	RD ⁵	OPCB ⁶	DISTRICT COLLECTOR	URBAN & RURAL LOCAL BODIES	
11.	Bio-remediation or capping of old and abandoned dump sites	<ul style="list-style-type: none"> To monitor the closure and rehabilitation of old/abandoned / non-functional sites in urban local bodies on a regular basis Direct the Town Planning Directorate to <ul style="list-style-type: none"> Develop norms for re-use of land previously used as dump sites, in collaboration with OPCB Handhold ULBs to plan for and utilise land previously used as dump sites 	<ul style="list-style-type: none"> To monitor the closure and rehabilitation of old/abandoned / non-functional sites in rural local bodies on a regular basis Direct the District/Regional Planning Authorities to <ul style="list-style-type: none"> Develop norms for re-use of land previously used as dump sites, in collaboration with OPCB in rural areas Handhold Local Bodies to plan for and utilise land previously used as dump sites in rural areas 	<ul style="list-style-type: none"> To contextualise guidelines for bio-remediation / capping of old and abandoned dump sites and closure protocols for Odisha on the basis of SWM 2016 Rules (Schedule I (J)) Monitor closure and rehabilitation of old dumpsites on a quarterly basis Report to Solid Waste Management Advisory Body, Government of Odisha on a regular basis and for corrective action, if any 	<p>To monitor the closure and rehabilitation of old/abandoned / non-functional sites</p>	<ul style="list-style-type: none"> Identify and evaluate existing dumpsites based on guidelines issued by OPCB Determine old/abandoned / non-functional dump sites to be closed – based on a feasibility study Local Body implementation plans to provide time-specific options for closure and rehabilitation of such sites. Obtain necessary statutory approvals for closure / rehabilitation of sites 	5 years

*Housing & Urban Development Department, G/o Odisha
 Rural Development Department, G/o Odisha
 Odisha Pollution Control Board, G/o Odisha



SL. NO.	DESIGNATION	MEMBERSHIP
16.	One Representative from Corporate Bodies / Industries Association(s) (To be nominated by Chairperson)	Member
17.	Two subject Experts (To be nominated by Chairperson)	Members
18.	Director, Municipal Administration, Housing & Urban Development Department, G/o Odisha	Member
19.	Director, State Sanitation Directorate, and Mission Director (SBM Urban), Housing & Urban Development Department, G/o Odisha	Convncor

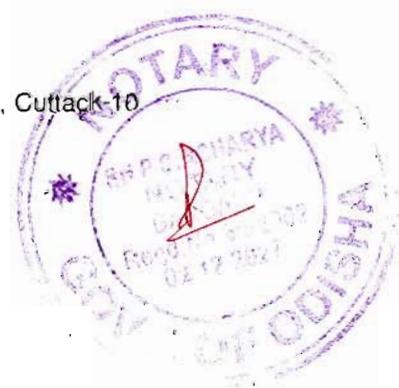
*Ex-Officio Members

The Solid Waste Management Advisory Body, Government of Odisha shall:

1. Meet at least once in six months
2. Review matters related to the implementation of this implementation plan *vis-à-vis* the provisions of the Solid Waste Management Rules 2016 and the Odisha Urban Sanitation Policy 2017 (and subsequent revisions)
3. Advise the Government of Odisha to take measures that are necessary for the expeditious and appropriate implementation of this plan.
4. Produce a review report covering the implementation plan. This shall be submitted to OPCB, G/o Odisha for necessary action under the SWM Rules 2016. It shall also be placed before the High Powered Committee (HPC) Constituted under the Odisha Urban Sanitation Policy 2017 for their perusal and consideration.

True Copy
Attested
Date

**COLLECTOR
BARGARH**





Government of Odisha
Housing & Urban Development Department,
Odisha Secretariat, Sachivalaya Marg, Bhubaneswar-751001

File No.: HUD-SANT-SCH-0026-2019 Letter No.: 13408 Date: 30/7/19

From

Sangramjit Nayak, IAS
Director, Municipal Administration &
Ex-officio Additional Secretary to Government

To

**The Municipal Commissioners, Bhubaneswar, Berhampur, Cuttack,
Rourkela and Sambalpur**
The Executive Officers of all Municipalities and NACs

Subj.: SOP on decentralised solid waste management

Madam/Sir,

I would like to draw your attention to the subject and in this connection I am to say that in Letter No. 13089 Dated 24.07.2019 of this Department draft SOP was circulated amongst the ULBs inviting suggestions thereon if any. In the meantime valuable suggestions have been received which have been examined. Taking into consideration the suggestions received, the **Standard Operating Procedure on decentralised solid waste management** has been approved by Government which is enclosed herewith for implementation immediately. The timeline prescribed therein for different stages of operation should be strictly adhered to.

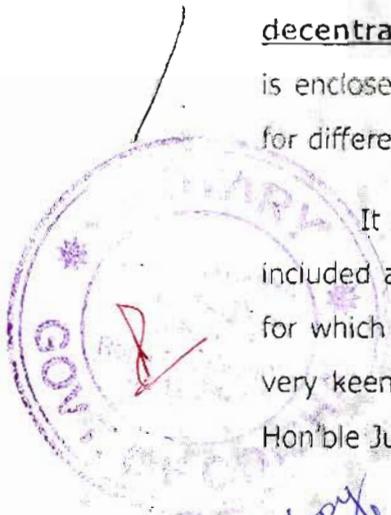
It may be pertinent to mention here that, "solid waste management" has been included as one of the ingredients in the action plan of this Department under "5-T" for which special focus may be given to roll out the plan timely. This activity is being very keenly watched by the Hon'ble NGT and the State Level Committee headed by Hon'ble Justice Shri P.K.Mohanty, former Judge, High Court of Orissa.

Yours faithfully,

Sangramjit Nayak
30/7/2019

Director, Municipal Administration &
Ex-officio Additional Secretary to Government

Enclosures: As above



True Copy
Attested
Bain

COLLECTOR,
BARGARH

11211

Memo No. 13409 /HUD Date: 30/7/19

Copy along with copy of the enclosures forwarded to the P.S. to the Hon'ble Minister, Panchayati Raj & Drinking Water, Law, Housing & Urban Development for kind information.

rcs
30.7.2019
Deputy Secretary to Government

Memo No. 13410 /HUD Date: 30/7/19

Copy along with copy of the enclosures forwarded to the OSD to the Chief Secretary / P.S to the Principal Secretary to Government, H&UD Department for kind information.

rcs
30.7.2019
Deputy Secretary to Government

Memo No. 13411 /HUD Date: 30/7/19

Copy along with copy of the enclosures forwarded to the Director, (Environment), Forest & Environment Department / Member Secretary, State Pollution Control Board, Odisha for kind information and necessary action.

rcs
30.7.2019
Deputy Secretary to Government

Memo No. 13412 /HUD Date: 30/7/19

Copy along with copy of the enclosures forwarded to all the Collectors / Project Directors, District Urban Development Agency for kind information and necessary action. They are requested to ensure IMPLEMENTATION OF THE DIRECTIVES ISSUED IN THE SOP within the stipulated timeline.

rcs
30.7.2019
Deputy Secretary to Government

Memo No. 13413 /HUD Date: 30/7/19

Copy along with copy of the enclosures forwarded to the Team Leader, PMU, SBM (Urban) for information and necessary action.

rcs
30.7.2019
Deputy Secretary to Government



Standard Operating Procedure

for

Decentralised Solid Waste Management in the State of Odisha

July, 2019

**Housing & Urban Development Department
Government of Odisha**



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The Solid Waste Management Rules, 2016 (herein after referred to as "The Rules") came into force with effect from 8th April, 2016. In order to facilitate implementation of various provisions of the Rules, this Standard Operating Procedure (SOP) has been prepared for implementation by the Urban Local Body (ULB).

1. Collection of Basic Statistics:

- i. Map of ULB with ward boundary, roads, parks, bulk waste generators, commercial areas and other important land masses, etc.
- ii. Demographic details:

Sl. No.	Ward No.	No. of Households	Population
1	Ward – 1		
2	Ward – 2		

2. Quantification of Waste Generation:

- i. ULBs are required to conduct quantification of waste through sample survey for a duration of ten days as mentioned below:
 - a. Select a few households in each ward which have to be representative in nature
 - b. Record the number of family members of each households
 - c. Collect segregated waste for consecutive 10 days from the same households
 - d. Weigh the dry and wet waste separately every day and record in a register
 - e. Calculate Average per capita waste generation for ULB based on the above Sampling.

3. Assessment of Human Resources:

3.1 Engagement of Swachha Sathi:

Swachha Sathi would be the Community Link & act as a change agent to bring about collective behavioural changes in the household level in the ward areas towards door-to-door collection of segregated waste and to ensure decentralised composting of wet waste & collection of dry waste.

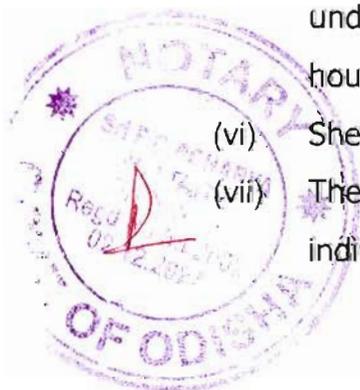


3.2 Who could be a Swachha Sathi?

- (i) One of the Dynamic WSHGs of that locality will nominate suitable members as Swachha Sathi for different areas in the assigned wards having educational qualification not below +2 level (preferably). However, the educational qualification may be relaxed in case of non-availability of suitable candidate.
- (ii) WSHG member having experience in community mobilisation and keen interest to work towards Solid Waste Management may be given preference by the WSHG.
- (iii) Persons having criminal track records, political affiliation should not be used as Swachha Sathi.
- (iv) ULB may also explore the possibility of engaging the services of Area Level Federation (ALF) wherever they are active & dynamic for performing this.

3.3 Role and Responsibilities of Swachha Sathi:

- (i) Swachha Sathi should sensitise all households in the locality to do the source segregation at household level itself.
- (ii) If people are not doing source segregation at home, she must demonstrate the source segregation before the family members in the premises of the house while collecting the garbage.
- (iii) Swachha Sathi must sensitise local markets/Schools / institutions / Parks regarding Source segregation and demonstrate the same for better understanding.
- (iv) She must generate awareness regarding various method of composting preferably Micro Composting in the locality.
- (v) She must explain and sensitise people about Micro Composting and may provide handholding support and guide the people for undertaking Micro Composting Centre (MCC) facilities by the individual households / bulk waste generators.
- (vi) She has to assist ULB in undertaking IEC activities in the locality.
- (vii) The ULB will have dealing only with the WSHG & not with any individual Swachha Sathi.



- (viii) The incentive will be given directly to the Bank Account of the WSHG and not to the Swachha Sathi (Member of the WSHG). The Groups are free to use one or more members for performing the assigned responsibilities.

3.4 Coverage & incentive to Swachha Sathi:

An incentive of Rupees 4000/- per month may be paid to the WSHG / ALF for every 600 households by the ULB on the basis of the work done by it.

3.5 Capacity Building of Swachha Sathi / WSHG / ALF:

ULB will organise orientation sessions/meetings for Swachha Sathi / WSHG / ALF to make them aware about different components of Solid Waste Management to improve their performance.

3.6 Assessment of performance:

The ULB authority must assess the performance of Swachha Sathis and may take needful action for better result either by replacing the existing Swachha Sathi / WSHG / ALF or through proper reorientation of the approach.

3.7 Sanitation Workers

Existing Sanitation workers shall be redeployed keeping in view of the revised strategy of decentralised MCC for smooth and effective collection of segregated waste. The ULB should make an **Action Plan** indicating the street, no of households, vehicle number, time of collection of waste, delivery of wet waste in the MCC/OCC, time and location for unloading of saleable and non- saleable dry waste , supervision mechanism etc. with an ultimate objective of **Zero discharge to the Land fill site**.

3.8 Engagement of Supervisors:

- (i) The ALF / WSHG may identify one Supervisor to monitor, support & supervise the functioning and performance of Swachha Sathis engaged for every 2400 households (roughly four Swachha Sathis).
- (ii) Incentive for Supervisors will be paid at the rate of up to Rs. 8000/- per month for every 2400 households to the ALF / WSHGs.



- (iii) The Supervisors may also be from among the Women Self-help Group members / ALF functioning in those wards/clusters having graduation as minimum qualification (subject to availability).
- (iv) For the aforesaid purpose, wards / cluster of wards as deemed suitable taking in to consideration various factors such as: density of population, geographical extension, etc. may be assigned.

3.9 OSD, Sanitation:

In case of Municipal Corporations and other large ULBs another tier of Officers designated as **OSD, Sanitation** may be identified from among the existing staff of ULBs and exclusive responsibility may be given with job chart and other logistics.

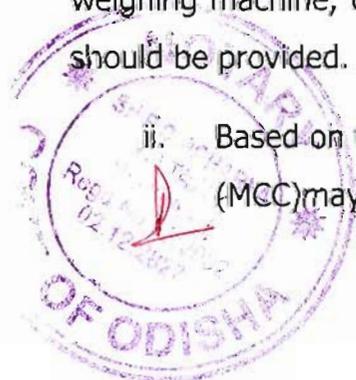
4. Identification of suitable land for establishment of Micro Composting Centre (MCC) and On-Site Composting Centre (OCC)

- i. In consonance with provisions contained under rule 12(a) of the Rules the Collector shall facilitate identification and allocation of suitable land (including advance possession) at various locations in the ULB as per the table below. The instructions issued by Revenue & Disaster Management Department in Letter No. 17241 Dated 20.06.2019 may be followed.

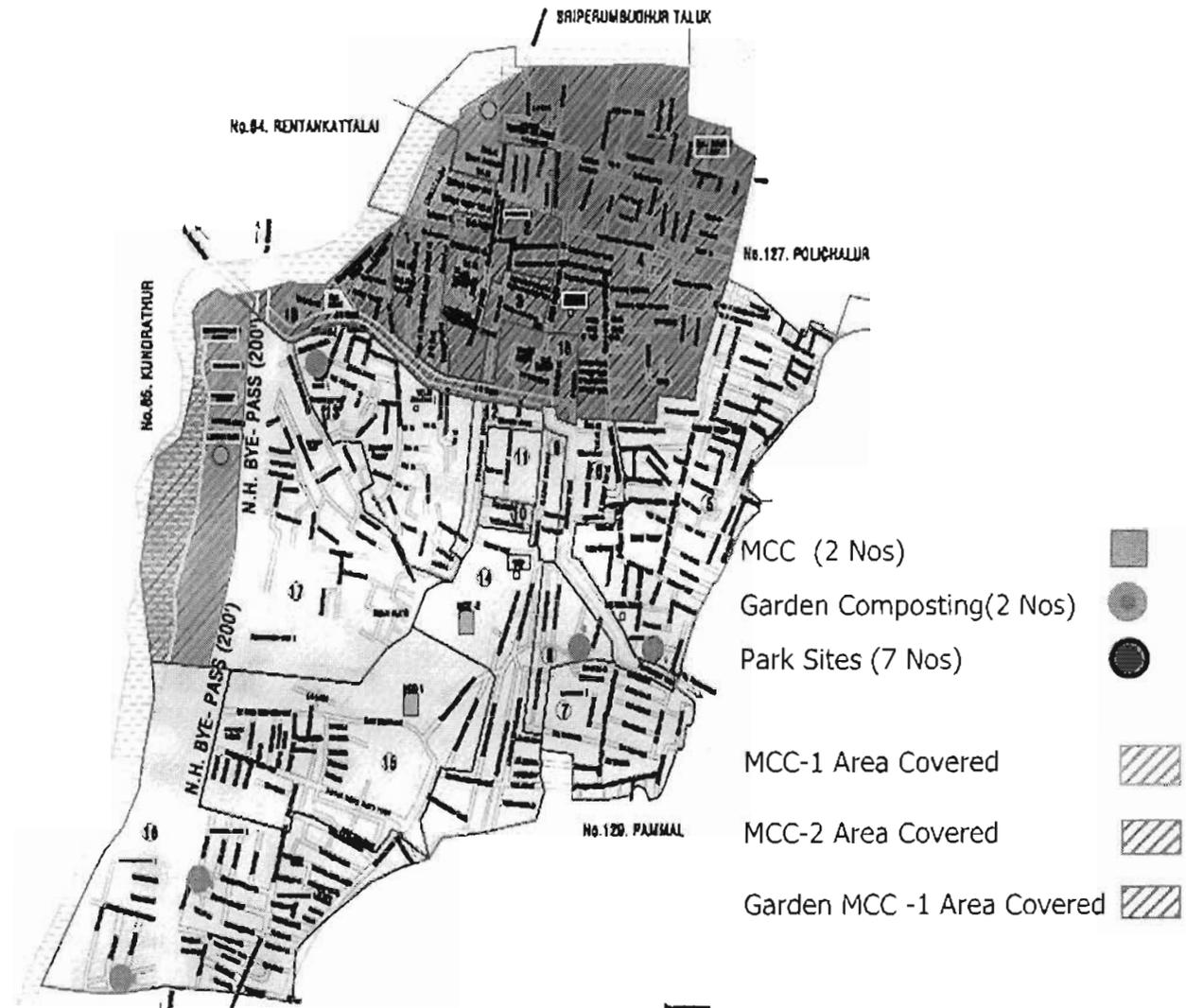
Processing Capacity of Bio-degradable waste in Tons Per Day	No. of Tubs	Size of Each Tub	Required Area for Processing Centre in Square Meter*
5	14	3.9m x 1.8m x 1.0m	600
4	14	3.0m x 2.0m x 1.0m	410
3	14	3.0m x 1.5m x 1.0m	360
2	14	2.4m x 1.2m x 1.0m	260
1.5	14	2.0m x 1.2m x 1.0m	200

* Facilities for provisioning of shredding machine with conveyor belt, sieving machine, weighing machine, office room, wash rooms (for men and women separately), etc. should be provided.

- ii. Based on the extent of land available, capacity of Micro Composting Centre (MCC) may be determined and suitably located.



- iii. For example, a land parcel of 410 square meter can be used for establishing MCC of 4 Tons per Day (TPD) capacity.
- iv. Based on the capacity of MCC, the coverage area comprising ward(s) can be determined.



- v. Map of the ULB clearly defining ward(s) attached to MCC shall be prepared in different colours and legends.
- vi. For example, a 1.5 TPD MCC can get waste from 10,000 people that is about 2,220 households. Hence, the coverage area of 2,220 households shall be delineated.



Calculation:

Capacity of MCC = 1.5 TPD = 15,00,000 grams per day

Per capita waste generation (assumed) = 300 grams per day

Bio-degradable per capita waste generation (assumed 50%) = 150 gram per day

The MCC can cover (15,00,000 grams per day / 150 gram per day) = 10,000 population

10,000 population = $10,000/4.5 = 2,222$ Households (Assumed population per Household = 4.5)

Hence, a 1.5 TPD MCC can cater to 10,000 population that is about 2,220 households.

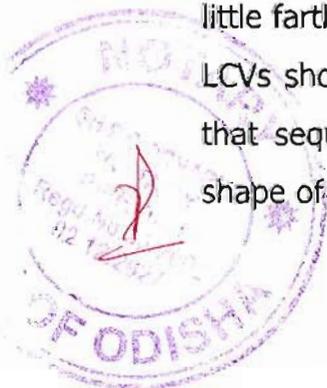
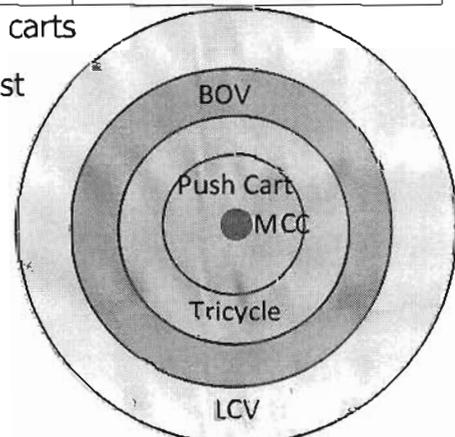
- vii. It should be ensured that for each MCC/OCC at least three numbers of Sanitation Workers are tagged and accordingly, requirement should be assessed & job responsibility should be shared.

5. Assessment of Vehicles

- i. After wards are being tagged with MCC (duly reflected in the ULB map) number of vehicles required for door-to-door collection (for 5 hours duration) and for transportation to MCC can be assessed as per the table below.

Vehicle Type	Number of Households to be covered	Staff Required
Push Cart	150 - 250	1 person per push cart
Tricycle	200 - 300	2 persons per Tricycle
Battery Operated Vehicles (BOV)	400 - 500	2 persons per BOV
Light Commercial Vehicles (LCV) having 500 to 700 kg capacity	1,000	3 persons per LCV

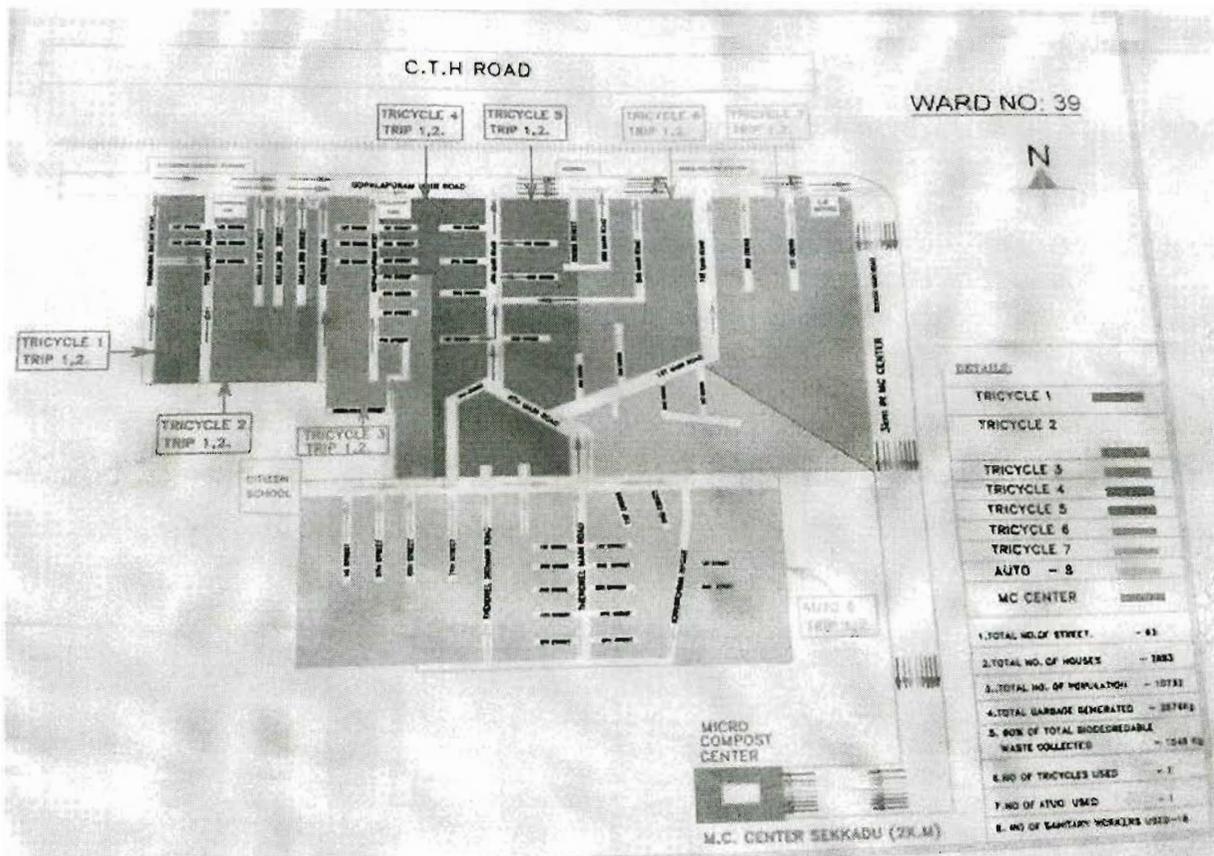
- ii. For optimum utilization of resources, push carts shall be engaged for the households nearest to the MCC, tricycles to the households a little farther from MCC. Similarly, BOVs and LCVs should be assigned to households in that sequence which may be assumed in shape of four concentric circles.



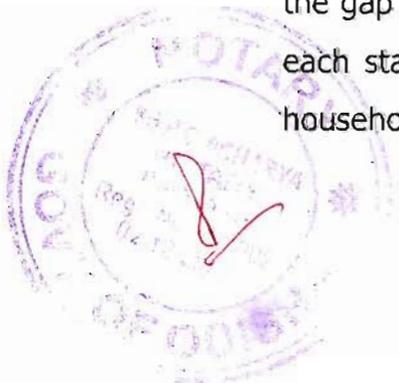
- iii. Proper assessment has to be made for procurement of small vehicles to cover all category of streets by following due procedure. The assessment should take the available vehicles and other transporting machineries into consideration.

6. Preparation of Route Maps

- i. Assign vehicles to collect segregated waste from specific areas for each trip to MCC. Prepare vehicle-wise Route Maps and fix the target of solid waste to be collected by every vehicle.

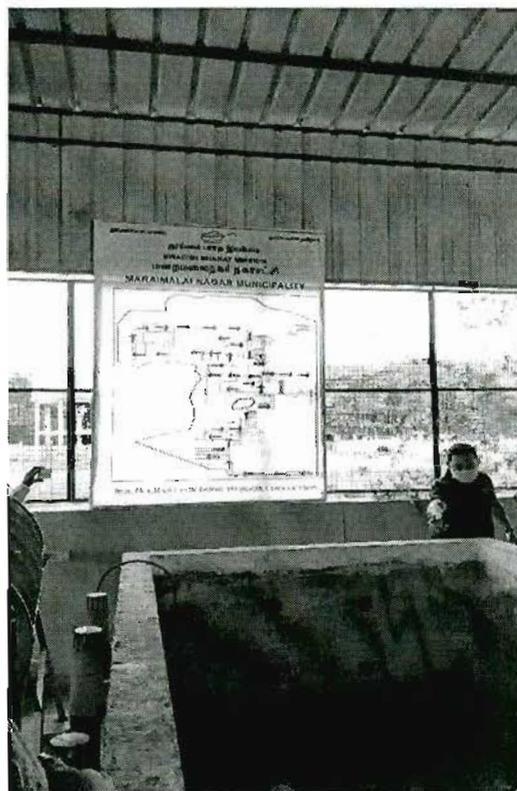
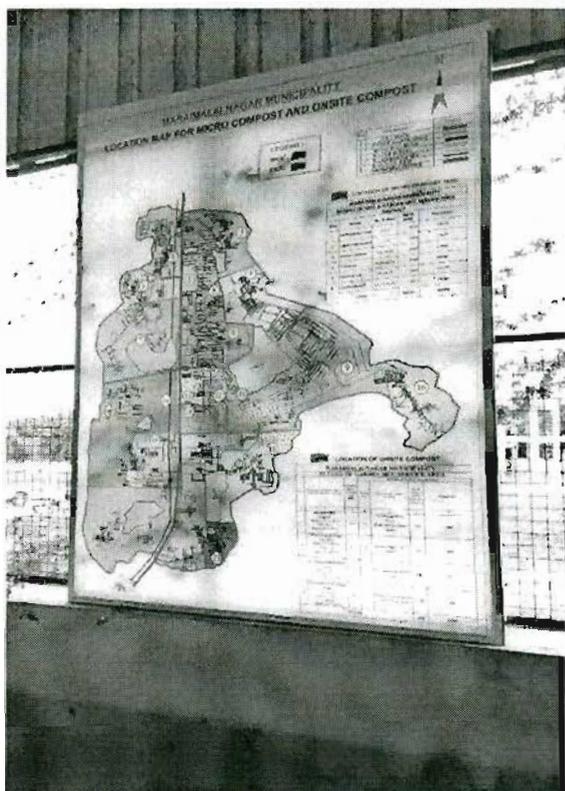


- ii. A register with title "Vehicle Deployment and Waste Collection Register" shall be maintained as per format mentioned below in every MCC. This register will help to ascertain amount of solid waste that should have been collected vis-à-vis the amount actually reached the MCC, thereby analysing the gap for the shortfall quantity. It will help in evaluating performance of each staff attached to the MCC concerned in collecting solid waste from household level on day-to-day basis.



Trip No.	Location of MCC	Vehicle Registration No. & Type	Name of the Driver & Mobile No.	Streets / Area covered	No. of Households covered(Through Swachh-Sathi survey)	No. of Population covered(Household x 4.5) (Col.6x4.5)	Quantity of MSW generation (Population x per capita waste generation)(Col. 7 x 0.3kg)	Quantity of organic waste (50% of total quantity of waste generation) (Col. 8 x 0.50) in kg	Remarks
1	2	3	4	5	6	7	8	9	10
Trip 1									
Trip 2									

iii. The vehicle-wise Route maps to be displayed on the wall of MCC.



7. Layout of Micro Composting Centre

- i. Roofing - Truss with corrugated sheets for roofing may be used
- ii. Side Wall - For proper ventilation and protection, wire mesh with appropriate gaping may be used.



- iii. Flooring - Concrete floor (anti-skid) with proper slope at the main entrance of the MCC may be constructed.
- iv. Tubs:
 - a. The MCC will have 14 tubs in two trains of 7 tubs in each train.
 - b. Each Tub may have dimensions as indicated below

Processing Capacity of Bio-degradable waste in Tons Per Day	No. of Tubs	Size of Each Tub	Required Area for Processing Centre in Square Meter
5	14	3.9m x 1.8m x 1.0m	600
4	14	3.0m x 2.0m x 1.0m	410
3	14	3.0m x 1.5m x 1.0m	360
2	14	2.4m x 1.2m x 1.0m	260
1.5	14	2.0m x 1.2m x 1.0m	200

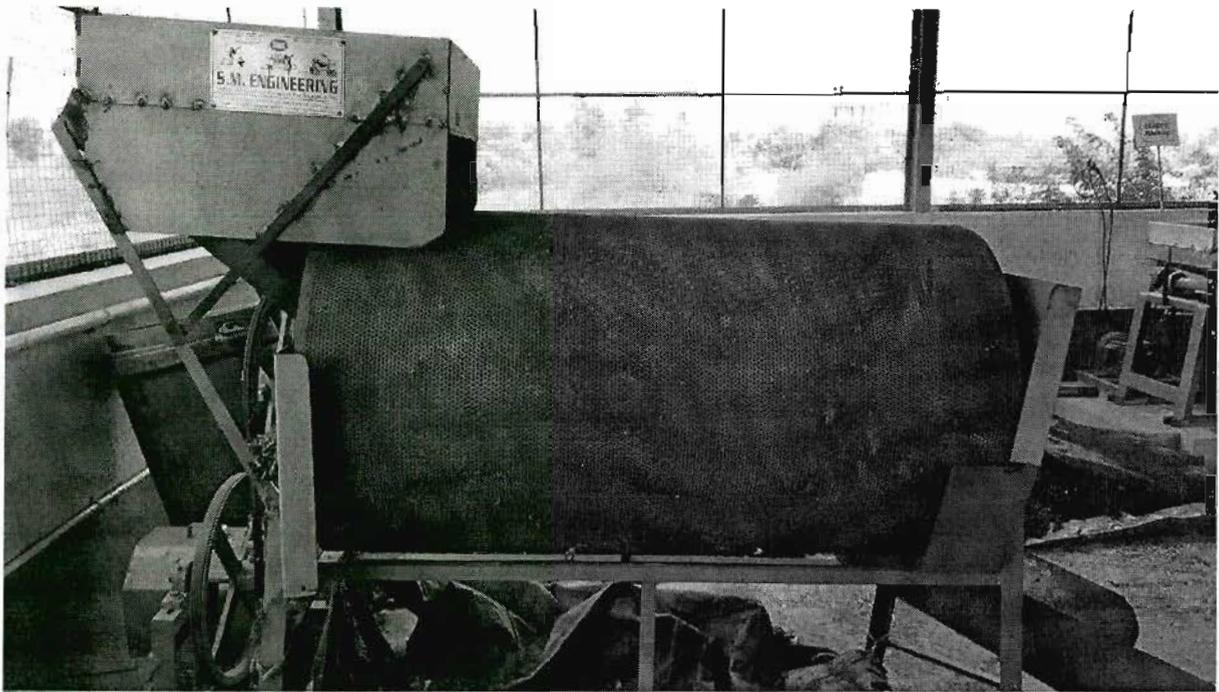
- c. The floor of each tub shall be sloped to one side and have a drain point with jalli to collect leachate.



- d. Leachate drain points from each tub shall be connected to underground pipes to form a leachate drainage network and connected to a chamber for safe collection.
- e. The accumulated leachate will be rich in bacterial consortium and can be used as inoculum. The leachate can be sprinkled a little on the waste in tubs. But too much of liquid may block the pores that will create anaerobic condition in the tubs.
- f. Each tub will have sufficient number of holes on the side walls. The holes will be connected through pipes and will have a cowl installed on the top to help proper ventilation.



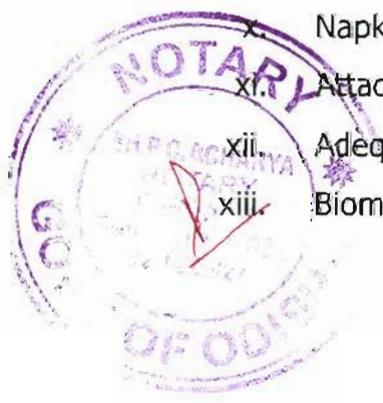
- g. There shall be adequate space for movement (approximately 1 meter) around each tub.
- v. Digital Weighing machine shall be installed to record the received waste.
- vi. Shredding Machine with conveyor belt shall be placed at the receiving bay to shred the waste to 20-40 mm size.



- vii. Sieving Machine shall be installed to screen the compost after 40 days.
- viii. Fly traps should be installed to control fly nuisance.

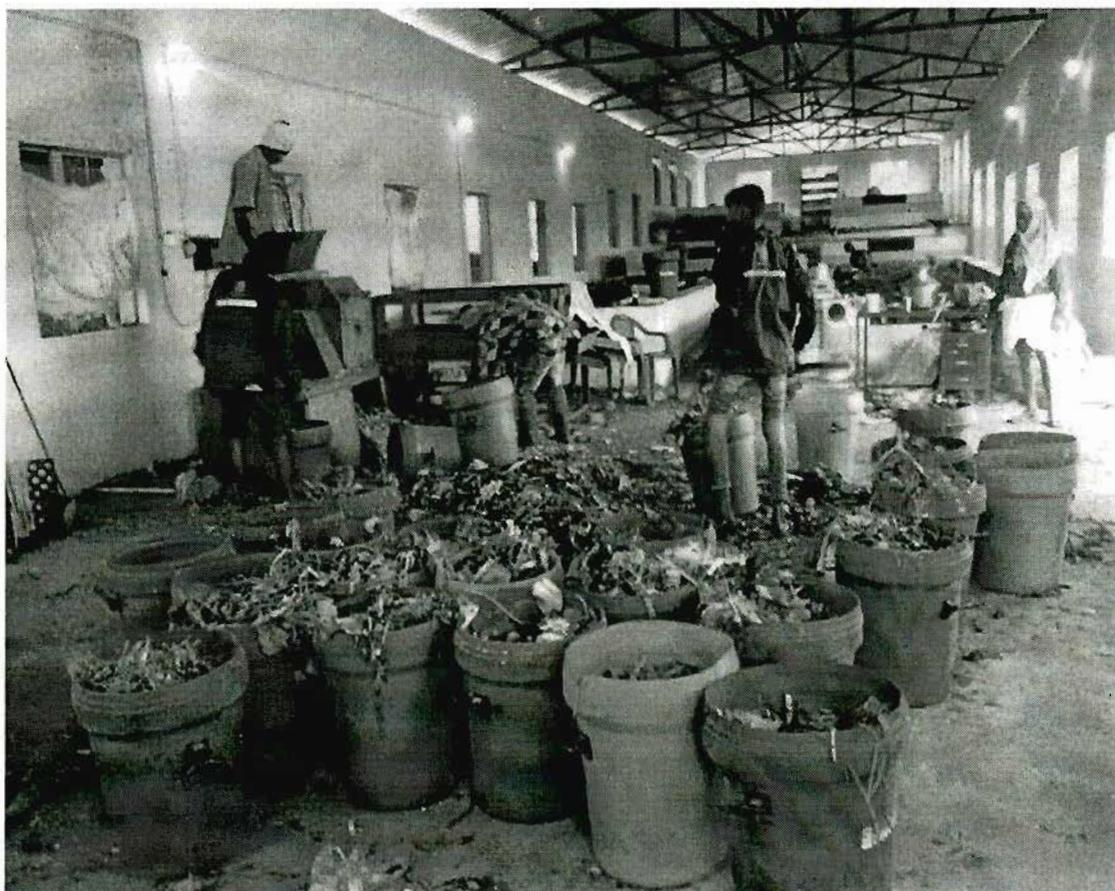


- ix. Storage room /Godown to be provided for storing finished product.
- x. Napkin Incinerator should be placed for disposal of sanitary napkins.
- xi. Attached toilets should be provided separately for men and women.
- xii. Adequate Water supply and Electrical arrangements to be provided.
- xiii. Biometric attendance system to be installed.

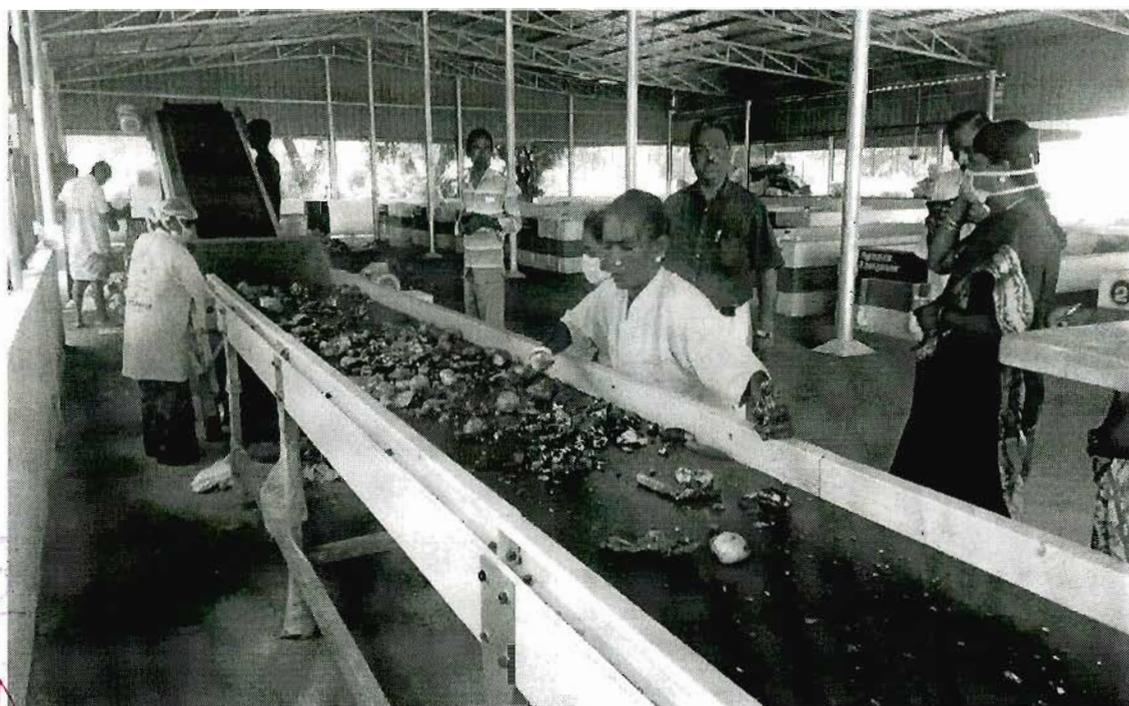


8. Preparation of Bio-degradable Waste

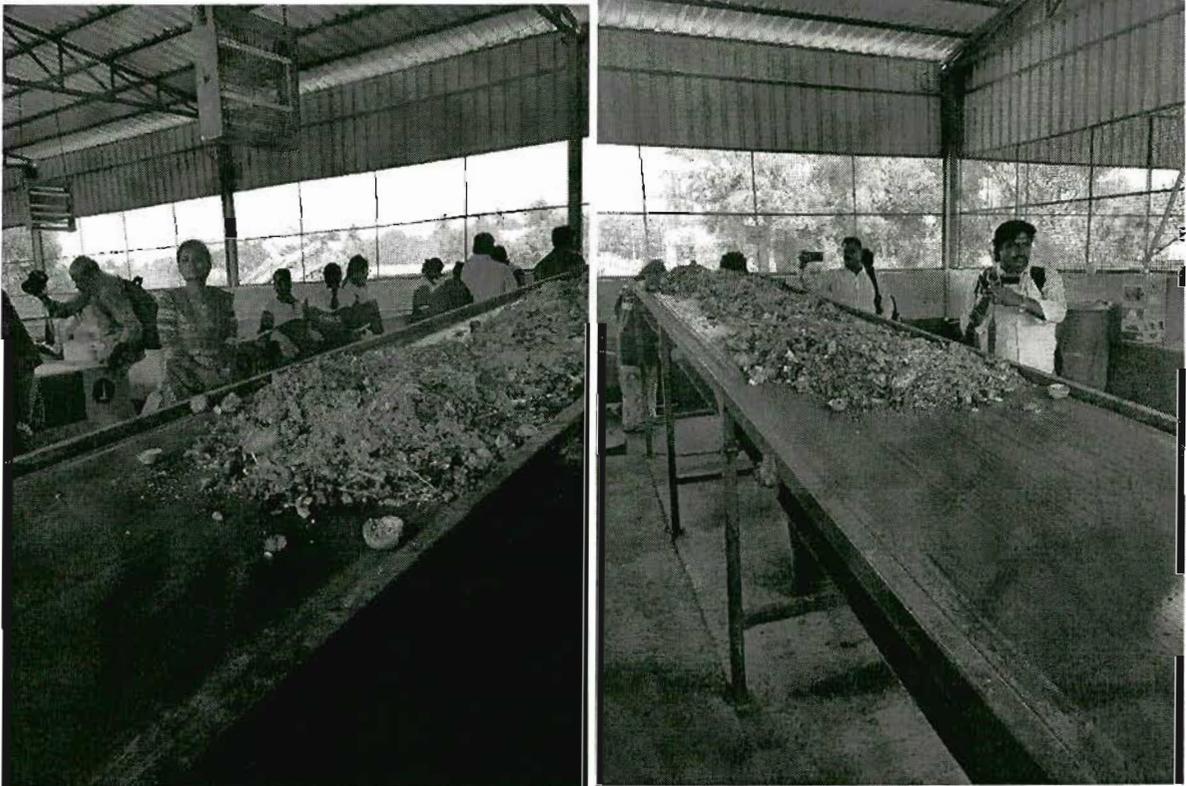
- i. Unload the bio-degradable waste in waste receiving yard after noting down the weight.



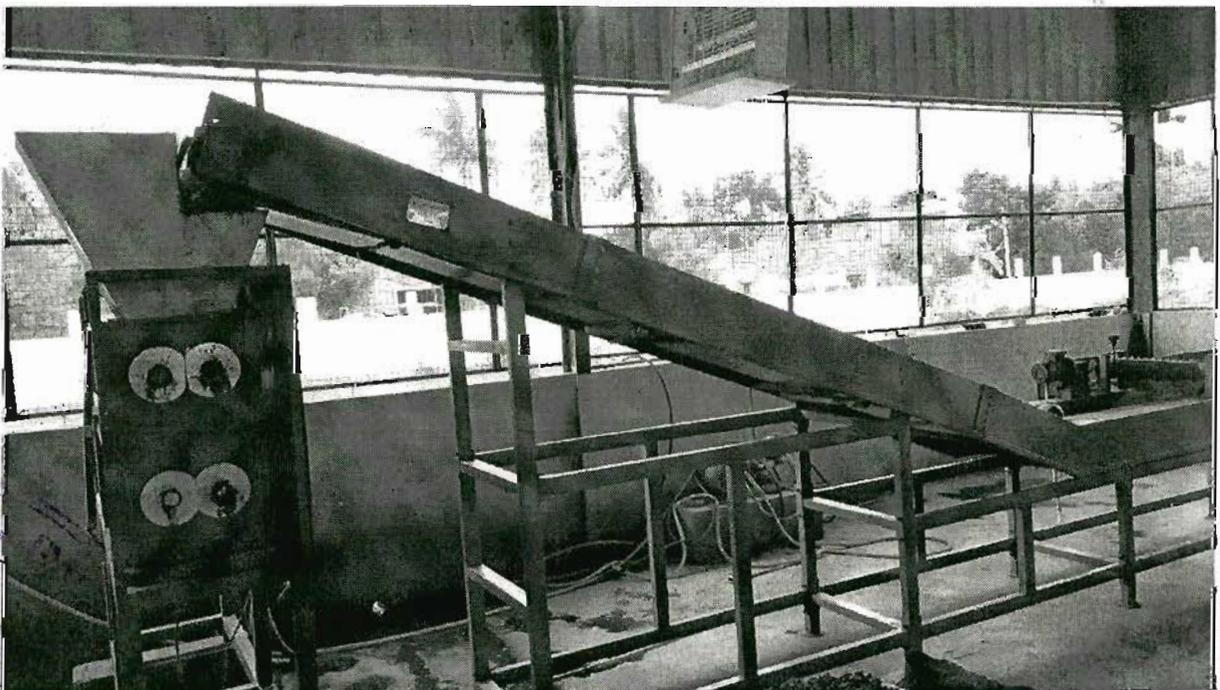
- ii. Transfer the waste to conveyor belt



- iii. Spread the waste manually across width of the conveyor belt and segregating the waste further to ensure all non-biodegradable wastes are removed



- iv. Sprinkle rice-husk-mixed-EM-solution evenly on the top of waste.
v. While passing through the shredder, the biodegradable waste will get shredded to 20-40mm size and mixed with the rice-husk-mixed-EM-solution.



- vi. Collect the shredded waste that is ready to be put inside composting tubs.



9. Preparation of Compost Tub to Receive Shredded Waste for First Time

- i. Before putting waste in the compost tub for 1st time, bio-dozing has to be done by placing a layer of 2-inch-thick dry cow dung at the floor of each tub.
- ii. The tub is now ready to receive the shredded biodegradable waste mixed with the rice-husk-mixed-EM-solution.
- iii. Place the waste inside the tub and carry on the same process for next tub on next day.

10. Composting Process

- i. On 1st day, put the shredded waste mixed with prepared media in 1st tub.
- ii. On 2nd day, put the shredded waste mixed with prepared media in 2nd tub.
- iii. This method is to be continued till 7th day, on which the shredded waste mixed with prepared media will be put in 7th tub.
- iv. The sequence of putting waste in tubs is: 1st day - 1st tub, 2nd day - 2nd tub, 3rd day - 3rd tub, 4th day - 4th tub, 5th day - 5th tub, 6th day - 6th tub, 7th day - 7th tub.
- v. Turn the waste up and down once in every five days for better aeration.



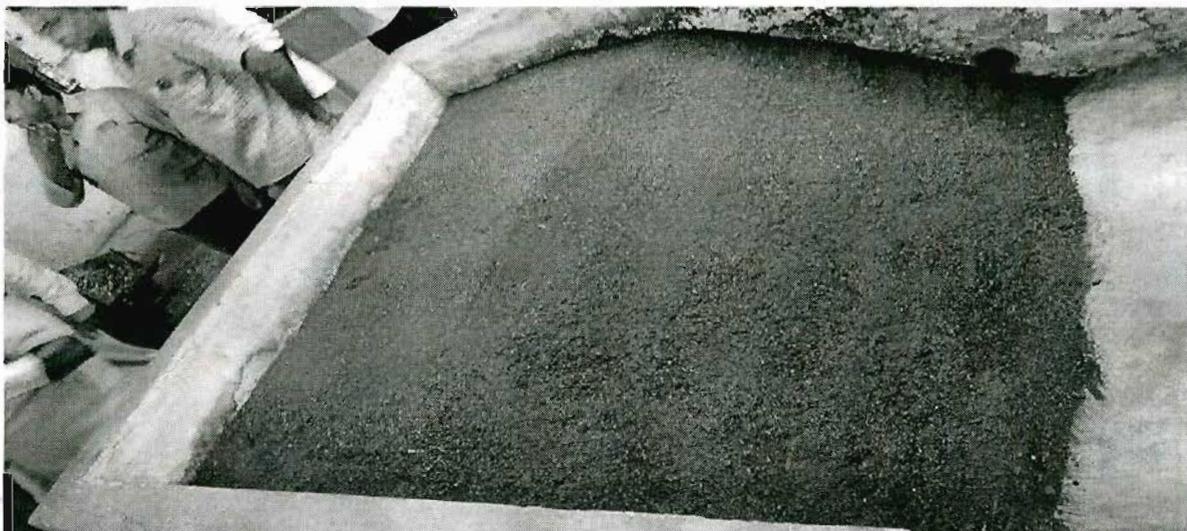
- vi. With each passing day, the waste will degrade due to bacterial activity and there will be reduction in volume of waste. The colour of the waste will slowly turn brown and ultimately become black in final stage.
- vii. On 8th day, the waste in 1st tub would have degraded with considerable reduction in its volume. Put the freshly shredded waste mixed with prepared media again in 1st tub, on the top of 7-days-old waste.
- viii. On 9th day, the freshly shredded waste mixed with prepared media will be put again in 2nd tub, on the top of 7-days-old waste.
- ix. This method is to be continued till 14th day, on which the shredded waste mixed with prepared media will be put in 7th tub.
- x. The sequence of putting waste in tubs is: 8th day - 1st tub, 9th day - 2nd tub, 10th day - 3rd tub, 11th day - 4th tub, 12th day - 5th tub, 13th day - 6th tub, 14th day - 7th tub.
- xi. On 15th day, the waste in 1st tub would have degraded with considerable reduction in its volume. Put the freshly shredded waste mixed with prepared media again in 1st tub, on the top of 14-days-old waste.
- xii. On 16th day, the freshly shredded waste mixed with prepared media will be put again in 2nd tub, on the top of 14-days-old waste.
- xiii. This method is to be continued till 21st day, on which the shredded waste mixed with prepared media will be put in 7th tub.
- xiv. The sequence is: 15th day - 1st tub, 16th day - 2nd tub, 17th day - 3rd tub, 18th day - 4th tub, 19th day - 5th tub, 20th day - 6th tub, 21st day - 7th tub.
- xv. After 21st day, the 2nd train of seven tubs will be put to use in the same manner.
- xvi. The sequence of putting waste in tubs is: 22nd day - 8th tub, 23rd day - 9th tub, 24th day - 10th tub, 25th day - 11th tub, 26th day - 12th tub, 27th day - 13th tub, 28th day - 14th tub, 28th day - 14th tub, 29th day - 8th tub, 30th day - 9th tub, 31st day - 10th tub, 32nd day - 11th tub, 33rd day - 12th tub, 34th day - 13th tub, 35th day - 14th tub, 36th day - 8th tub, 37th day - 9th tub, 38th day - 10th tub, 39th day - 11th tub, 40th day - 12th tub, 41st day - 13th tub, 42nd day - 14th tub.



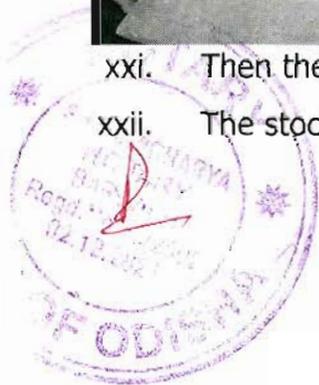
- xvii. During these 21 days from 22nd day to 42nd day, the waste in all seven tubs in 1st train will be turned up and down for aeration but no fresh waste will be added.
- xviii. After 40 days of adding waste in any tub, the waste in the tub would have turned black colour indicating matured compost.



- xix. The matured compost shall be removed from the tub and sieved for uniform size. The rejects from the sieving shall be put again in the tub for further decomposition.
- xx. The screened compost shall be kept for seven days for stabilization.

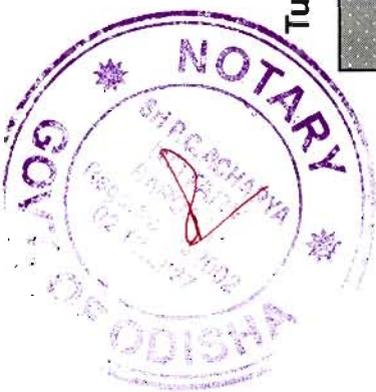


- xxi. Then the compost shall be weighed packed to standard size of bags.
- xxii. The stock register and sale register are to be maintained.

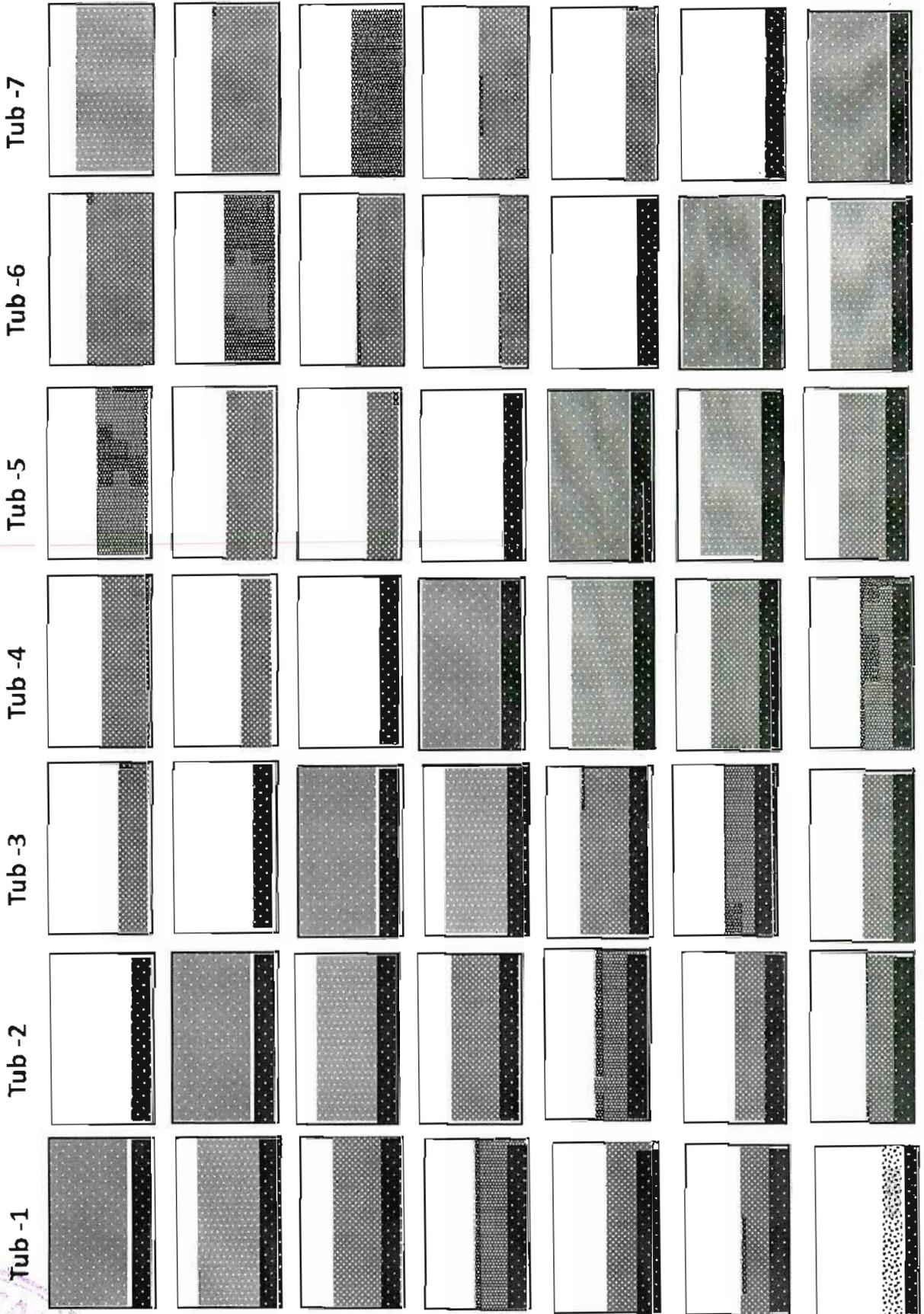


Micro Composting Process of Train-1 Comprising Seven Tubs (1/3)

	Tub -1	Tub -2	Tub -3	Tub -4	Tub -5	Tub -6	Tub -7
Day - 1							
Day - 2							
Day - 3							
Day - 4							
Day - 5							
Day - 6							
Day - 7							



Micro Composting Process of Train-1 Comprising Seven Tubs (2/3)



Micro Composting Process of Train-1 Comprising Seven Tubs (3/3)

Tub -7

Tub -6

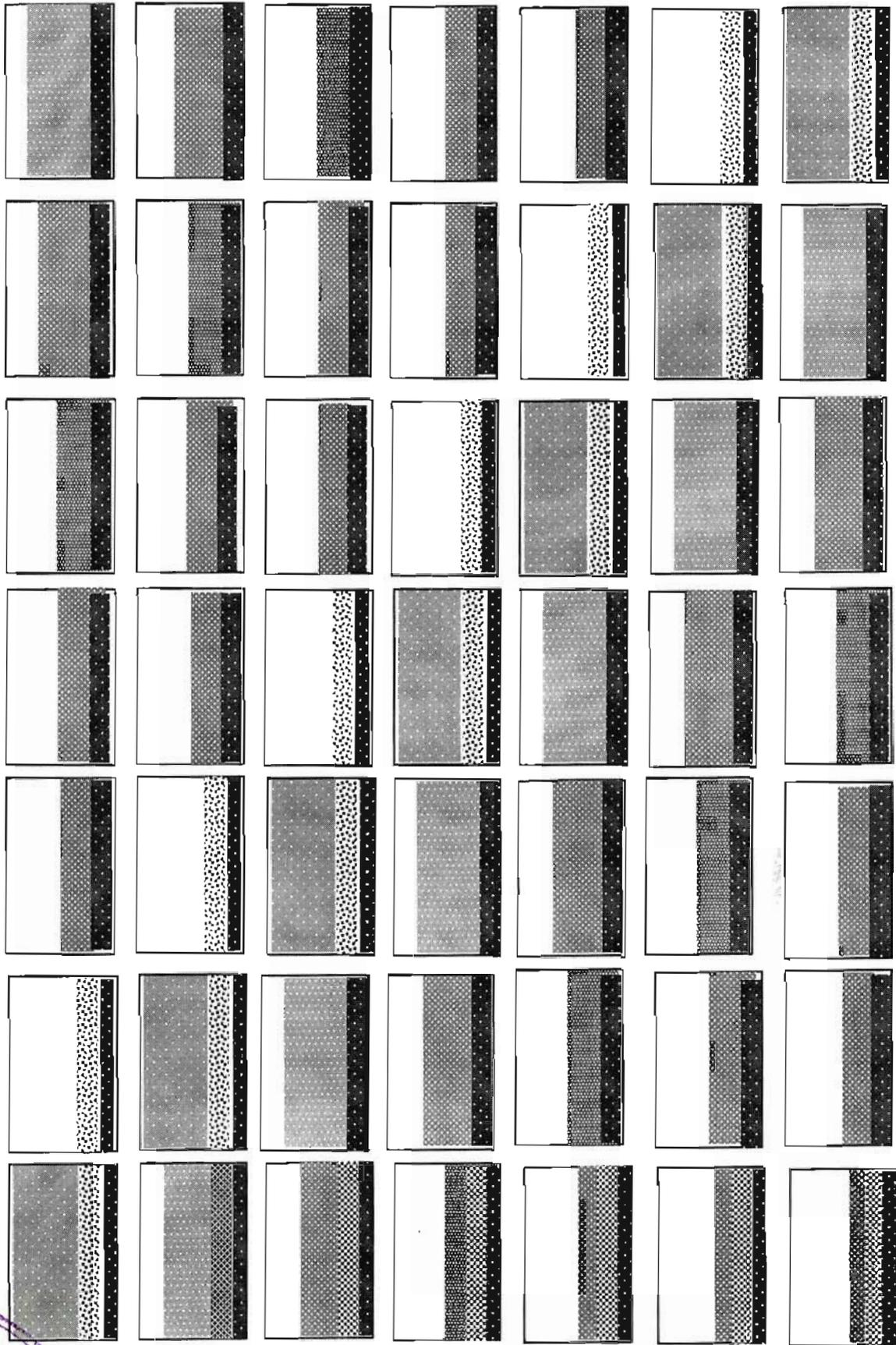
Tub -5

Tub -4

Tub -3

Tub -2

Tub -1



Day - 16

Day - 17

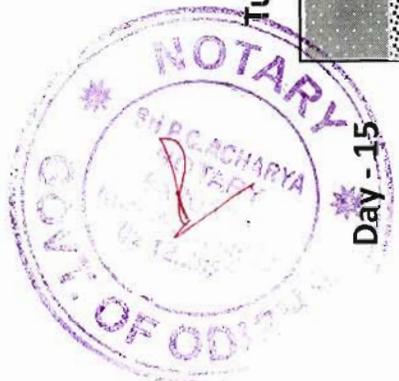
Day - 18

Day - 19

Day - 20

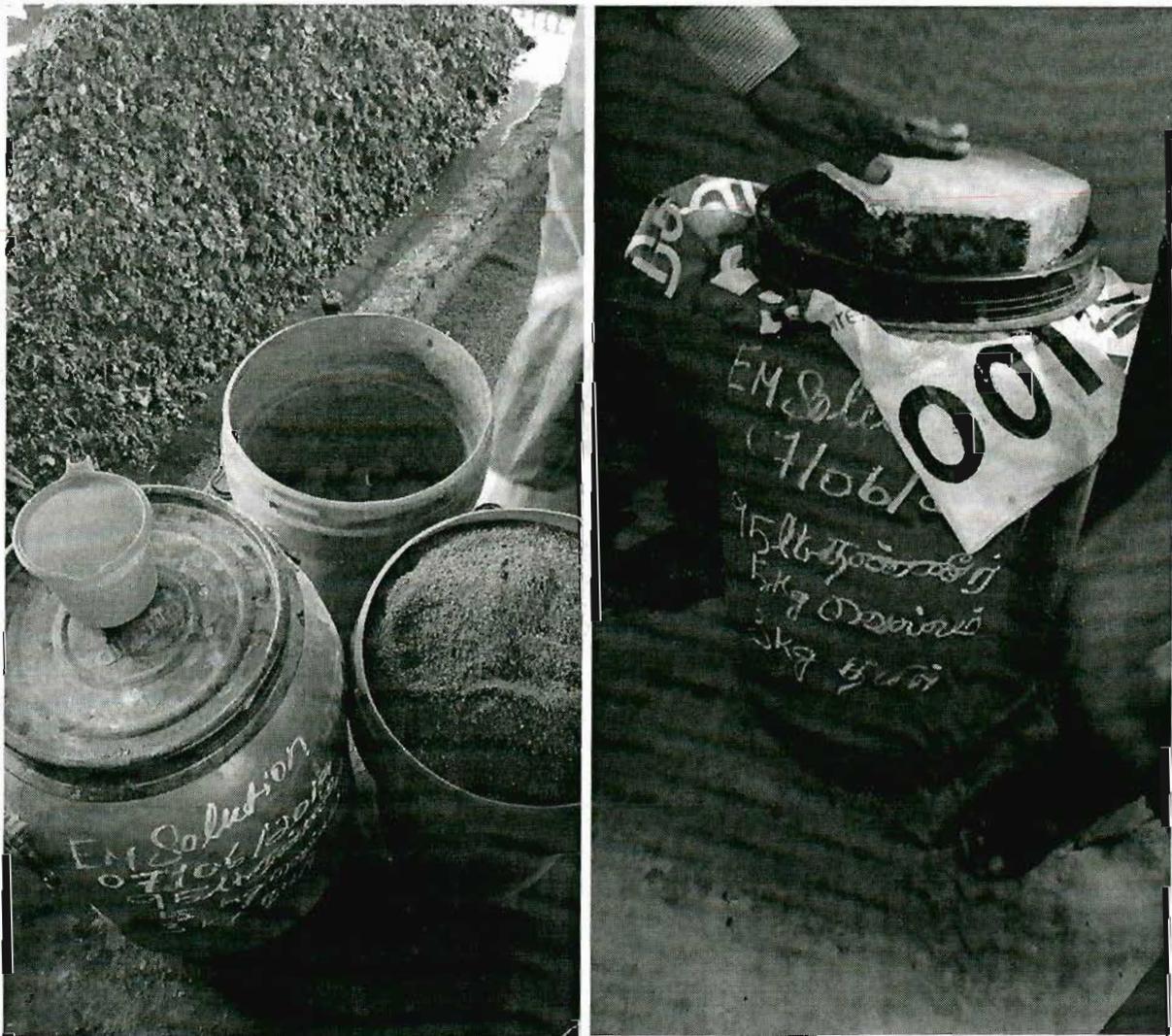
Day -21

Day -15



11. Preparation of Effective Microorganism (EM) and Media

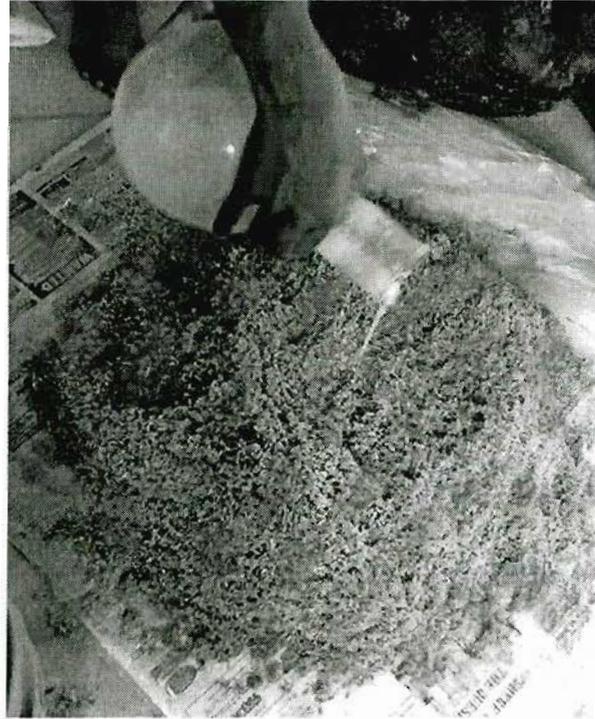
- i. EM stands for "Effective Micro-organisms". EM consists of a wide variety of effective, beneficial and non-pathogenic microorganisms produced through a natural process and not chemically synthesized or genetically engineered.
- ii. Take a barrel of 100 litres capacity.
- iii. Fill 90 litres of water.
- iv. Add 3 litres of curd and 5 Kgs of jaggery. Mix it to form a homogeneous solution.



- v. Close the barrel and keep it fermented for 7 days.
- vi. After 7 days, open the barrel and the EM Solution is ready to use.

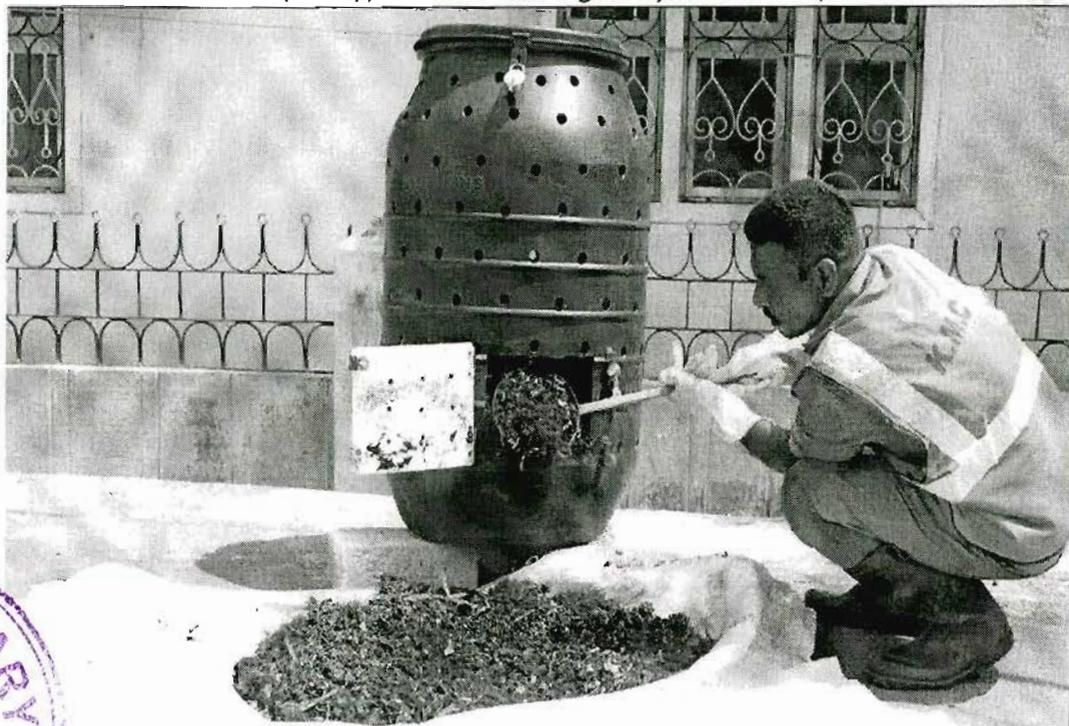


- vii. Take some EM solution in a jar and mix it with equal proportion of Rice bran and Rice husk. The quantity of EM solution should be such that the mixture can be turned into balls of the size of a coconut without breaking. If it crumbles, add a little more EM solution to the mixture. If it is too much of watery, add more Rice bran and Rice husk.
- viii. Keep the mixture ready to add on fresh waste.
- ix. The EM solution should be used within 3 days of preparation.



12. On-site Composting Centres (OCC)

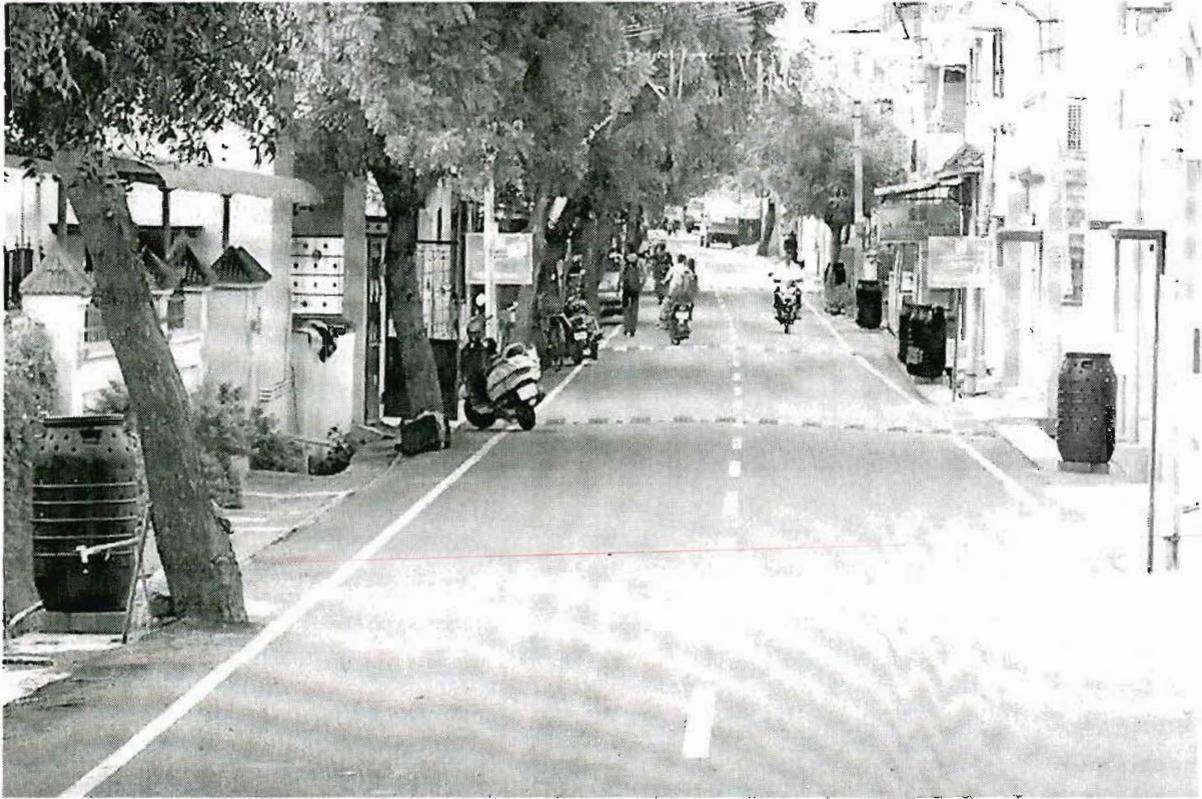
- i. OCC may be established with seven tubs following the process adopted in MCC to obviate the difficulties in finding adequate space.
- ii. For wards having further space crunch, composting can be taken up using bins of 200 litre capacity, unused damaged syntax tanks, etc.



- iii. The bin shall have holes on its sides for effective aeration.



- iv. There shall be post box size opening with door at the bottom for removal of compost.



- v. The fresh wet waste shall be shredded on-site by mobile shredding machine and be fed from top after mixing it with EM Solution.
- vi. After around 40 days the waste will be converted to compost that can be removed through the bottom gate and may be distributed among the households concerned or may be disposed of in any other manner as deemed proper by the ULB.

13. Sale of compost in local market

- i. A suitable mechanism may be developed by the ULB in consultation with District Magistrate and other stakeholders of the District for timely and proper selling of the compost generated from MCC/OCC.

14. Disposal of dry waste

- i. The Municipal Solid dry waste may be divided into two categories:
 - a. Recyclable - that can be sold out and
 - b. non-recyclable - that cannot be sold out
- ii. The recyclable dry waste to be collected, segregated and sold to the empanelled agencies at the rates approved by the ULB. Sale proceeds

thereof shall be distributed amongst the sanitation workers which shall be over and above their salary / remuneration.

- iii. The details of the transaction shall be recorded in a register for future reference with signature of the sanitation workers as a token of receipt of the received amount.
- iv. The non-recyclable solid waste to be brought to the Material Recovery Facility adjacent to the MCC. The unutilized tubs (if any) of the MCC may be utilised for the purpose.
- v. The non-recyclable solid waste shall be baled using a baling machine to reduce the volume and transported to cement factories having kilns for co-processing as intimated by this Department from time to time.
- vi. A register shall be maintained depicting the details thereof for future reference.

15. Bulk Waste Generator (BWG)

- i. As per SWM Rules, 2016 the BWGs shall segregate their waste and process the bio-degradable waste within their premises using any of the methods such as: vermi-composting, bio-digester, mechanical composting, etc.
- ii. The non-bio-degradable waste shall be handed over to sanitation worker for which user fee shall be collected as per provisions made under the Bye-Laws.
- iii. Periodical meetings with BWGs should be made to create awareness and take stock of efficiency in handling waste.

16. Information, Education and Communication (IEC)

- i. Each and every household shall be effectively impressed upon to segregate the solid waste by themselves and handover the same to the waste collectors during door-to-door collection.
- ii. Competitive attitude amongst the households shall be generated by adopting naming and shaming technique.
- iii. In respect of households handing over segregated waste continuously shall be recognized by affixing sticker / sun-board on the outer wall of the house to that effect.



- iv. Token mementos may be distributed to such households during periodical ward sabha
- v. Households not adopting the practice of handing over segregated waste shall be requested to do so. In case of repeated failure, such waste may be placed on a sheet in front of the house and the sanitation worker shall impart on the spot training to the members of the household present as to how to segregate the waste.

17. Technical advice:

In case of technical difficulties / advice for furtherance in Solid Waste Management, the ULB may refer / consult the PMU of the SBM / SWM.

18. Funds

Housing & Urban Development Department will provide required funds on receipt of **Action Plan for capital investment** and the ULBs will take care of O&M from either their own funds or from the permissible grants received from Government.

19. Timeline:

Sl. No.	Deliverable	Activity	Month				
			1 st	2 nd	3 rd	4 th	5 th
1	Basic Statistics	Sample survey for quantification of per capita waste generation (segregated: wet and dry)					
2		Map of ULB with ward boundary, roads, parks, etc.					
3		Identification of Bulk Waste Generators					
4	Availability of Land	Identification of Suitable Land for MCC/OCC					
5		Advance possession					
6	Cluster Demarcation	Households to be tagged to the MCC/OCC					
7		Demarcation of the area					
8	Vehicles	Assessment of vehicles required for door-to-door collection					
9		Arrangement of required number of Tricycle, LCV, BOV					
10	Human Resources	Identification of WSHG / ALF and selection of Swachh Sathi					
11		Identification of Sanitary Workers					
12		Selection of Supervisor					



Sl. No.	Deliverable	Activity	Month				
			1 st	2 nd	3 rd	4 th	5 th
13	Route Map	Preparation of Route map tagging vehicle - sanitation worker - households - MCC/OCC					
14	Establishment of MCC	Civil Construction					
15		Procurement of machinery and installation					
16	Disposal of Recyclable Waste	Identification of Rag Pickers and agencies dealing with recyclable dry waste					
17		Approval of rate for recyclable waste					
18	Establishment of MRF for Dry Waste	Civil Construction					
19		Procurement of machinery (Baling Unit) and installation					
20	Disposal of Non-recyclable Waste	Identification of Cement Factories					
21		Sending the baled non-recyclable waste for co-processing					
22	IEC	IEC Activities by Swachh Sathi					

20. Independent Evaluation

The H&UD Department may take steps to conduct independent evaluation in the manner as deemed proper at appropriate time.

21. Conclusion

The sense of **"My Waste, My Responsibility"** may be inculcated in every waste generator (Individual household / Bulk Waste Generator) to ensure "Swachh Odisha Susth Odisha".

* * *

*True Copy
Attested
By*

**COLLECTOR
BARGARH**

