

Dated Guwahati, the 25th January, 2023

To

The Registrar General
Hon'ble National Green Tribunal
Faridkot House, Copernicus Marg,
Near India Gate, New Delhi, Delhi-110001.

Sub: Status report on compliance of the Solid Waste Management Rules, 2016 including the legacy waste and liquid waste management in the State in the matters of OA No. 606/2018.

Sir,

Most respectfully, with reference to the subject mentioned above, I am to humbly submit the following actions taken by the State of Assam in compliance with the provisions of the Solid Waste Management Rules, 2016 and various directions passed by Hon'ble NGT in OA No. 606/2018.

The State generates about 1284 Tonnes per day (TPD) of solid wastes at present covering 104 ULBs in the State. The generation of wet waste, dry waste and inert waste is estimated at 611 TPD, 533 TPD and 140 TPD respectively. About 652 TPD, which is about 51 % of total waste generation in the State, are processed as present. However, to mitigate gaps in solid waste treatment, the State has prepared roadmaps for proper disposal of solid waste. The roadmap includes construction of *bio-methanation plants, composting plants, material recovery facilities and sanitary landfill covering all the ULBs in the State. The detail budgetary allocation for the said facilities are reflected in the action taken report by the Government attached herewith.*

Out of 1284 TPD waste generation in the State, about 575 TPD of solid waste is generated in capital city Guwahati. The State has allocated Rs. 17.25 crores for construction of 'waste to compost' and Refuse Derived Fuel (RDF) Plant in Guwahati with processing capacity of 150 TPD which shall be completed by June, 2023. Another Rs. 39 crores has been approved under SBM 2.0 for construction of composting plants in 42 ULBs with total treatment capacity of 342 TPD.

Bio-mining of legacy wastes is being carried out as per the direction of the Hon'ble NGT. Total legacy waste accumulated in the State is estimated at about 25 lakh tonne out of which about 15 lakhs tonne of legacy waste were generated in Guwahati alone. Bio mining of about 3.61 lakhs MT of legacy waste has been completed in the Boragaon dump site in the 1st phase during Jan 2021-April 2022 at a total cost of Rs 10.0 crore. In the second phase, bio-mining of legacy waste in Guwahati has been undergoing at a total project cost of Rs 172.5 Crore. Road map has also been prepared by the State to undertake bio mining of legacy wastes in 43 ULBs, which have identified legacy waste dumps.

Govt. of Assam has facilitated disposal of the plastic waste generated from the bio-mining process to M/s Dalmia Bharat Cement Ltd. for co-incineration. 14877 MT of recovered plastic waste has been co-incinerated at the said cement plant so far. It has helped the cement clinkerisation unit to reduce consumption of fossil fuel to a significant level.

The State generates 435.35 MLD of sewage at present. I humbly admit that at present the State does not have any operational sewage treatment plant (STP) except the STPs operated by the PSUs like ONGCL, Refineries of IOCL and NRL, Indian Railways, etc. However, the Govt. of Assam has given due priority to establish sewage treatment plants (STP) in all the major towns in the State in a mission mode. The Govt has planned to install 99 STPs covering all the major towns in the State with a total treatment capacity of 443 MLD at a total cost of Rs 3219 Crores. The detail plan of establishment of the said STPs is included in the action taken report annexed herewith.

About 130 MLD of sewage is generated in Guwahati alone. Three (3) STPs with total capacity of 187 MLD are being established in Guwahati to treat the entire sewage generated in in the City at a total project cost of Rs. 2365 crores.

In Assam most of the households in urban and rural areas are having individual septic tanks. The Govt of Assam has taken proactive steps to construct a number of Faecal Sludge Treatment Plants (FSTP) covering all the 104 ULBs in the state. The state has also allocated Rs. 38.66 crores from 15th Finance Commission (FC) grants for construction of FSTPs in 32 towns. One FSTP of capacity 10 KLD is operational in Titabor.

To bridge the gap between solid waste generation and treatment as well as between sewage generation and treatment, the State has planned comprehensive coverage of the required waste processing facilities, STP and FSTP infrastructures in all the towns in a Mission Mode. Besides, the State has ring-fenced more than **Rs. 4000 Crores** for creating the above mentioned infrastructure facilities in the State. The details of amount ring-fenced by the State with specific mention of State's share of more than **Rs. 1000 crores** are mentioned in the action taken report annexed herewith.

Sir, once again we assure the sincere intent of the Govt. of Assam to comply with the directions of the Hon'ble NGT. Considering the good intent of the Government, we request the Hon'ble NGT not to impose any environmental compensation upon the State.

The Action taken report, the last quarterly progress report and the copy of the power point presentation are enclosed herewith. We shall appear before the Hon'ble Court through Video Conferencing and you are therefore requested to share the VC link with us for the purpose.

With kind regards,

Yours sincerely,

Encl: As above

Chief Secretary,
Government of Assam

STATUS REPORT ON COMPLIANCE OF SOLID WASTE MANAGEMENT RULES, 2016
INCLUDING LEGACY WASTE AND LIQUID WASTE MANAGEMENT

1. Assam has the largest urban population of 43.9 Lakh (Census 2011) amongst the North-eastern States. Guwahati has about 1 million urban population, while the other large towns of the state are Nagaon (population 116,355), Dibrugarh (population 138,661) and Silchar (population 172,709). This indicates that other than the concentration of more than 25% urban population of Assam in Guwahati and surrounding urban agglomeration, Assam has a well distributed urban population across the state. The state's level of urbanization is 14 per cent in the Census 2011 which is lesser than the national average.

Demography	Assam's Status
Urban Local Bodies	104
Number of Municipal Corporation	1 (Guwahati)
Number of Municipal Boards	103*
Urban population (Census 2011)	43.9 million
Urbanization Level of Assam	14% (India 31.2%)
% of Assam's urban population in Guwahati	25% (approx.)

*Including 8 newly created ULBs.

2. The population category wise distribution of urban local bodies are as follows

Population Bracket as per 2011 Census	No of Municipal Corporations (MC) / Municipal Boards (MB)
More than 500K	1 MC (Guwahati)
Between 100K to 500K	3 Municipal Boards (Dibrugarh, Silchar & Nagaon)
Between 50k to 100K	10 Municipal Boards
Between 25K to 50 K	19 Municipal Boards
Between 10 K to 25 K	47 Municipal Boards
Less than 10 K	24 Municipal Boards

3. The Department of Housing & Urban Affairs has the administrative control over the urban local bodies in including Guwahati Municipal Corporation.

4. The state has taken several steps to ensure compliance of Rule 22 of the Solid Waste Management Rules 2016 towards effective collection, transportation, processing and legacy waste treatment. The state is also working towards creating institutional capacity to effectively implement the projects both in solid waste as well as in Sewerage and Septage management.

A. STATUS OF SOLID WASTE MANAGEMENT IN ASSAM

5. The total quantum of solid waste generation is 1284 TPD as on December 2022 as detailed below: -

6. The status of Solid Waste Management in Assam is as furnished below: -

Details¹	Dec-22
Quantity of waste generated (TPD)	1284
Wet Waste Generated (TPD)	611
Dry Waste Generated (TPD)	533
Quantity of waste Processed (TPD)	652 (51%)

Total No of wards in 104 ULBs	1214
No of wards where door to door collection exist	1153 (95%)
No of wards where source segregation practiced	463 (38%)

(i) STEPS TAKEN BY GOVERNMENT OF ASSAM ON POLICY SIDE

- The Government of Assam has drafted the **State Policy on Urban Solid Waste Management** in the year 2018 in line SWM rule 2016.
- Constitution of special task force in every district headed by District Magistrate and comprising other members like Superintendent of Police, State Pollution Control Boards and District Legal Services Authority (DSLAs) for awareness about SWM Rules, 2016 by involving educational, religious and social organizations including local Eco-clubs has been completed in every district.

(ii) COLLECTION & TRANSPORTATION

- Source segregation campaign by Govt. of India under the theme “Hara Geela, Sukha Neela” carried out in more than 300 schools across the state.
- Currently door to door collection is in practise in more than 95% of the wards in the state and source segregation in about 38% of the wards.
- To achieve 100% collection and segregation, massive Information Education Communication (IEC) awareness campaign is being carried out by the SBM mission directorate.
- To make source segregation sustainable through people driven approach, 103 nos of model wards for segregation have been identified and campaign for source segregation has been made operational from Dec, 2022. A consultant for IEC management is being on boarded to ensure effective reach and impact of the source segregation campaign. The EOI has been floated in this regard.
- Under SBM the ULBs were provided with collection equipment for door-to-door collection and septage collection (34 nos. of cesspool vehicle, 1807 tricycles).
- Under state budget 116 nos of tipper trucks and 114 nos. of skid steer loaders have been provided to ULBs for a project cost of Rs. 45.93 Crore
- Additional Procurement of 180 auto tippers for primary collection for an estimated amount of Rs.14.6 Crore under SBM is in process.





a) Ban on Single use plastics

7. In line with Ministry of Environment, Forest & Climate Change, GOI notification dated 12th August 2021 (GSR 571E), Government of Assam, Environment & Forest Department has also prepared an action plan to stop single use plastic across Assam and sent to all concerned vide letter no ENG.1/2019/205 dated 24th March 2022. Regular monitoring, checking has been carried out across the state in this regard.

8. The Mission Director SBMU has also written to all ULBs in the state for creation of awareness and monitoring of stopping of use of single use plastic vide letter no SBM (U)206/2020/151 Dated Guwahati, the 21st June, 2022.

9. Following Action has been undertaken with respect to ban on single use plastic

- State Control Room has been set up on the 1st of July. Phone number of State Control Room is 7099027961
- Pollution control Board, Assam also constituted separate inspection squads from Head office. The inspection teams of PCBA visited 2 airports, 14 bus stations, 17 railway stations and 6 E-commerce warehouses.
- Pollution Control Board (PCB), Assam registered all ULBs of the state in the SUP compliance monitoring portal developed by CPCB with direction to upload all data related to inspection in the portal. PCBA organized an online workshop for all ULBs on 1st July, 2022 to demonstrate the usage of portal.
- The Calcom Cement limited, Umrangso has been authorized by PCB for co-incineration of plastic and other wastes.
- **Till December 2022, more than 6500 inspections have been carried out with seizing of around 4.6 MT of plastic with issuance of 546 nos. of challans for imposition of Rs. 457681 as fine.**

(iii) SOLID WASTE PROCESSING

10. Out of the total generation of solid waste 1284 MTPD, Guwahati alone generates about 575 MTPD of waste. In the year 2007, under JNNURM mission, an integrated waste management project was envisaged for Guwahati which was to be implemented on a PPP mode for a total project cost of Rs. 107 Crore. M/S Ramky Enviro was appointed as the PPP partner for the project who was responsible for collection, transportation and processing of waste. A 150 MTPD waste to compost was envisaged to be constructed under the project along with an RDF plant. However due to presence of the site in an eco-sensitive zone and several citizens protest the project could not be implemented.

11. Shifting of the site for processing plant and scientific landfill site was necessary. However, after identification of alternative land by the government, the site could not be shifted due to several citizen outrages in both the places of Chandrapur and Sonapur. Finally, in pursuance of the Hon'ble NGT order dated 11th February 2020 a new site has been allotted in Belortal where construction of a 150 TPD waste to compost plant is in process along with a 50000 cum scientific landfill site for a total project cost of Rs. 28.31 Crore from state budget.

12. For other ULBs construction of waste processing facility is being undertaken with assistance from SBM 2.0 as well as from state budgetary support. Decentralized waste treatment is being promoted by the SBM, Mission directorate

a) Wet Waste Management

13. The current gap in wet waste management is as follows

Description	December 2022
Total Waste Generation (TPD)	1284
Waste processed (TPD)	652
Gap in TPD	632
Wet Waste	
Generation (TPD)	611
Processed (TPD)	169
Gap (TPD)	442

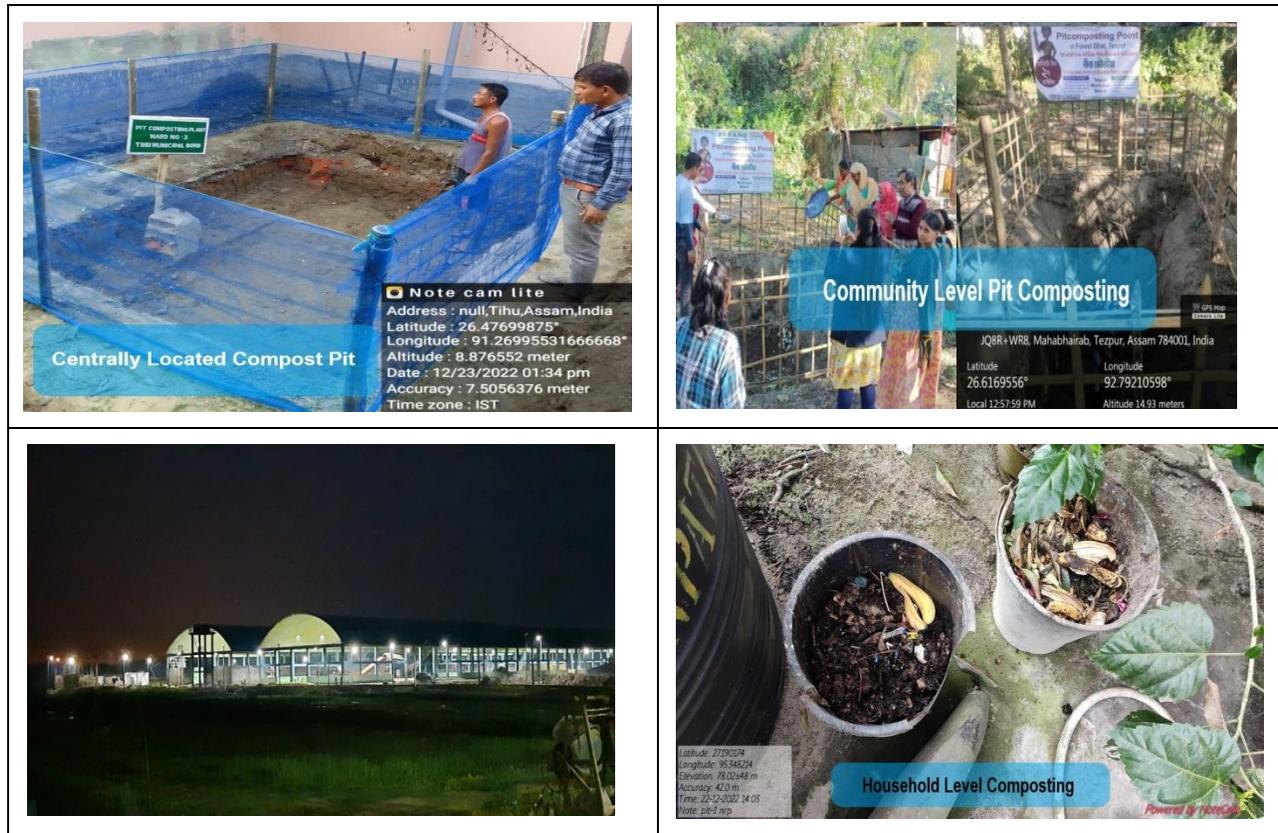
14. Out of 611 TPD of wet waste 169 TPD (28%) of wet waste is being processed through organic waste converters (55 nos.), pit composting, windrow composting (100 MT plant in Dibrugarh), bio methanation (7.5 MTPD in GMC), drum composting facility in (Bongaigaon). The available wet waste processing facility in the state is as follows

SI.No.	Available wet waste processing facilities	Processing Capacity available (TPD)
1	Organic waste converter	27.5
2	Drum Composting	3
3	Windrow Composting (Dibrugarh)	100
4	Bio Methanation	7
5	Bed Composting/Pit composting	83.14
	Windrow Composting (Guwahati)	50*
Total		270.64

*A processing Plant at Guwahati of capacity 50 TPD is discontinued as per order passed by Hon'ble NGT in OA No. 472/2018.

b) Photographs





c) Steps taken to mitigate the Gap for wet waste²:

15. To address the Gap of 436 TPD in wet waste processing the following steps have been taken

Sl.No.	Processing facility	Nos.	Capacity in TPD	Cost in Rs. cr	Source of Fund	Status of work
1	Waste to compost for GMC (Guwahati)	1	150	17.25	State Budget	The Plant is under construction. The output will be Compost & Refuse derived Fuel (RDF). The plant is proposed to run in 2 shifts upto 300 TPD capacity
2	Windrows composting/Pit composting	42	342	39.33	SBM 2.0	Approved under SBM 2.0. 1 st Installment released by GOI. DPRs are being prepared
3	Bio Methanation in GMC (Adabari-Guwahati)	1	60	17.07	SBM 2.0	Matter is under process for approval of GOI
4	Windrows composting/Pit composting	54	156	18.94	SBM 2.0	Proposal under preparation for sending to GOI
5	Additional Amount earmarked for civil works/land development for wet waste management including 5-year O&M (All Municipal Boards)	103	-	89.69	State Budget	Already Budgeted and earmarked
	Total		708	182.28		

² Under SBM 2.0 facilities are planned to meet the demand for the year 2025

d) Dry Waste Management

16. The current gap in dry waste management is as follows

Description	December 2022
Total Waste Generation (TPD)	1284
Waste processed (TPD)	652
Gap in TPD	632
Dry Waste	
Generation (TPD)	533
Processed (TPD)	363
Gap (TPD)	170

17. Out of 533 TPD of dry waste, 363 TPD is being processed in 144 nos. of material recovery facilities/resource recovery centers set up in all ULBs under SBM. The available dry waste processing facility in the state is as follows

SI.No.	Available dry waste processing facility	No. of functional plants	Processing Capacity available (TPD)
1	Material Recovery Facilities/ Resource recovery centres	144**	430
Total			430

****96 nos of MRF were constructed in 96 ULBs under SBM 1.0, remaining 48 nos of Resource Recovery Centers are operated locally using Rag pickers.**

e) Steps taken to mitigate the gap in Dry Waste management

18. To address the Gap of 170 TPD in dry waste processing the following steps have been taken including strengthening of existing MRF using latest scientific technology.

Sl. No.	Processing facility	Nos.	Capacity in TPD	Cost in Rs. cr	Source of Fund	Status of work
1	Material Recovery Facilities including plastic waste management	42	184	15.68	SBM 2.0	42 ULBs approved under SBM 2.0. 1 st tranche released. DPRs are being prepared
2	MRF for GMC	3..	225	13.26	SBM 2.0	Tender is in final stage.
3	MRF for GMC	1	10	0.60	CSR	• Under construction
4	Material Recovery Facilities including plastic waste management	53	94	9.49	SBM 2.0	• CSWAPs have been prepared for submission to GOI for funding under SBM 2.0(2 nd tranche)
5	Additional Amount earmarked for civil works/land development for dry waste management including 5-year O&M	-	-	30.89	State Budget	• Already Budgeted and earmarked for all ULBs

Sl. No.	Processing facility	Nos.	Capacity in TPD	Cost in Rs. cr	Source of Fund	Status of work
Total		99	513	69.92		

- Land has also been identified for setting Construction and Demolition (C & D) waste Plant in the vicinity of Guwahati.

f) Inert Waste Management

19. The current Gap in inert waste management in terms of available scientific landfill is as follows

Description	December 2022
Total Waste Generation (TPD)	1284
Waste processed (TPD)	652
Gap in TPD	632
Inert	
Generation (TPD)	140
Utilized (TPD)	0
Gap	140

g) Steps taken to mitigate the gap in Inert Waste management

20. To address the Gap of inert waste management through construction of scientific landfill site the following steps have been taken

Sl.No.	Processing facility	Capacity in TPD	Cost in Rs. Cr	Source of Fund	Status of work
1	Scientific landfill site in 42 ULBs	144	9.36	SBM 2.0	42 ULBs approved under SBM 2.0. 1 st installment released. DPRs are being prepared
2	Scientific Landfill site for GMC	50000 cm	11.06	State budget	On-going
3	Scientific landfill site in 53 ULBs	94	8.31	SBM 2.0	CSWAPs are prepared.
4	Additional Amount earmarked for civil works/land development for Scientific Landfill Site including 5-year O&M	103	113.32	State Budget	Already Budgeted and earmarked
Total			142.05		

- Site for construction of scientific landfill site has been identified in all ULBs (including cluster basis).
- DPR has been prepared for construction of scientific landfill for 50,000 cum in Guwahati for an amount of 11.06 Crore under state government funding
- Balance ULBs, construction of landfill site shall be taken under state funding on cluster basis.

h) Legacy Waste Management:

- 43 ULBs have legacy waste in identified locations.
- Bio mining project for Guwahati is ongoing for a project cost of Rs. 172.5 Crore from State budget. The work is allotted to M/S Zigma Global Environ Solutions Pvt. Ltd. The

contractor has completed setting up the plant for processing of the waste. So far 3.61 Lakh tonnes of legacy waste processed and treated.

- Bio mining project for Lakhimpur is ongoing for a project cost of Rs. 2.61 Crore from ULBs budget. So far 40 % of work has been completed.
- Bio mining project for Tinsukia is proposed to be done under CSR initiatives from Oil India Ltd. work will be started soon
- Bio mining project for Jorhat has been proposed for a project cost of Rs. 10 Crore from State budget.
- Legacy waste management for 39 ULBs for an estimated quantity of 8 Lakh MT has been proposed under NESID scheme of MDONER, GOI for an amount of 102.73 Crore. DPRs are currently under preparation

i) Steps taken to mitigate the legacy waste management

Sl.No	No. of locations	Total quantity in lakh MT	Estimated expenditure in Rs. Cr	Source of Fund	Status
1	39 ³	8.0	102.73	NESID	Approved. DPRs under preparation.
2	Lakhimpur	0.39	2.61	15 th FC	Work ongoing
3	GMC	15.00	172.50	State Budget	Work ongoing
4	Jorhat	1.58	10.0	State Budget	Tendering in process
	Total	24.97	287.84		

- **Further an additional a sum of Rs. 112.98 Crore has been earmarked for legacy waste management in the state budget**

Photographs (Legacy Waste management in Guwahati)



j) Good Models for Replication (Bijni Municipal Board)

21. The waste to wealth initiative of Bijni municipal Board presents a traditional approach for empowering women through active participation of SHG's and positively altering agricultural practices.

³ Details in Annexure A

22. Women Self-help groups has been trained by Dept of agriculture, Bijni and with the joint effort of different SHG's of Bijni Town. As on today 500kg of vermicompost is ready for sale.



- ❖ **Bongaigaon Drum Composting:** Bongaigaon Municipal Board started Drum Composting Plant in September, 2019 by engaging M/S ECO WASTE Management as a consultant cum agency for 100 drums with machineries like conveyor belt, organic shredder, rotary shieve and bailer machine. Its processing capacity is 1.5 MT per day. Altogether 28 people are working on the plant on daily basis. The compost produced is of great demand to the nearby Tea Estates and is certified by Toklai Tea Research Institute, Jorhat.

B. SEWAGE AND SEPTAGE MANAGEMENT IN ASSAM

a) Introduction

23. Currently no towns in Assam have a 24X7 water supply system with 135 LPCD consumption level. The average per capital consumption is around 50-70 LPCD in majority of the towns. In Guwahati itself the average consumption is around 50-70 LPCD. However, the consumption level will go up once the water supply projects will be completed under EAP/AMRUT.

24. As per central Monitoring Committee. Ministry of Jal Shakti report dated 12.02.2021 which was reproduced in the hon'ble NGT order dated 8.12.2022 (for the state of Mizoram) the sewage generation in Assam has been indicated as 435.53 MLD.

25. Currently none of the towns and cities in Assam has a networked sewerage system apart from few industrial townships like OIL, NRL, ONGC etc. **STP coverage across the State has been given due priority and has been taken up on a Mission Mode by the State Government to address the huge gap.**

2 MLD STP is under implementation in Nagaon under state funding. Under SBM 2.0 Sewerage treatment Plant is planned to be implemented in six towns (Bongaigaon, Dhubri, Jorhat, Tezpur, Mangaldoi, & Tinsukia) with diversion network as per SBM 2.0 guideline. The

City Sanitation Action Plans have been approved by GOI for funding under SBM 2.0. Currently preparation of DPR is under progress for tendering.

26. Under AMRUT 2.0 STP is being planned in Dibrugarh (7.5 MLD) and Silchar (2 MLD) with partial coverage.

27. **In Guwahati, under JICA funding 3 STPs are being planned for construction for a total capacity of 187 MLD to meet the intermediate demand till 2040 for Zone 1 (South East, South central and part of south west Guwahati) for a total project cost of Rs. 2365 Crore.** As an interim measure a 20 KLD FSTP is also being proposed in Guwahati for which tender has been floated.

28. In the meanwhile, several interim measures have been undertaken to reduce the pollution level of the water bodies in Guwahati which have been in priority I as per CPCB norms. In Silsako beel, bio remediation activity is being undertaken (Rs. 9 Crore under State budget) from State budget. As a result, the pollution level of the water body has gone down from Priority I to Priority IV. For the first time in last 10 years migratory birds from Siberia has been observed in the beel. Project for development of Silsako Beel for a project cost of Rs. 250.58 Crore has been submitted to Ministry of Jal Shakti which is under Third Party Evaluation.



29. An STP of 2 MLD (Rs. 5.5 Crore) has been proposed in Borsola Beel along with bio remediation under state budget. In Sarusola Beel bio remediation work is being taken up under stage budget for an amount of Rs. 1.49 Crore.

b) Under Ground Sewerage Schemes (UGSS)

30. The operational area of Guwahati city is about 230 Sq km with a present population of about 12 Lakh currently. Considering availability of 135 LPCD water supply the estimated sewerage generation in the year 2025 is around 132 MLD. **Under JICA funding 3 STPs are being planned for construction for a total capacity of 187 MLD to meet the intermediate demand till 2040 for Zone 1 (South East, South central and part of south west Guwahati) for a total project cost of Rs. 2365 Crore. The project cover around 1 lakh households through network coverage of around 874 Km.** The details of planned capacity addition are enclosed in **Annexure B**.

c) Sewerage Treatment Plant (STP)

31. 11 towns shall be taken up under SBM 2.0 for construction of STP cum FSTP in tranche 2 and tranche 3. Rest of 74 towns shall be taken up under state government funding for construction of STP cum FSTP. An Amount of Rs. 450 Cr. has been earmarked under state

budget. Proper diversion work will be undertaken in the projects to treat the gray water through the STP.

32. Under AMRUT 2.0 STP is being planned in Dibrugarh (7.5 MLD) and Silchar (2 MLD) with partial coverage. 2 MLD STP is under implementation in Nagaon under state funding.

d) Faecal Sludge and Septage Management (FSSM)

33. Indiscriminate disposal of faecal sludge and septage in open environment and water bodies poses a great danger to the environment. Therefore, it is imperative to regulate the operation and movement of the lorries, trailers or any other vehicles used for decanting of septic tanks and cesspools and transportation of faecal sludge and septage to ensure safe disposal of the faecal sludge and septage.

34. The Government of Assam has recognized the importance of Faecal Sludge and Septage Management (FSSM) as a viable method of sanitation for smaller cities and town and outgrowths in bigger cities. In pursuance of National Policy on Faecal Sludge and Septage Management, to provide complete full cycle of sanitation in the local bodies, a comprehensive programme has been formulated, for regulating periodic cleaning of septic tanks and transportation, treatment and disposal of faecal sludge and septage. Currently construction of FSTPs is being planned in **32 towns under funding from 15th FC for a combined capacity of 337 KLD for a project cost of Rs. 38.66** Crore under funding from 15th FC grant. Already construction of FSTP (10 KLD capacity) is completed in Titabar MB. One 7 KLD FSTP has started in Goalpara MB. 29 nos of projects have already been tendered out.

e) Sewage Treatment Capacity and Gap

35. The following are the steps undertaken to meet the present gap of 435.5 MLD⁴ and future gap in sewerage management

SI.No	No. of locations	No of STP	Capacity of STP in MLD	Project Cost in Crore	Source of Fund	Status
1	Guwahati	3	187.0	2365.00	JICA	DPR prepared. Land possession complete
2	Guwahati (Borsola)	1	2.0	5.50	State funding	In tendering stage
3	6 (Bongaigaon, Dhubri, Mangaldoi, Tezpur, Jorhat, Tinsukia) ⁵	6	38.5	123.7	SBM 2.0	Approved by MoHUA. DPR under preparation.
4	11 (11 ULBs) ⁶	11	60.0	227	SBM 2.0	CSAPs are prepared for funding under SBM 2.0
5	1(Nagaon)	1	2.0	12.56	State funding	Under construction
6	2(Silchar, Dibrugarh)	2	9.5	67.34	AMRUT 2.0	Approved by GOI. DPR preparation to be taken up
7	75 (75 ULBs)	75	144	417.85	State Budget	Earmarked by State Government for implementation

⁴ Ministry of Jal Shakti report dated 12.02.2021 which was reproduced in the hon'ble NGT order dated 8.12.2022 (for the state of Mizoram) **the sewerage generation in Assam has been mentioned as 435.53 MLD.**

⁵ STP capacity designed taking into consideration of 2025 generation as per SBM 2.0 guideline

⁶ Golaghat, Sivsagar, Nalbari, Mariani, Margherita & Karimganj to be taken in tranche 2 of SBM 2.0

Sl.No	No. of locations	No of STP	Capacity of STP in MLD	Project Cost in Crore	Source of Fund	Status
	Toal	99	443	3218.95		

f) Faecal Sludge Treatment

36. FSTPs are planned to be implemented in the district headquarter towns. The 8 new Municipalities are being covered by cluster basis. **The source of funding for FSTP is 15th Fc grant**

37. A total 32 stand-alone FSTP is under planning for implementation in 32 towns. 1 FSTP in Titabor MB (10 KLD) is operational. 1 FSTP (7 KLD) capacity is under construction in Goalpara. The details of FSTP and status are as follows

Sl. No.	ULB Name	Capacity of FSTP in KLD	Estimated Cost (INR, in lakhs) *	Status
1	Titabar MB	10	45	Operational
2	Goalpara MB	7	136	Under construction
3	Barpeta M.B.	5	90	NIT floated
4	Barpeta Rd. M.B.	10	130	NIT floated
5	Bongaigaon	15	120	NIT floated
6	Jorhat M.B.	15	120	NIT floated
7	Rangia M.B.	5	90	NIT floated
8	Diphu M.B.	10	110	NIT floated
9	Kokrajhar MB	10	110	NIT floated
10	Sivasagar M.B.	10	110	NIT floated
11	Tezpur M.B.	10	110	NIT floated
12	Rangapara M.B.	10	110	NIT floated
13	Tangla M.B.	5	90	NIT floated
14	GMC	20	360	NIT floated
15	Nagaon MB	20	360	NIT floated
16	Nazira	10	110	NIT floated
17	Simalguri			
18	Kharupetia M.B.	10	110	NIT floated
19	Dibrugarh	20	135	NIT floated
20	Nalbari M.B.	10	110	NIT floated
21	Tinsukia M.B.	20	135	NIT floated
22	N. Lakhimpur M.B.	10	110	NIT floated
23	Golaghat M.B.	10	110	NIT floated
24	Bokakhat M.B.	10	110	NIT floated
29	Digboi M.B.	10	110	NIT floated
25	Silchar	20	135	NIT floated
26	Karimganj M.B.	5	90	Tender Under process
27	Biswanath Chariali M.B.	5	184	NIT floated
28	Dhemaji M.B.	5	90	NIT floated
30	Mariani MB	5	90	NIT floated
31	Dhekiajuli M.B.	10	110	NIT floated
32	Kajalgaon M.B.	10	81	NIT floated
Total		332	3911	

C. Management of water bodies in the city

38. Several interim measures have been undertaken to reduce the pollution level of the city water bodies which have been priority I as per CPCB norms.

Sl. No.	Name of the water body	Intervention proposed	Project cost	Source of fund	Status
1	Silsakoo Beel	Bio remediation	9 Crore	State Budget	Ongoing

Sl. No.	Name of the water body	Intervention proposed	Project cost	Source of fund	Status
2	Borsola Beel	2 MLD STP	5.5 Crore	State Budget	Tendered out
3	Sorusola Beel	Bio remediation	1.49 Crore	State Budget	Ongoing
4	Silsako Beel	Comprehensive development, Bioremediation etc	250.68 Crore	Ministry of Jal Shakti	Under Third Party Evaluation

D. Way Forward

39. Apart from various projects under the central missions and multilateral funding sources, in compliance of the order passed by the Hon'ble Tribunal in OA 606/2018, the State of Assam is committed for overall comprehensive coverage of solid waste management and waste water treatment in all the urban towns through allocating its own budgetary resources.

40. The state has prepared road map for comprehensive coverage of STP and FSTP infrastructure in all the towns for treatment of black and gray water. Technical Assistance was provided by NIUA, MoHUA for preparation of Roadmap for STP for the entire State. UNICEF has also provided technical support to the state in rolling out FSTPs in various towns in the state.

41. The state has ringfenced more than Rs. 4000 Crore for creating Solid Waste Processing facility, setting up of STP/FSTP as well as clearing of legacy waste as follows:

Sl no	Component	Particulars	Budgetary provision in state budget for ongoing and proposed projects in Rs. Crore	Central Provision Like SBM 2.0/AMRUT/NESID/EAP (Rs. in Crore)	Total (Central + State)
1	SOLID WASTE MANAGEMENT	Waste to Compost (GMC)	17.25	--	17.25
2		Wet/Dry/Inert processing facilities for 96 ULBs	233.99	118.3 (SBM 2.0)	363.35
3		Landfill for GMC	11.06		
4		Legacy waste management for GMC	172.5	102.73 (Proposed under NESID)	275.23
5		Legacy waste management for Jorhat MB	10	---	10
6		Additional Sum for Legacy Waste Management	122.98		122.98
TOTAL			567.78	221.03	798.81

1	LIQUID WASTE MANAGEMENT	Guwahati Borsola STP	5.5	---	5.5
2		Nagaon STP	12.56	---	12.56
		Guwahati 3 nos.(Silsako,Borsola and PAchim Boragaon) of 187 MLD	----	2365.00 (JICA)	2365.00
3		STP for 92 ULBs	417.85	350.78 (SBM 2.0)	768.63
4		2 ULBs (Silchar MB & Dibrugarh MB)	---	54.036 (AMRUT 2.0)	54.036
Total			435.91	2769.816	3205.726
1	Water Body rejuvenation	Bioremediation of water bodies in Guwahati	10.49	--	10.49
Total			10.49	-	10.49
GRAND TOTAL			1014.18	2990.846	4005.026

The Budget duly earmarked for ongoing and future projects by the State Government is Rs. 1014.18 Crores. The Govt. of Assam is committed to comply with the direction of the Hon'ble Tribunal in OA 606/2018 & OA 273/2018 and create necessary infrastructure for Solid Waste Processing, Liquid Waste Management & Legacy Waste Management.

JICA Assisted Guwahati Sewerage Project

Introduction and Objective

42. Guwahati Sewerage Project under JICA assistance for implementing Sewerage System and Sewerage Treatment Plant (STP) within Guwahati City is being implemented by Guwahati Metropolitan Drinking Water & Sewerage Board.

43. For planning purposes, Guwahati City has been considered as 3 main zones and of which, Zone 1: South-East, South-Central Guwahati & part of South West Guwahati is under JICA funding.

44. The project's objective is to provide reliable sewerage services by carrying out the construction of sewerage facilities and an extensive network of sewers in South and East Guwahati, thereby considerably improving sanitation and living conditions of people in Guwahati City.

<u>Capacity and Land Status of STPs under GSP</u>				
STP	Location	Co-ordinates	Capacity (MLD)	Area
STP-1	Silsako Beel	Latitude 26.148786 Longitude 91.817623	65	15 Acre
STP-2	Borsola Beel	Latitude 26.176894 Longitude 91.748739	62	5 Acre
STP-3	Paschim Boragaon	Latitude 26.113036 Longitude 91.682268	60	10 Acre

Components of the GSP

1. Sewerage Network: 874 KM
2. Main Pumping Stations: 03 nos.
3. Lift pumping Stations: 16 nos.
4. STP-03 nos. (Total Capacity 187 MLD)
5. House Service Connections-1,01,058 nos.
6. Population Covered:

Area	Population			
	Sq.km	2025	2040	2055
Zone 1	191.67	1,318,000	1,775,000	2,311,000

Annexure B

Sl. No	ULB Name.	Waste Quantity in MT	Estimate @ INR 1275/MT (in Rs.)
1	Basugaon M.B	40	51000
2	Bihpuria M.B	190	242250
3	Bokajan M.B	100	127500
4	Bokakhat M.B	150	191250
5	Bongaigaon M.B	35670	45479250
6	Chabua M.B	100	127500
7	Dhekiajuli M.B	30	38250
8	Dhemaji M.B	380	484500
9	Dibrugarh M.B	80000	102000000
10	Digboi M.B	1650	2103750
11	Diphu M.B	50	63750
12	Gohpur M.B	200	255000
13	Golaghat M.B	3289	4193475
14	Haflong M.B	47304	60312600
15	Hailakandi M.B	25000	31875000
16	Hojai M.B	5545	7069875
17	Howly M.B	1460	1861500
18	Kampur M.B	120	153000
19	Karimganj M.B	25	31875
20	Kharupetia M.B	1010	1287750
21	Kokrajhar M.B	500	637500
22	Lakhipur M.B (C)	400	510000
23	Mahur M.B	453	577575
24	Maibong M.B	170	216750
25	Morigaon M.B	300	382500
26	Nagaon M.B	59430	75773250
27	Nalbari M.B	300	382500
28	Raha M.B	100	127500
29	Rangapara M.B	2500	3187500
30	Rangia M.B	750	956250
31	Silapathar M.B	100	127500
32	Silchar M.B	200000	255000000
33	Simaluguri M.B	2100	2677500
34	Sivasagar M.B	100000	127500000
35	Sonari M.B	250	318750
36	Tangla M.B	120	153000
37	Tezpur M.B	233550	297776250
38	Titabar M.B	2200	2805000
39	Umrangsho M.B	200	255000
Total		805736	1027313400 102.73 Crore

15 th FC	15 th Finance Commission
AMRUT	Atal Mission Rejuvenation and Urban Transformation
CPCB	Central Pollution Control Board
CSR	Corporate Social Responsibility
CSAP	City Sanitation Action Plan
CSWAP	City Solid Waste Action Plan
DONER	Development of Northeastern Region
DLSA	District Legal Services Authority
DMA	Directorate of Municipal Administration
DPR	Detailed Project Report
EAP	Externally Aided Projects
EOI	Expression of Interest
FSSM	Faecal Sludge and Septage Management
FSTP	Faecal Sludge Treatment Plant
GoI	Government of India
GMC	Guwahati Municipal Corporation
IEC	Information Education Communication
JICA	Japan International Cooperation Agency
JNNURM	Jawaharlal Nehru National Urban Renewal Mission
KLD	Kilo Liters per day
MB	Municipal Board
MC	Municipal Corporation
MIS	Management Information System
MLD	Million Litres per Day
MoHUA	Ministry of Housing and Urban Affairs
MRF	Material Recovery Facilities
MT	Metric Tonne
MTPD	Metric Ton Per Day
NESID	North East Sustainable and Inclusive Development
NGT	National Green Tribunal
NIUA	National Institute of Urban Affairs
NRL	Numaligarh Refinery Limited
OIL	Oil India Limited
ONGC	Oil & Natural Gas Corporation
O&M	Operation & Maintenance
PCBA	Pollution Control Board, Assam
RDF	Refuse Derived Fuel
SBM U 2.0	Swachh Bharat Mission Urban 2.0
SHG	Self Help Group
SHPC	State High Powered Committee
SLTC	State Level Technical Committee
STP	Sewage Treatment Plant
SUP	Single Use Plastic
SWM	Solid Waste Management
TPD	Tones Per Day
UGSS	Underground Sewerage Schemes
ULBs	Urban Local Bodies
UWM	Used Water Management