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Municipal Administration and
Water Supply (MA.IV)
Department,
Secretariat, Chennai – 600 009.

Letter No. 18583/MA.IV/2019 Dated :14.10.2019

From
Thiru Harmander Singh, I.A.S.,
Principal Secretary to Government,

To
The Registrar,
National Green Tribunal,
Faridkot House, Copernicus Marg,
New Delhi- 110001. (w.e)

Sir,

Sub : National Green Tribunal - Solid Waste Management Rules,
2016 – Orders of National Green Tribunal in O.A.No.606 of
2017 dated: 12.09.2019 – report on the status of
compliance of environmental norms of model cities and
villages and other major achievements - Submitted - reg

Ref : Orders of the NGT dated: 20.8.2018, 16.1.201,
23.04.2019 and 12.09.2019 in OA.No.606 of 2018.

I am to invite attention to the reference cited, and to inform that as per the orders of the Hon'ble National Green Tribunal dated: 12.09.2019, the report on the status of compliance of environmental norms of model cities and villages and other major achievements made to be filed by the Chief Secretary on behalf of the State of Tamil Nadu is enclosed herewith for filing before the National Green Tribunal.

Yours faithfully,

For Principal Secretary to Government.

14/10/2019

3316/RG/OAK
P. S. S. S.
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2203/DR(S)
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Cases

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**MODEL CITIES AND VILLAGES IN COMPLIANCE WITH
ENVIRONMENT NORMS AND OTHER MAJOR ACHIEVEMENTS
SUBMITTED TO THE HON'BLE NATIONAL GREEN TRIBUNAL.
PRINCIPAL BENCH, NEW DELHI**

IN

ORIGINAL APPLICATION NO. 606 / 2018

&

CONNECTED MATTERS

Submitted by

Chief Secretary, State of Tamil Nadu

14th October 2019

Urban Local Bodies

1. Introduction

In the State of Tamil Nadu, there are 15 Corporations and 121 Municipalities under the administrative control of Commissioner of Municipal Administration, 528 town Panchayats under the administrative control of Directorate of Town Panchayats . Of the above urban and rural local bodies, the following Corporations/ Municipalities/ Town panchayats and 93 Village Panchayats act as a model in the area of Solid waste management to comply with the Solid Waste Management Rules 2016.

Table 1. List of Model ULBs/RLBs

Corporations	Tiruchirappalli, Vellore and Salem
Municipalities	Sembakkam, Karaikudi, Kangeyam and Kumbakonam
Town Panchayats	Uthiramerur, Madukkarai and Ponnampatti
Village Panchayats	93 villages and list is annexed

Bio-mining

The Government of Tamil Nadu has taken up Bio-mining in big way. So far, bio mining projects has been sanctioned in 6 Corporations, 89 Municipalities and 24 Town Panchayats at a cost of Rs.469.80 Crore to remove an estimated quantity of 74.86 Lakhs Cu.m. of legacy waste, creating a fresh land back of 765 Acres value of worth is Rs.500 Crore in Urban Local Bodies. The progress is being monitored periodically.

The details of the Solid Waste Management activities being done in these Model urban and rural local bodies are furnished below:

II. Model Cities/Corporations

1. Tiruchirappalli Corporation

City Profile

Tiruchirappalli town was constituted as Municipal Corporation in the year 1994 with an extent of 167.23 sq.km. The population of the Tiruchirappalli Corporation as per 2011 census is 9,15,569 and the present population is estimated as 10,22,592. The corporation consists of 65 Electoral wards and the total households and the commercial assessments are 2,73,538. The corporation maintains one major market and two bus stands. Daily waste generation of the city is 460 TPD.

SWM Bye Laws and Action plan

After the implementation of SWM Rules 2016, Tiruchirappalli Corporation published Bye Laws in the District Gazette on 10.03.2017 to make the public aware of the provisions of the SWM Rules 2016 including the provisions of penalty for failure of complying with the norms. Subsequently, the corporation published the SWM action plan with the approval of TNPCB on 13.09.2019.

SWM activities in Tiruchirappalli Corporation

The daily generated garbage of 460 TPD comprises of wet waste of 246.27 TPD and Dry waste of 213.73 TPD.

Collection mechanism

The daily generated waste is collected at door steps from all households in a segregated manner and transported to the wet waste processing centers and dry waste disposal centers with defined route charts.

Wet waste processing

The Tiruchirappalli Corporation has adopted decentralized approach of waste processing. It has established 31 Micro Composting Centers (MCC) and each MCC covers 5,000 households

with a processing capacity of 5 MT. 155 MT of wet waste is processed in these 31 MCCs. So far 3714.75 TPD of Bio manure has been produced. Further, the Corporation has established the following facilities to process wet waste,

- 5 Bio Methanation plants with total capacity of 14 TPD.

Gas is used for crematorium, community kitchen + Amma Low cost canteen and burning of street lights.

- 15029 Home Composting units with processing quantity of 15 TPD.
- 49 Bulk Waste Generators Processing units with processing capacity of 6.50 TPD.
- 22 Small onsite composting centres with processing capacity of 2.20 TPD
- One Windrow Composting centre with processing capacity of 53.57 TPD

Subsequent to the establishment and satisfactory function of the above processing facilities, the Tiruchirappalli Corporation has now reduced sending waste to the Ariyamangalam dump yard to a great extent.

Dry waste processing

Four Resource Recovery Centers (RRCs) have been established in MCCs to handle 213.73 MT of dry waste. Daily 12 TPD of plastic waste is being disposed to the recyclers directly and the sale proceeds is distributed among the Sanitary workers as incentive. Further Plastic waste is disposed to cement industries and So far 2911.99 MT of plastic waste, 5.5 MT of other type of wastes such as E- waste, Tyres, wood has been disposed to the identified vendors.

Ban on the Single use Plastic

Adhering to the ban on Single use of plastic in the state of Tamil Nadu, Tiruchirappalli Corporation has so far seized 9.695 MT of plastic waste and imposed penalty of Rs 16.69 Lakhs and continuously monitoring the ban to eradicate the usage of "single use plastic" within the town limits.

Compost yard, Legacy waste – Bio-mining

The Corporation is having a compost yard of 40 Acres at Ariyamangalam which is located in the core area of the city. For the past 3 decades, the daily collected waste had been dumped. At present it is quantified that 7,85,560 cu.m of legacy waste is available. Action is being taken to remove the legacy waste through Bio-mining process to reclaim the land. A project of Rs.49 crore has been sanctioned and work has started.

Plogging

- On World Earth Day – 22nd April 2018 – “Trichy Plogging Activity” has been initiated in Tiruchirappalli City Corporation.
- Tiruchirappalli City Corporation in the first urban local body in the State to take up this initiative to create awareness about this activity among the public.
- Corporation Officials, workers, RWAs, NGOs, College Student’s and Public are involved to plogging on every Saturday on mass scale.

EXPO

- Till now 5 EXPOs have been conducted by the Corporation exhibiting Alternative Plastics, Home Compost, Bio Gas, Solar, Rain Water harvesting, Zero Waste Home composting.
- 15029 Households are practicing successfully Home Composting in the Corporation.
- Plans to cover 1, 00,000 No's of House Holds within this year.
- More than 1 Lakh people visited the EXPO.

School Students, College Students, Residential Welfare Associations and NGOs participated in the above expo eagerly.

2. Vellore Corporation

City profile

Vellore town was constituted as Municipal Corporation in the year 2008 and administrated with 60 wards with an extent of 87.91 sq.km. The population of the Vellore corporation as per 2011 census is 5,04,079 and the present population is estimated around 5,60,517. The Corporation consists of 60 electoral wards with total households at 124380 and 13752 commercial assessments. The corporation maintains two major markets, two bus stands and daily garbage generation of the city is 230 TPD.

SWM bye Laws and action plan

After the implementation of SWM Rules 2016, Vellore Corporation published Bye Laws in the District Gazette on 19.04.17 to make the public aware of the provisions of the SWM Rules 2016 including the provisions of penalty for failure of complying with the norms. Subsequently, the corporation published the SWM action plan with the approval of TNPCB on 27.09.2019.

SWM activities in Vellore Corporation

The daily generated garbage of 230 TPD comprises of wet waste of 138 TPD and Dry waste of 92 TPD.

Collection mechanism

The daily generated waste are collected at door steps from all households in a segregated manner and transported to the wet waste processing centers and dry waste disposal centers with defined route charts.

Wet Waste Processing

The Vellore Corporation has adopted decentralized approach of waste processing. It has established 42 Micro Composting Centers (MCC) and each MCC covers 5,000 households with a processing capacity of 3 to 5 MT. In addition to MCCs, 20 Onsite Composting Centres (OCC) and one Bio- Methanation plant has also been established. Entire wet waste of 135 TPD is

processed in these 42 MCCs. So far 7590 TPD of Bio manure has been produced. 141 Bulk waste generators are processing 30 MT of wet waste by themselves at their own facilities.

Subsequent to the establishment and satisfactory function of the above processing facilities, the Vellore Corporation has now stopped the dumping of daily generated garbage in the Sathuperi dump yard.

Dry waste processing

42 Resource Recovery Center have been established in MCCs to handle 92 MT of dry waste which is disposed to the recyclers directly and the sale proceeds are shared among the Sanitary workers as incentive. Further, so far 1040 TPD of plastic waste is disposed to cement industries and other type of wastes such as E- waste, Tyres and wood etc., are disposed to the identified vendors.

Ban on the Single use Plastic

Adhering to the ban on Single use of plastic in the State of Tamil Nadu, Vellore Corporation has so far seized 31.78 MT of plastic waste and imposed penalty of Rs 4.21 Lakhs and continuously monitoring the ban to eradicate the usage of “single use plastic” within the town limits.

Compost yard, Legacy waste – Bio-mining

The Corporation is having a compost yard of 7 Acres at Sathuperi which is located in the core area of city. For the past 3 decades, the daily collected waste was dumped here. At present waste available is quantified as 2,00,000 cu.m and action is being taken to remove the legacy waste through Bio-mining process to reclaim the land. Corporation has issued work order for Bio- mining to be taken up at cost of Rs.13 crores and work is expected to commence from November 2019.

Salem Corporation

City profile

Salem town was constituted as Municipal Corporation in the year 1994 with an extent of 91.34 sq.km. The population of the Salem Corporation as per 2011 Census is 8,34,792 and the present population is estimated as 9,13,188. The Corporation consists of 60 Electoral wards with 2,15,314 households and 21,515 commercial assessments. The Corporation has two major markets and two bus stands and daily garbage generation of the city is 350 TPD.

SWM bye laws and Action plan

After the implementation of SWM Rules 2016, Salem Corporation published Bye Laws in the District Gazette on 24.03.17 to make the public aware of the provisions of the SWM Rules 2016 including the details of penalty provision for failure of complying the norms.

SWM activities in Salem Corporation

Out of the daily generated garbage of 350 TPDs, wet waste comprises of 203 TPDs and Dry waste comprises of 147 TPDs.

Collection mechanism

The daily generated waste is collected at door steps from all households in segregated manner and transported to the wet waste processing centers and dry waste disposal centers with defined route chart.

Wet waste processing

The Salem Corporation has adopted decentralized approach of waste processing. It has established 15 Micro Composting Centers (MCC) and each MCCs covers 5,000 households with a processing capacity of 5 MT. Wet waste of 70 TPD, is being processed in these 15 MCCs. So far 540 MT of Bio manure has been produced. Further the corporation has established the following facilities to process wet waste,

- ✓ 2 Bio Methanation plants with total capacity of 8 TPD

(Gas generated is used for crematorium, community kitchen and burning of street lights)

- ✓ 1250 Home Composting units with processing capacity of 1 TPD.
- ✓ 17 Bulk Waste Generators have own units with processing capacity of 10 TPD
- ✓ Non Bio Degradable dry waste recycled through Kuppaikaran NGO of 17 TPD
- ✓ Piggery Rearing waste processing units of 10 TPD
- ✓ 20 Small On-site composting centers with processing capacity of 7 TPD

Subsequent to the establishment and satisfactory function of the above processing facilities, the Salem Corporation has reduced the dumping of daily generated garbage in the Erumapalayam dump yard to a great extent.

Dry waste processing

4 Resource Recovery Centers have been established in MCCs to handle 147 MT of dry waste. About 17 TPD of plastic waste is being disposed to the recyclers directly and the sale proceeds are shared among the sanitary workers. Further non recyclable combustible waste is disposed to cement industries and other type of wastes such as E- waste, Tyres, wood etc., are disposed to the identified vendors.

Ban on the Single use Plastic

Adhering to the ban on Single use of plastic in the state of Tamil Nadu, Salem Corporation has so far seized 42.10 MT of plastic waste and imposed penalty of Rs 27.14 Lakhs and continuously monitoring the ban to eradicate the usage of “single use plastic” within the town limits.

Bio-capping

As per the Topographical / Contour Survey, it has been assessed that about 2,73,000 Cu.m of old waste has been dumped in 19.33 Acres land at Erumapalayam dump site. A project of bio capping at a cost of Rs.20.45 Crore has been sanctioned and work is in progress. After Bio-capping, 13 Acres land will be remediated. The options include basic capping with green belt for Jogging/Walking and redevelopment into Sports Amenity Park. At present 70% work has been completed.

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Status of Service Levels of SWM Parameters in the Model Cities

S.No	Description of Parameters	Target level	Parameter level Achieved by the ULB			Probable date of Achieving Target
			Tiruchirappalli Corporation	Vellore Corporation	Salem Corporation	
1	Door to Door Collection	100%	100%	100%	100%	-
2	Segregation at Source	100%	100%	100%	80%	Dec 2019
3	Wet Waste Processing	100%	100%	100%	48%	March 2020
4	Dry Waste Processing	100%	12% (Plastics used for laying road)	100 %	13%	March 2020
5	MRF/RRC for collection, sorting out and disposal of dry waste	100%	50%	100%	50%	Dec 2019
6	Earmarking the C&D Waste Collection Centre	Site to be identified before Aug 2019	Site earmarked and DPR approved to float tender for establishing 20 TPD capacity C&D Waste Recycling plant	Site earmarked. DPR under preparation for establishing 20 TPD capacity C & D waste processing plant	Site earmarked. DPR under preparation for establishing 40 TPD capacity C & D processing plant	--
7	E-Waste Collection Centre	To be established before Aug 2019	5 Centres established	42 Centres established	4 Centres established	--
8	Disposal of Legacy Waste	100%	Work commenced	Work order issued for an estimated cost of Rs 13.00 Crore The bio-mining expected	70% of Bio-Capping work completed	<u>Salem</u> – March 2020 <u>Vellore</u> – September 2020

S.No	Description of Parameters	Target level	Parameter level Achieved by the ULB			Probable date of Achieving Target
			Tiruchirappalli Corporation	Vellore Corporation	Salem Corporation	
				to begin in November 2019		Tiruchirappalli – December 2021
9	Implementation of Ban on Single Use Plastic	Sustainable Enforcement	9.695 MT seized & Rs. 16.69 lakh is collected as penalty	31.78 MT seized & Rs. 4.21 lakh is collected as penalty	43.24 MT seized & Rs. 28.49 lakh is collected as penalty	Continuous monitoring and raids are being done
10	SWM Bye Laws	To be Published before the year 2017	Published on 10.03.17	Published on 19.04.17	Published on 24.03.17	--
11	PWM Bye Laws	To be Published before the year 2017	Published on 10.03.17	Published on 08.06.2017	Published on 24.03.17	--
12	SWM Policy and Action Plan	To be published before April 2019	Published on 13.09.19	Published on 27.09.2019	Published in daily news paper on 14.05.19 calling for claims and suggestions from the public.	December 2019

III. Model Municipalities

1. Sembakkam Municipality

Town Profile

Sembakkam town constituted as Municipality in the year 2013 (Upgraded from Town Panchayat to Municipality vide G.O.No-68 MAWS Dept, Dated: 16.05.2013 and declared as 2nd Grade) in with an extent of 6.25 Sq.km. The population of the Sembakkam Municipality as per census 2011 is 45,356 and the present population is estimated as 66340. The municipality consists of 15 wards and has 16585 households and 925 commercial assessments. The daily waste generation of the town is 24 TPD.

SWM Bye Laws and Action plan

Subsequent to the implementation of SWM Rules 2016, the Municipality published SWM bye laws on 28.4.2017 in the District Gazette to make the public aware of the provisions of the SWM Rules, 2016 including the provisions of penalty on failure of complying the norms. Subsequently the municipality published the SWM Action plan for with the approval of TNPCB (Authorization No.013 Dated 08.04.2019).

SWM Activities in Sembakkam Municipality

The daily generated garbage of 24.00 TPD comprises of wet waste of 12.00 TPD and dry waste of 12.00 TPD.

Collection Mechanism

The daily generated waste is collected at door steps from all households in a segregated manner and transported to the wet waste processing centers (Micro Composting Centres and Onsite Composting Centres) and dry waste disposal centers (RRC) with defined route charts.

Wet Waste Processing

The Sembakkam Municipality has adopted decentralized approach of waste processing and has established 2 Micro Composting Centers (MCC). Each MCC covers 5,000 households

with a processing capacity of 5MT. Daily 8MT of wet waste is being processed in these 2 MCC's and 238.800 MT of Bio manure produced so far. The manure is sold out and distributed to farmers and public. It has also established following units:-

- 108 Home Composting units with processing capacity of 54 kg.
- 22 Bulk Waste Generators processing units with capacity of 2 TPD.
- 6 Onsite Composting Centres with processing capacity of 4 TPD.

Now Sembakkam Municipality is marching towards the goal of Bin Free, dumpsite Free and Plastic Free Municipality.

Dry Waste Processing

One Resource Recovery Center is established in the Kalathumettu Street in to handle 12 MT of dry waste. The dry wastes of 2 TPD comprising plastic/recyclable waste is disposed to the recyclers directly and the sale proceeds are disbursed among the sanitary workers. Further 8.00 TPD of plastic waste/Combustible is being disposed to M/s.Ultra Tech Cement Industries and the local vendors. The other type of wastes such as E- waste and Domestic hazardous waste also received in RCC/MRF Centre in separate compartment. These wastes are disposed as per TNPCB norms.

Ban on Single use Plastic

Subsequent to the ban on Single use of plastic in the state of Tamil Nadu, Sembakkam Municipality seized 13.629 MT of plastic waste and collected penalty of Rs 3.24 Lakhs and continuously monitoring to eradicate the usage of "single use plastic" within the town limits.

Compost yard, Legacy waste – Bio-mining

The Municipality is having a compost yard of 4.20 Acres at Sembakkam Eri, wherein the legacy waste of 31,393 cu.m was dumped during the past 3 decades. Action has been taken and the entire legacy waste was removed through Bio-mining process which was taken up at a cost of Rs.1.63 crore and the entire 4.20 Acres land has been reclaimed and restored as water body.

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2. Karaikudi Municipality

Town Profile

Karaikudi town constituted as Municipality in the year 1928 an extent of 13.75 sq.km. The population of the Karaikudi Municipality as per the census 2011 is 106714 and the present population is estimated as 118112. The municipality consists of 36 wards and has 26745 households and 2429 commercial assessments. The daily waste generation of the town is 48 TPD.

SWM Bye Laws and Action plan

Subsequent to the implementation of SWM Rules 2016, the Municipality has published SWM bye laws on 29.07.2019 in the District Gazette to make public aware of the provisions of the SWM Rules including the provision of penalty on failure of complying the norms. Subsequently the Municipality published the action plan on SWM with the approval of Tamil Nadu Pollution Control Board norms.

SWM Activities in Karaikudi Municipality

The daily generated waste of 48 TPD comprises of wet waste of 28 TPD and dry waste of 20 TPD.

Collection Mechanism

The daily generated waste is collected at door steps from all households in a segregated manner and transported to the wet waste processing centers and dry waste disposal centers with the defined route charts.

Wet Waste Processing

The Karaikudi Municipality has adopted decentralized approach of waste processing and established 6 Micro Composting Centers (MCC). It covers 4,500 households with a capacity of 4 MT for each MCCs. Out of the total wet waste of 28 TPD, 20 TPD is being processed in these 6

MCC and so far 610 MT of Bio manure is produced. Besides that the Municipality established the following facility to process the complete wet waste generated in the town.

- ✓ 1288 Home Composting units with processing capacity of 0.5 TPD.
- ✓ 91 Bulk waste Generators with processing capacity of 2 TPD
- ✓ One Windrow Composting Centre with processing capacity of 2 TPD

Subsequent to the establishment and satisfactory function of the above processing facilities, the Karaikudi Municipality has reduced the dumping of daily generated in the Devakottai Rastha dump to a great extent.

Dry Waste Processing

Two Resource Recovery Center were established in nearby MCC to handle 20 MT of dry waste. The dry waste collected daily is disposed to the recyclers directly and the sale proceeds are disbursed among the Sanitary workers. So far 299 MT of plastic waste is disposed to M/s. Ultra Tech Cement Industries and other type of wastes such as E- waste, Tyres, wood etc., are disposed to the identified vendors.

Ban on Single use Plastic

Subsequent to the ban on Single use of plastic in the State of Tamil Nadu, Karaikudi Municipality seized 6.26 MT of plastic waste and collected penalty of Rs 2.96 Lakhs and continuously monitoring the ban to eradicate the usage of “single use plastic” within the town limits.

Compost yard, Legacy Waste – Bio-mining

The Municipality is having a compost yard of 13.70 Acres at Devakottai Rastha wherein the legacy waste of 1,12,000 cu.m were dumped during the past 4 decades. Action has been taken to remove the legacy waste through Bio-mining project taken up at a cost of Rs.7.37 crore to reclaim the land and convert the entire 13.70 Acres prime land to a beautiful park as a recreational zone for the citizens of the city.

3. Kangeyam Municipality

Town Profile

Kangeyam town constituted as Municipality in the year 2010 and with an extent of 22.64 sq.km. The population of the Kangeyam Municipality as per census 2011 is 33,264 and the present population is estimated as 35,000. The Municipality consists of 18 wards and has 10,664 household and 1345 commercial assessments. The daily waste generation of the town is 11 TPD.

SWM Bye Laws and Action plan

Subsequent to the implementation of SWM Rules 2016, the Municipality has published SWM Bye laws on 27.06.2017 in the District Gazette to make public aware of the provisions of the SWM Rules including the provision of penalty on failure of complying the norms. Subsequently the Municipality published the action plan on SWM with the approval of TNPCB norms on 20.04.2019.

SWM Activities in Kangeyam Municipality

The daily generated garbage of 11 TPD comprises of wet waste of 7 TPD and dry waste of 4 TPD.

Collection Mechanism

The daily generated waste is collected at door steps from all households in a segregated manner and transported to the wet waste processing centers and dry waste disposal centers with defined route charts.

Wet Waste Processing

- ✓ The Kangeyam Municipality has established one Micro Composting Center (MCC) with a capacity of 2 MT on decentralized basis covering 3,000 households and windrows compost pad has been established in the existing Compost yard to the capacity of 4 TPD. So for 315 MT of wet waste has been processed in the MCC and windrows Compost yard and converted

into 60 MT Bio manure. The sum of Rs. 20000/- has been earned through the selling of 20 MT of Bio manure which is distributed as incentive to the workers. Balance manure is being stocked at compost yard. Further the municipality has taking steps to educate the public to promote the Home composting process.

- ✓ 32 households have taken up Home composting with processing quantity of 0.009 TPD.
- ✓ 4 Bulk waste generator units with processing capacity of 1.16 TPD.

Subsequent to the establishment and satisfactory function of the above processing facilities, the Kangeyam Municipality has now reduced the dumping of daily generated in the Chennimalai road Compost yard to a great extent.

Dry Waste Processing

One Resource Recovery Center were established in nearby MCC to handle 7 MT of dry waste. The dry waste collected daily is disposed to the recyclers directly and the sale proceeds are disbursed among the sanitary workers. So far 40 MT of plastic waste is also disposed to M/s. Ultra Tech Cement Industries and other type of wastes such as E- waste, Tyres, wood etc., are disposed to the identified vendors.

Ban on the Single use Plastic

Adhering to the ban on single use of plastic in the State of Tamil Nadu, Kangeyam Municipality seized 3.62 MT of plastic waste and imposed the penalty of Rs. 24,500/- and continuously monitoring the ban to eradicate the usage of “single use plastic” within the town limits.

Compost yard, Legacy Waste – Bio-mining

The Municipality is having a compost yard of 4.64 Acres at Chennimalai road in the core area of town, wherein the legacy wastes of 22018 cu.m were dumped during the past 3 decades. Action is being taken to remove the legacy waste through Bio-mining project at a cost of Rs.1.45 crore to reclaim the land and convert the entire 4.64 Acres prime land to a beautiful park as a recreational zone for the citizens of the town and work is in progress.

4. Kumbakonam Municipality

Town Profile

Kumbakonam is a Special Grade Municipal Town and second biggest town in terms of administrative status in Thanjavur District. Kumbakonam, is the headquarters of Kumbakonam Taluk. The Municipality was established during the year 1866 & later upgraded to first grade during 1949. The Municipality was upgraded to Selection Grade on 09/08/1974 and to Special grade on 23/09/1998. The town limit extends over an area of 12.58 Sq.km and the Local Planning Area (LPA) limit extends over an area of 64.02 Sq.Km. The Municipality consists of 45 wards and has 36,630 household and 4223 commercial assessments. The daily waste generation of the town is 54 TPD.

SWM Bye Laws and Action plan

Subsequent to the implementation of SWM Rules 2016, the Municipality has published SWM bye laws on 10.05.2017 in the District Gazette to make public aware of the provisions of the SWM Rules including the provision of penalty enforcement on failure of complying with SWM Rules. Subsequently the Municipality published the action plan on SWM with the approval of TNPCB norms on 11.08.2019.

SWM in Kumbaknoam Municipality

The daily generated garbage of 54 TPD comprises of wet waste of 32.5 TPD and dry waste of 21.5 TPD

Collection Mechanism

The daily generated waste are collected as wet waste, dry waste separately at door steps from all households in a segregated manner and transported to the wet waste processing centers and dry waste disposal centers with defined route charts.

Wet Waste Processing

Kumbakonam Municipality has adopted decentralized approach of waste processing and established 5 Micro Composting Centers (MCC). Each MCC covers an area of 3500 households

with a capacity of 4 MT. Municipality has also established the following facilities to process the entire wet waste:

- ✓ One Bio Methanation plant with processing capacity of 5 TPD (Gas generated is used for running machineries and burning of lights.)
- ✓ 650 Home Composting units with processing capacity of 0.5 TPD.
- ✓ 58 Bulk Waste Generators with processing capacity of 6 TPD.
- ✓ 34 On-Site Compost Centre with processing capacity of 7.8 TPD.

Subsequent to the establishment and satisfactory function of the above processing facilities, the Kumbakonam Municipality has now reduced the dumping of daily generated in the Karikulam dump yard to a great extent.

Dry Waste Processing

One Resource Recovery Center is established at Karikulam to handle 21.5 MT of dry waste. Of the dry waste collected, 3 TPD of plastic waste is being disposed to the recyclers directly and the sale proceeds are shared among the sanitary workers. Plastic waste of 8 TPD is being disposed to M/s. Ultra Tech Cement Industries and other type of wastes such as E- waste, Tyres, wood etc., are disposed to the identified vendors.

Ban on Single use Plastic

Subsequent to the ban on Single use of plastic in the state of Tamil Nadu, Kumbakonam Municipality has seized 55.15 MT of plastic waste and collected the penalty of Rs 22.41 Lakhs and continuously monitoring the ban to eradicate the usage of “single use plastic” within the town limits.

Compost yard, Legacy waste – Bio-mining

Kumbakonam Municipality has been pioneer in implementing the Bio Mining project and removed the legacy waste of 1, 31,250 meter cube which was dumped in the past three decades and reclaimed the land of extent of 12 acres. This bio Mining was commenced in the year 2016 and completed in the year 2018 at a cost of Rs.3 crore. The materials retrieved from the legacy waste through the bio mining process are disposed to the vendors for recycling and its end use.

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Status of SWM Parameters Level in the Model Municipalities

S.No	Description of Parameters	Target level	Parameter level Achieved by the ULB				Probable date of Achieving 100%
			Sembakkam	Karaikudi	Kangeyam	Kumbakonam	
1	Door to Door Collection	100%	100%	100%	100%	100%	-
2	Segregation at Source	100%	100%	80%	95%	85%	Dec 2019
3	Wet Waste Processing	100%	100%	60%	100%	100%	March 2020
4	Dry Waste Processing	100%	95%	30%	70%	12%	March 2020
5	MRF/RRC	100%	100%	50%	70%	50%	Dec 2019
6	Earmarking of C&D Waste Collection Centre	Site to be identified before Aug 2019	Site earmarked	Site Earmarked	Site Earmarked	Site Earmarked	--
7	E-Waste Collection Centre	To be established before Aug 2019	One Centre Established	Two Centres Established	Two Centres Established	Two Centres Established	--
8	Disposal of Legacy Waste	100%	Bio-mining Completed	Bio Mining - Work commenced	Biomining in progress	Bio-mining Completed	<u>Karaikudi</u> – March 2020 <u>Kangeyam</u> – March 2020
9	Implementation of Ban on Single Use Plastic	Sustainable Enforcement	13,629 Kg of Plastics seized & penalty of	6.26 MT seized & penalty of Rs. 2.96 lakhs	942 Kg seized & penalty of Rs. 0.19	55.15 MT seized & penalty of Rs. 22.41 lakhs	Continuous Monitoring and raid are being

S.No	Description of Parameters	Target level	Parameter level Achieved by the ULB				Probable date of Achieving 100%
			Sembakkam	Karaikudi	Kangeyam	Kumbakonam	
			Rs.3,24,100/- fine amount collected	collected	lakhs collected	collected .	done
10	SWM Bye Laws	To be Published before the year 2017	Published on 28.04.2017	Published on 25.07.2017	Published on 27.06.17	Published on 10.05.17	--
11	PWM Bye Laws	To be Published before the year 2017	Published on 28.04.2017	Published on 05.09.2019	Published on 27.06.17	Published on 10.05.17	--
12	SWM Policy and Action Plan	To be published before April 2019	Published on 08.04.2019	Published on 25.08.2019	Will be Published on or before 20.10.2019	Published on 11.08.2019	--

IV. Model Town Panchayats

1. Uthiramerur Town Panchayat

Town Profile

Uthiramerur Town Panchayat was established in the year 1967 and administrated with 18 Wards with an extent of 44 sq.km. The population of the Uthiramerur Town Panchayat is 25194 as per the census 2011 and the present population is estimated as 27000. There are 6197 households and 246 commercial assessments. There is one major market and one bus stand which are being maintained by the Town Panchayat. The daily garbage generation of the town is 7 TPD.

SWM Bye Law of Action Plan

After the implementation of SWM Rules 2016, the Town Panchayat published Bye Laws in the District Gazette on 20.07.2017 for fixing the responsibility of waste generators and penalty provisions on failure of following provisions of SWM Rules. Subsequently, the Town Panchayat published the action plan on SWM with the approval of TNPCB on 20.04.2019.

Compost yard, Legacy waste – Bio-mining

The Town Panchayat is having compost yard of 4 acres at Maliyankarani in the town. Where the daily collected waste is processed.

SWM in Uthiramerur Town Panchayat

The daily generated waste of 7 TPD comprises of wet waste of 3.85 TPD and dry waste of 3.15 TPD.

Collection Mechanism

The daily generated waste is collected at door steps of all households in segregated manner using sufficient numbers of battery operated vehicles and light commercial vehicle and transported to the wet waste processing centers and dry waste disposal centers.

Wet Waste Processing

Uthiramerur Town Panchayat has established to process the entire wet waste by following Resource Recovery Park, Home composting and Onsite composting center for Garden waste as detailed below:

- ✓ Windrow composting 3.85 TPD capacity
- ✓ Vermi Composting – 0.5 TPD capacity
- ✓ Home Composting – 120 households processing 0.050 TPD capacity

Dry waste Processing

3.15 TPD of dry waste is generated in the Uthiramerur Town Panchayat. The generated dry waste is segregated and 2.03 MT of recyclable waste is sold to the recyclers directly. Remaining 1.12 MT waste is segregated and stored in RR Park. It is disposed periodically. Other wastes such as E- waste, tyres, wood is disposed to the identified vendors.

Ban on the Single use of Plastic

Adhering to the ban on single use of plastic in the state of Tamil Nadu, Uthiramerur Town Panchayat seized 0.120 MT of plastic waste and imposed penalty of Rs 40390/- and continuously imposing the ban to eradicate the usage of “ single usage plastic” within the town limit.

2. Madukkarai Town Panchayat

Town Profile

Madukkarai Special Grade was established in the year 1970 and administrated with 18 wards with an extent of 21.47 sq.km. The population of the Madukkarai Town Panchayat 30357 as per the censuses 2011 and the present population is estimated as 35253. There are 10358 households and 390 commercial assessments. There is famous ACC Cement factory located in Madukkarai Town Panchayat. The daily waste generation of the city is 7.390 TPD.

SWM Bye Laws of Action Plan

After the implementation of SWM rules 2016, the Town Panchayat published Bye Laws in the District Gazette on 27.07.2017 for fixing the responsibility of waste generators and also penalty provisions on failure to follow provisions of SWM Rules. Subsequently the Town Panchayat has published the action plan on SWM with the approval of Tamil Nadu Pollution Control Board on 20.04.2019.

Compost yard

The Town Panchayat is having a compost yard of 1.10 acres at Chettipalayam road. Where the daily collected waste is processed to produce manure.

SWM in Madukkarai Town Panchayat

The daily generated garbage of 7.4 TPD comprises of wet waste of 4.3 TPD and dry waste of 3.1 TPD

Collection Mechanism

The daily generated waste is collected at door steps of all households as segregated manner using sufficient numbers of Pushcarts, battery operated vehicles and light commercial vehicle and transported to the wet waste processing center and dry waste disposal center.

Wet Waste Processing

The Madukkarai Town Panchayat established one Resource Recovery Park and the wet waste are processed through the windrow composting method and it which produces 0.1 TPD of Bio manure. Further the Town Panchayat has established the following facilities to process wet waste:

- ✓ Windrow Composting - 4.2 TPD capacity
- ✓ Vermi Composting – 0.5 TPD capacity
- ✓ Home Composting – 15 households processing 0.1 TPD capacity

Dry Waste Processing

3.10 TPD of dry waste is generated in the Madukkarai Town Panchayat. The generated dry waste is segregated and 2.0 MT of recyclable waste which is sold to the recyclers directly. Remaining 1.10 MT waste is transported to ACC Cement Factory. Other type of waste such as E- waste, tyres, wood etc., is disposed to the identified vendors.

Ban on the single use of Plastic

Adhering to the ban on single use of plastic in the State of Tamil Nadu, Madukkarai Town Panchayat seized 0.096 MT of plastic waste and imposed the penalty of Rs 16050 and continuously imposing the ban to eradicate the usage of “single usage plastic” within the town limit.

3. Ponnampatti Town Panchayat

Town Profile

Ponnampatti Town Panchayat was established in the year 1979 and administrated with 15wards with an extent of 10.83squ.m. The population of the Ponnampatti Town Panchayat 12167 as per the censuses 2011 and the present population estimated as 14114. There are 3120 house and 915 commercial assessments. There is one Weekly market and one bus stand which are being maintained by the Town Panchayat. The daily waste generation of the city is 4.5 TPD.

SWM Bye Laws of Action Plan

After the implementation of SWM Rules 2016, the Town Panchayat has published the Bye Laws in the District Gazette on 13.07.2017 for fixing the responsibility of waste generators and penalty provision on failure of follows provision of SWM Rules.

Compost yard, Legacy waste – Bio-mining

The Town Panchayat is having compost yard of 2 acres at Uppiliyapatti Kallankuthu in the city, where in the daily collected waste is segregated and processed.

SWM in Ponnampatti Town Panchayat

The daily generated waste of 4.5 TPD comprises of wet waste of 3.5 TPD and dry waste of 1 TPD.

Collection Mechanism

The daily generated waste is collected at door steps of all households as segregated manner using sufficient numbers of battery operated vehicles and light commercial vehicle and transported to the wet waste processing centers and dry waste disposal centers.

Wet Waste Processing

The Ponnampatti Town Panchayat established one Resource Recovery park and the wet waste are processed through the windrow composting method. It produces 0.1 TPD of Bio manure. Further the Town Panchayat established the following facilities to process:

- ✓ Windrow Composting - 3.5 TPD capacity
- ✓ Vermi Composting – 0.5 TPD capacity
- ✓ Home Composting – 10 households processing 0.1 TPD

Dry Waste Processing

1 MT of dry waste is produced in the Ponnampatti Town Panchayat. The dry waste produced in Town Panchayat is segregated and 0.5 MT of recyclable waste is sold to the recyclers directly. 0.4 MT of non recyclable waste is segregated and stored in Town Panchayat and is disposed periodically. Other type of waste such as E- waste, tyres, wood etc., is disposed to the identified vendors.

Ban on the single use of Plastic

Adhering to the ban on single use of plastic in the State of Tamil Nadu, Ponnampatti Town Panchayat seized 0.05 MT of plastic waste and imposed the penalty of Rs 20000/- and continuously imposing the ban to eradicate the usage of “single usage plastic” within the town limit.

Status of SWM Parameters Level in the Model Towns (Town Panchayat)

S.No	Description of Parameters	Target level	Parameter level Achieved by the ULB			Probable date of Achieving 100%
			Uthiramerur	Madukkarai	Ponnampatti	
1	2	3	5	6	7	8
1	Door to Door Collection	100%	100%	100%	100%	-
2	Segregation at Source	100%	100%	80%	100%	Dec 2019
3	Wet Waste Processing	100%	100%	100%	100%	-
4	Dry Waste Processing	100%	80%	100%	75%	Dec 2019
5	MRF/RRC	100%	100%	100%	100%	-
6	Earmarking C&D Waste Collection Centre	Site to be identified before Aug 2019	One Site earmarked	One Site earmarked	One Site earmarked	--
7	E-Waste Collection Centre	To be established before Aug 2019	Collection Centre Identified	Collection Centre Identified	Collection Centre Identified	--
8	Disposal of Legacy Waste	100%	100%	100%	100%	--
9	Implementation of Ban on Single Use Plastic	Sustainable Enforcement	120 Kg seized & Rs. 0.40 lakhs is collected as penalty	96Kg seized & Rs. 0.16 lakhs is collected as penalty	500Kg seized & Rs. 0.20 lakhs is collected as penalty	Monitoring and raid are being done regularly.
10	SWM Bye Laws	To be Published before the year 2017	Published on 20.07.2017	Published on 27.07.2017	Published on 13.07.2017	--

S.No	Description of Parameters	Target level	Parameter level Achieved by the ULB			Probable date of Achieving 100%
			Uthiramerur	Madukkarai	Ponnampatti	
11	PWM Bye Laws	To be Published before the year 2017	Published on 20.07.2017	Published on 27.07.2017	Published on 13.07.2017	-
12	SWM Policy and Action Plan	To be published before April 2019	Published on 08.04.2019	Published on 20.04.2019	Will be Published on or before 31.12.2019	December 2019

Rural Local Bodies

I. Outline of SWM in rural areas of Tamil Nadu

Tamil Nadu is the first state in the country to have achieved universal coverage in establishing Solid Waste Management facilities in all 12,524 Village Panchayats covering 31 Rural Districts in a phased manner. Around 66,130 Thooimai Kaavalars have been engaged through Village Poverty Reduction Committee (VPRC) / Panchayat Level Federation (PLF) of Self Help Groups (SHG) on an outsourcing basis to facilitate in Door to Door collection of waste. The required infrastructure facilities for the collection, segregation and safe disposal of the waste have also been provided to all the Village Panchayats. In order to cater the special needs of Peri-Urban Village Panchayats and Village Panchayats in Hilly areas, battery operated pushcarts and motorized pickup vehicles respectively, have been provided.

II. Model Village Panchayats

In Tamil Nadu, 93 model Village Panchayats have been identified in all the 31 rural Districts, at the rate of 3 per district, for the purpose to make it fully compliance with norms, as per the orders issued by the NGT.

(a) Profile:

In 93 model Village Panchayats, there are about 859 Habitations covering around 1,43,215 rural households with the total population of 4,81,793 as per 2011 census.

(b) Collection Mechanism:

814 Thoomai Kaavalars have been engaged to ensure Door to Door collection of Waste. For collection and transportation, they have been provided with 638 tricycles/push carts and 2,103 street garbage bins.

The collected waste is segregated as bio-degradable and non-degradable waste in the 97 Segregation cum Storage shed provided in these Village Panchayats.

(c) Wet waste processing:

With respect to bio-degradable waste, 194 compost pits are available, where these wastes are composted. In order to enhance the compost, 93 Vermi-Compost sheds have also been established and the Thooimai Kaavalars have also been trained on the Vermi Composting techniques.

(d) Dry waste processing:

The non- degradable, recyclable waste collected is segregated under various grades and are sold to scrap merchants and are accounted in the SWM account of the Village Panchayat.

(e) Ban on the Single Use Plastic:

Resolutions have been passed in the all the Village Panchayats including the 93 model Village Panchayats banning the use of Single Use and throwaway Plastic.

(f) Gaps at present and proposed activities:

1. Awareness Generation:

To achieve 100% segregation at source, awareness is being created to all the rural households in these model Village Panchayats to ensure waste is segregated at source/household level.

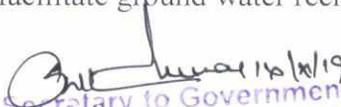
2. Micro-Composting Centres (MCC):

In the model Village Panchayats that are Peri-Urban / Bigger Village Panchayats adjacent to Corporations and Municipalities, it is proposed to establish Micro-Composting Centres (MCC) to facilitate the effective processing of the entire wet waste.

3. Grey Water Management:

Community Soak Pits are proposed to be constructed in the model Village Panchayats for managing the grey water at community level. This will be done to avoid stagnation of waste water to prevent spread of water borne diseases and also to facilitate ground water recharge.

(TRUE COPY)


Under Secretary to Government
Municipal Administration and
Water Supply Department,
Secretariat, Chennai-600 009.

14/10/2019
14/10/19

Annexure-I

Model Village Panchayats

Details of Basic Information and Infrastructure facilities provided in 93 model Village Panchayats

Sl. No.	Name of the District :	Name of the Block	Name of the Village Panchayat	No. of Habitations	No. of Households	Population as per 2011 census	No of Thooimai Kavalars	No. of Street Garbage Collection Bins	No. of Tricycle /Pushcarts	No. of Segregation shed	Compost Pits	Vermi Compost Sheds
1	Kanchipuram	Sriperumbudur	Mevalur Kuppam	6	792	3805	4	12	2	1	2	1
2	Kanchipuram	Kundrathur	Karasankal	4	1314	4639	9	8	5	1	2	1
3	Kanchipuram	Chithamur	Keelmaruvathur	2	537	2125	4	4	2	1	2	1
4	Tiruvallur	Sholavaram	Panchetty	10	797	3960	5	10	3	1	2	1
5	Tiruvallur	Poonamallee	Kuthambakkam	7	1102	5047	9	7	5	1	2	1
6	Tiruvallur	Kadambathur	Papparambakkam	1	273	1028	2	2	1	1	2	1
7	Cuddalore	Panruti	Lakshmi Narayanapuram	7	2456	9445	15	18	18	1	2	1
8	Cuddalore	Kattumannarkoil	Nattarmangalam	1	635	2153	4	2	5	1	2	1
9	Cuddalore	Mangalore	Sirukarambalur	1	321	1081	2	4	2	1	2	1
10	Villupuram	Vanur	Kiliyanur	8	766	6334	6	15	4	1	2	1
11	Villupuram	Olakkur	Ongur	3	644	2677	5	8	3	1	2	1
12	Villupuram	Ulundurpet	Pidagam	15	2123	11930	15	33	7	1	2	1
13	Vellore	Walajah	Thiruparkadal	1	507	2059	4	2	2	1	2	1
14	Vellore	Natrampalli	Mallagunda	31	1891	9824	13	88	8	2	4	1
15	Vellore	Kaveripakkam	Ocheri	3	581	2318	4	5	3	1	2	1
16	Tiruvannamalai	Tiruvannamalai	Adi annamalai	3	814	4066	4	10	2	1	2	1

Sl. No.	Name of the District :	Name of the Block	Name of the Village Panchyat	No. of Habitations	No. of Households	Population as per 2011 census	No of Thooimai Kavalars	No. of Street Garbage Collection Bins	No. of Tricycle /Pushcarts	No. of Segregation shed	Compost Pits	Vermi Compost Sheds
17	Tiruvannamalai	Polur	Santhavasal	11	1879	8305	13	32	7	1	2	1
18	Tiruvannamalai	Thandarampattu	Sathanur	11	1880	8749	13	33	7	1	2	1
19	Salem	Kolathur	Navapatti	15	2358	8693	13	45	7	1	2	1
20	Salem	Sankari	Katheri	34	3422	9379	17	102	10	1	2	1
21	Salem	Mecheri	Kuttapatti	36	3025	8439	17	108	8	1	2	1
22	Namakkal	Kabilarmalai	Pilikkalpalayam	11	1477	5010	9	17	12	1	2	1
23	Namakkal	Mallasamudram	Karumanur	13	766	2504	4	26	8	1	2	1
24	Namakkal	Namakkal	Vettambadi	7	1394	4718	9	14	6	1	2	1
25	Dharmapuri	Dharmapuri	K.Naduhalli	12	1339	4894	8	23	5	1	2	1
26	Dharmapuri	Nallampalli	Maniyathahalli	18	3017	13174	18	46	9	1	2	1
27	Dharmapuri	Pennagaram	Paruvathanahalli	17	1838	7995	9	41	5	1	2	1
28	Krishnagiri	Krishnagiri	Kammampalli	15	1026	5759	6	30	5	1	2	1
29	Krishnagiri	Kaveripattinam	Arasampatti	14	1818	7925	12	28	11	1	2	1
30	Krishnagiri	Shoolagiri	Chennapalli	16	938	3889	5	32	5	1	2	1
31	Erode	Chennimalai	V.Kuttapalayam	9	785	2284	5	18	3	1	2	1
32	Erode	Gobichettipalayam	Kullampalayam	4	1366	3089	7	7	4	1	2	1
33	Erode	TN Palayam	Pullappanaickenpalayam	4	1117	3029	5	16	4	1	2	1
34	Tiruppur	Vellakoil	Pachapalayam	37	2320	4944	9	74	5	1	2	1
35	Tiruppur	Uthukuli	Morattupalayam	7	1450	5798	9	14	5	2	4	1
36	Tiruppur	Gudimangalam	Aamanthakadavu	2	860	3228	5	4	3	1	2	1

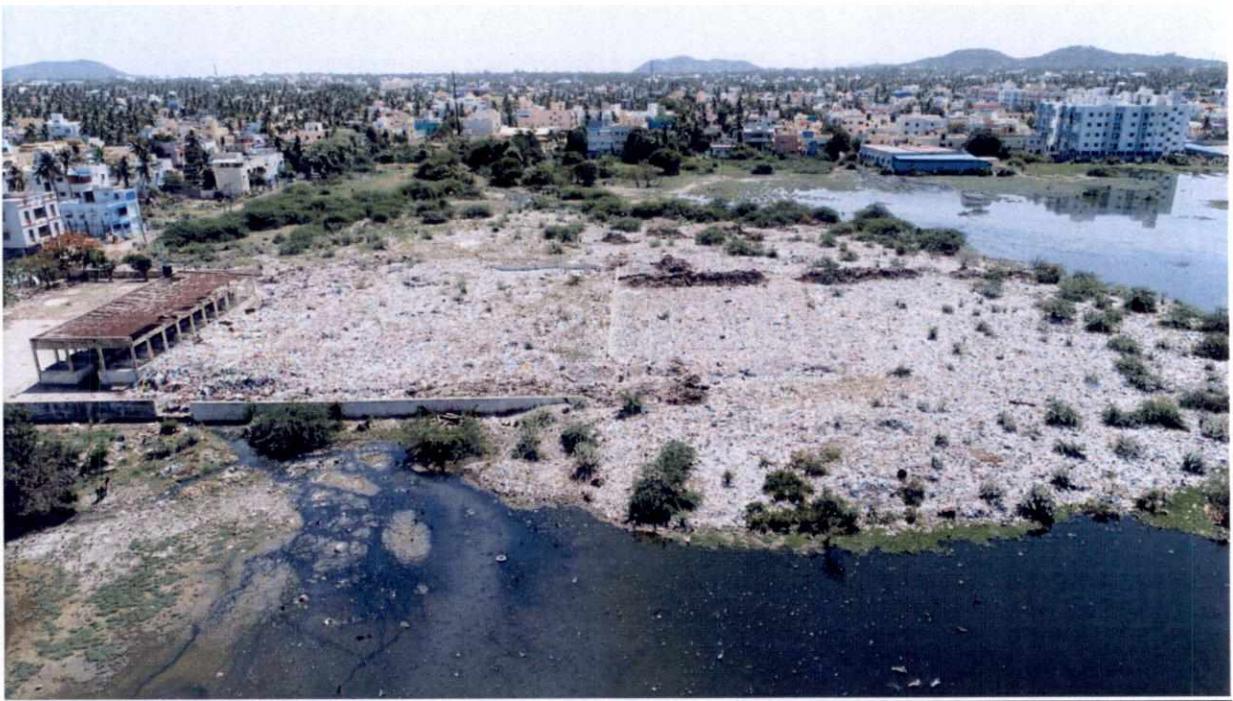
Sl. No.	Name of the District :	Name of the Block	Name of the Village Panchyat	No. of Habitations	No. of Households	Population as per 2011 census	No of Thooimai Kavalars	No. of Street Garbage Collection Bins	No. of Tricycle /Pushcarts	No. of Segregation shed	Compost Pits	Vermi Compost Sheds
37	Coimbatore	Thondamuthur	Vellimalai Pattinam	2	969	3066	7	11	11	1	2	1
38	Coimbatore	Madukkarai	Malumichampatti	5	6200	12956	18	42	22	1	2	1
39	Coimbatore	Annur	Kunnathur	6	2058	4281	5	34	9	1	2	1
40	The Nilgiris	Udhagai	Balacola	45	3449	13622	31	137	10	1	2	1
41	The Nilgiris	Coonoor	Melur	60	6375	13244	35	182	17	1	2	1
42	The Nilgiris	Gudalur	Masinagudi	10	2065	8783	22	30	12	1	2	1
43	Thanjavur	Thanjavur	Mathur West	3	750	2249	3	5	2	1	2	1
44	Thanjavur	Thiruvaidaimaruthur	Narasingampettai	2	1710	5342	9	9	15	1	2	1
45	Thanjavur	Pattukottai	Ponnavarayanankottai	2	1566	4092	7	4	5	1	2	1
46	Nagapattinam	Nagapattinam	Thethi	2	840	2223	4	4	2	1	2	1
47	Nagapattinam	Kilvelur	Kuthur	1	1265	2877	3	2	2	1	2	1
48	Nagapattinam	Sirkali	Thirupungur	5	624	1840	3	15	1	1	2	1
49	Tiruvarur	Valangaiman	Vadakkupattam	2	310	924	2	2	2	1	2	1
50	Tiruvarur	Nannilam	Moongilkudi	2	320	1311	2	3	2	1	2	1
51	Tiruvarur	Kottur	Nallur	3	504	1731	3	3	3	1	2	1
52	Tiruchirappalli	Manikandam	Mudikandam	3	958	2278	4	6	5	1	2	1
53	Tiruchirappalli	Pullambady	Melarasur	1	1014	2400	5	13	6	1	2	1
54	Tiruchirappalli	Musiri	Peramangalam	5	1070	3774	5	9	9	1	2	1
55	Karur	Karur	Punjaikadambankurichi	12	1555	3764	6	24	5	1	2	1
56	Karur	K.Paramathi	K.Paramathi	13	1011	3488	8	26	4	2	4	1

Sl. No.	Name of the District :	Name of the Block	Name of the Village Panchyat	No. of Habitations	No. of Households	Population as per 2011 census	No of Thooimai Kavalars	No. of Street Garbage Collection Bins	No. of Tricycle /Pushcarts	No. of Segregation shed	Compost Pits	Vermi Compost Sheds
57	Karur	Krishnarayapuram	Thirukkampuliyur	11	1915	6487	15	24	10	2	4	1
58	Ariyalur	Ariyalur	Reddipalayam	8	845	4126	6	5	14	1	2	1
59	Ariyalur	Thirumanur	Varanavasi	4	956	3634	6	3	6	1	2	1
60	Ariyalur	Jayamkondam	Thathanur	8	2625	9124	14	18	5	1	2	1
61	Perambalur	Perambalur	Pudhunaduvalur	4	907	2416	4	7	3	1	2	1
62	Perambalur	Veppanthattai	Valikandapuram	3	1044	5385	7	9	4	1	2	1
63	Perambalur	Veppur	Aduthurai	1	536	1906	3	3	2	1	2	1
64	Pudhukottai	Annavasal	Sithannavasal	2	543	1935	2	4	2	1	2	1
65	Pudhukottai	Arimalam	Onangudi	5	476	2193	3	7	2	1	2	1
66	Pudhukottai	Pudhukottai	9B Nathampannai	5	431	1055	2	5	2	1	2	1
67	Madurai	Alanganallur	Achampatti	1	373	1316	3	2	1	1	2	1
68	Madurai	Vadipatti	Mullipallam	2	1144	4575	7	2	4	1	2	1
69	Madurai	Madurai East	Karseri	6	2250	6135	11	6	5	1	2	1
70	Theni	Andipatti	Marikundu	7	1110	4317	7	11	3	1	2	1
71	Theni	Bodinayakanur	Rasingapuram	5	1338	5736	9	14	18	1	2	1
72	Theni	Periyakulam	Lakshmipuram	2	1139	4757	8	3	7	1	2	1
73	Dindigul	Athoor	N.Panjampatti	1	1951	7476	13	17	17	1	2	1
74	Dindigul	Natham	Sirukudi	13	2860	9524	16	39	23	1	2	1
75	Dindigul	Kodaikanal	Vilpatty	26	4012	15820	29	71	33	1	2	1
76	Ramanathapuram	Ramanathapuram	Kaloogurani	6	645	1614	5	9	2	1	2	1

Sl. No.	Name of the District :	Name of the Block	Name of the Village Panchyat	No. of Habitations	No. of Households	Population as per 2011 census	No of Thocimai Kavalars	No. of Street Garbage Collection Bins	No. of Tricycle /Pushcarts	No. of Segregation shed	Compost Pits	Vermi Compost Sheds
77	Ramanathapuram	Mandapam	Irumeni	5	1243	3067	5	5	2	1	2	1
78	Ramanathapuram	Paramakudi	Ariyanenthal	2	650	2009	4	4	3	1	2	1
79	Virudhunagar	Sivakasi	Saminatham	7	1850	4031	6	14	4	1	2	1
80	Virudhunagar	Sriviliputhur	Karishalkulam	1	252	1952	1	2	2	1	2	1
81	Virudhunagar	Tiruchuli	Pallimadam	5	779	2083	4	14	2	1	2	1
82	Sivagangai	Sivagangai	Kattunedungulam	4	540	1794	3	9	4	1	2	1
83	Sivagangai	Sakkottai	Ariyakudi	6	1127	5538	7	18	11	1	2	1
84	Sivagangai	Kalaiyarkovil	Kattenthalsukkanoorani	7	1059	5126	9	27	13	1	2	1
85	Thirunelveli	Keelapavoor	Gunaramanallur	15	5400	12982	25	36	12	1	2	1
86	Thirunelveli	Manur	Madavakurichi	7	1700	3684	7	14	4	1	2	1
87	Thirunelveli	Palayamkottai	Muneerpallam	21	2578	8010	16	66	9	1	2	1
88	Thoothukudi	Ottapidaram	Keela Arasadi	4	590	2186	4	8	2	1	2	1
89	Thoothukudi	Thoothukudi	Mudivaithanendal	7	2851	5927	19	14	11	1	2	1
90	Thoothukudi	Srivaikundam	Nattathi	8	842	2874	5	8	3	1	2	1
91	Kanniyakumari	Kurunthancode	Kurunthancode	24	1993	7838	13	38	17	1	2	1
92	Kanniyakumari	Thiruvattar	Aruvikarai	10	1440	5203	10	16	7	1	2	1
93	Kanniyakumari	Munchirai	Methukummal	26	6980	19417	26	52	24	1	2	1
Total				859	143215	481793	814	2103	638	97	194	93

Annexure –II

Removal of Legacy Waste (Bio Mining) – Sembakkam Municipality



Removal of Legacy Waste (Bio Mining) – Kumbakonam Municipality



(Along with fair copy colored picture will be enclosed)

Kumbakonam Municipality



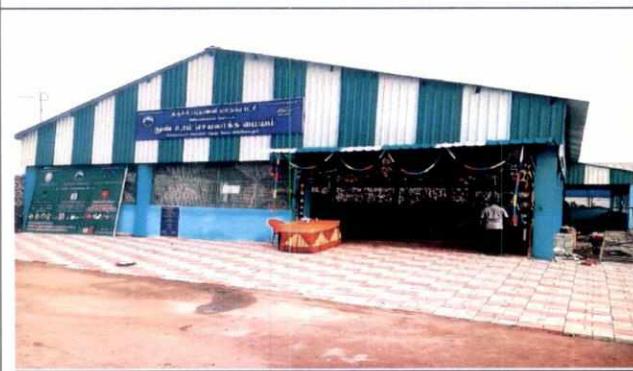
Madukkarai Town Panchayats



Vellore Corporation



Trichy Corporation



Salem Corporation



Sembakkam Municipality:



Uthiramerur Town Panchayat



WINDROW PROCESSING METHOD



ALTERNATIVE FOR ONE USE PLASTIC EXHIBITION



466-18

Ponampatti Town Panchayat

