

District Environment Plan



Prepared By



Environment Department, Government of Maharashtra



Maharashtra Pollution Control Board

Palghar

1.0 Preamble

Hon'ble National Green Tribunal vide order dated 26/09/2019 in O.A. No. 360 of 2018 filed by Shree Nath Sharma Vs Union of India and Others directed that CPCB shall facilitate the District Magistrates in preparation of District Environmental Plan by placing Model plan on its website. This model plan may be adopted as per local requirements by all Districts under supervision of District Magistrate.

The said Order also directs that Department of Environment in respective States / UTs should collect district plans to prepare State Environment Plan, which shall be monitored by respective Chief Secretaries of State/UT by 15/12/2019.

Based on State Environmental plans, CPCB and Ministry of Environment, Forest & Climate Change shall prepare National Environmental Plan, under the supervision of Secretary, MoEF&CC and Chairman, CPCB by 31/01/2020. The National Action Plan needs to be submitted before Hon'ble NGT 15/02/2020.

In compliance to above directions, CPCB has prepared a model District Environment Plan (DEP) that covers following thematic areas;

In compliance to above directions and as per the model DEP prepared by CPCB, Environment Action plan for Palghar District is prepared

2.0 Introduction

Palghar district is an administrative district in the state of Maharashtra in India. The district headquarters are located at Palghar. The district occupies an area of 9558km² and has a population of 29, 90,116 as of 2011 census. Figure 1.0 gives a picture of Palghar district in State of Maharashtra. Palghar district is located in the central part of Maharashtra in Konkan region. The district lies between 19° 69' North Latitudes and 72° 77' East Longitudes.

The Godavari River forms the boundary of the district throughout the northern border. In 2011 census, the district has 8 talukas, 1008 villages, 3818 sub villages, 477 gram panchayat.

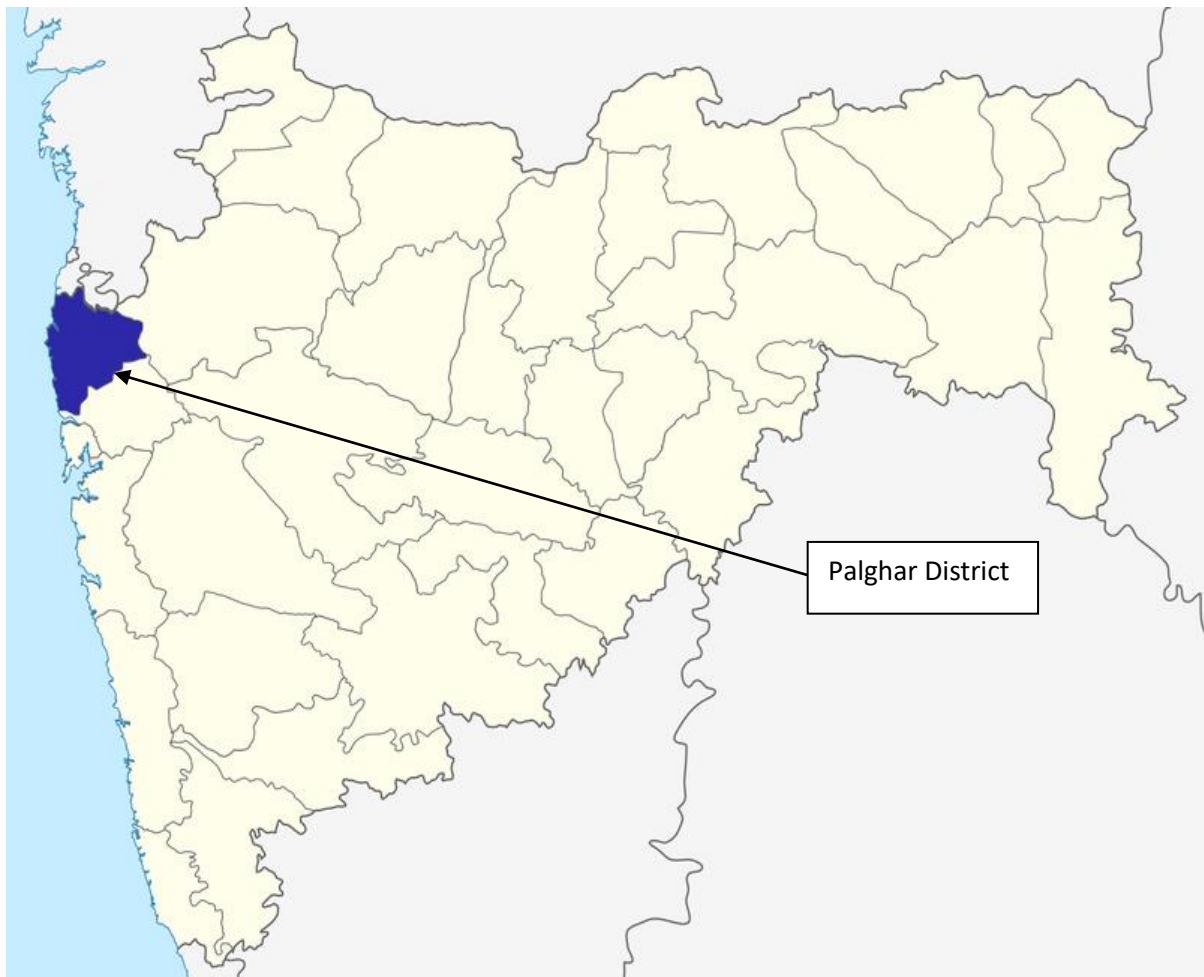


Figure 1.0 Location of Palghar District in Maharashtra state

3.0 Waste Management Plan

Nearly all incidents generate waste, debris and materials. While the amount of waste varies between incidents, the generated waste is often greater than the amount of waste many communities handle each year. With the increasing population, management of Solid Waste in the country has emerged as a severe problem not only because of the environmental and aesthetic concerns but also because of the sheer quantities generated every day. It encompasses the legal and regulatory framework that relates to waste management encircling guidance on recycling.

Solid waste management is among the basic essential services provided by municipal authorities in the country to keep cities clean. In Palghar district primary sources of solid waste are local households, commercial establishments, hospitals, hotels, restaurants, and markets. Local Bodies are responsible for collection, storage, segregation, transportation and disposal of all solid waste generated in the city. There are 4 Urban Local Bodies [ULB's] in Palghar district. Table 1

represents the list of ULB's along with population. Following section gives insight about waste management of Palghar district.

Table 1 Palghar District Profile

ULB1	Vasai-Virar City Municipal Council	1222390
ULB2	Palghar Municipal Council	68930
ULB3	Dahanu Municipal Council	50287
ULB4	Jawhar Municipal Council	12040

3.1 Quantification of Solid waste

Palghar District comprises of 4 Urban Local Bodies [ULB] namely Palghar Municipal Council, Vasai-Virar City Municipal Council, Dahanu Municipal Council, Jawhar Municipal Council. Vasai-Virar City Municipal Council comprise of higher population [i.e. 12,22,390] while Jawhar Municipal Council depicts lower population of the district [i.e. 12,040].

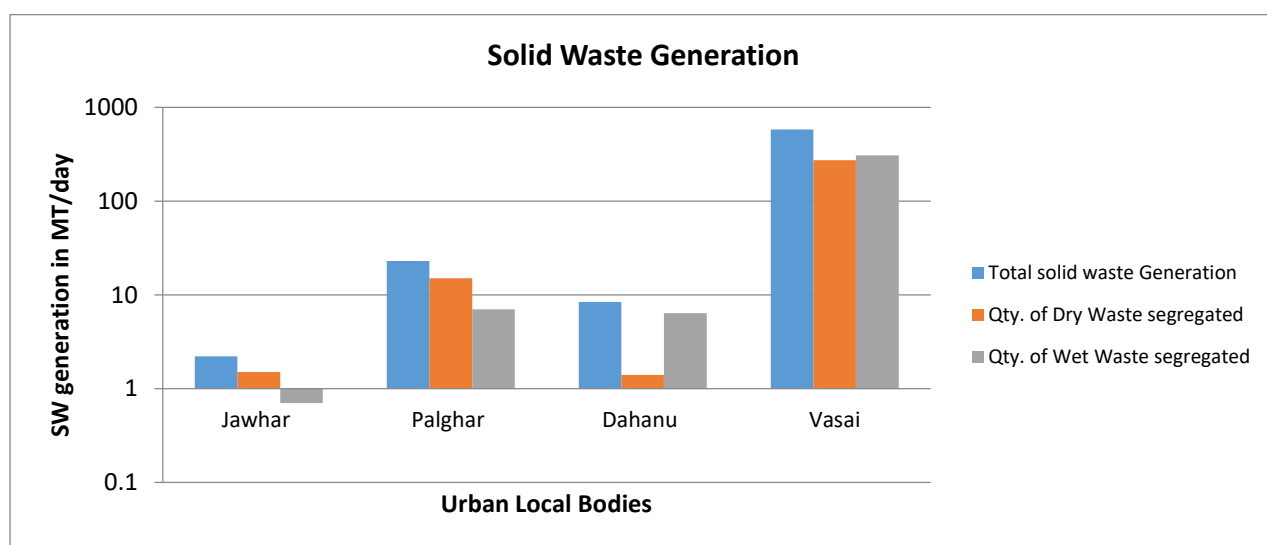


Figure 1.1 Domestic Solid Waste Generation

Fig 1.1 indicates the total solid waste generation of 4 ULB's of Palghar district further categorizing it into dry and wet waste of each ULB.

- Palghar District constitutes of Total 4 ULB's. Total Solid Waste generated from Palghar District is 613.6 MT/D out of which Vasai Municipal Council being the ULB with largest population [12,22,390] generates 613.6 MT/D waste thus contributing to major portion of waste. Wherein, Dry waste is 290.9 MT/D and Wet waste is 321.05 MT/D segregated every day

- In accordance with Fig 1.1 the maximum Solid waste generating ULB is Vasai- Virar City Municipal Council at the tune of 580 MTD out of which Dry and Wet waste is 273MTD & 3307MTD as compared to other ULBs. Likewise, Minimum Solid Waste generating ULB is Jawhar Municipal Council at tune of 2.2 MTD out of which the dry waste is 1.5MTD & Wet waste is 0.7MTD respectively.

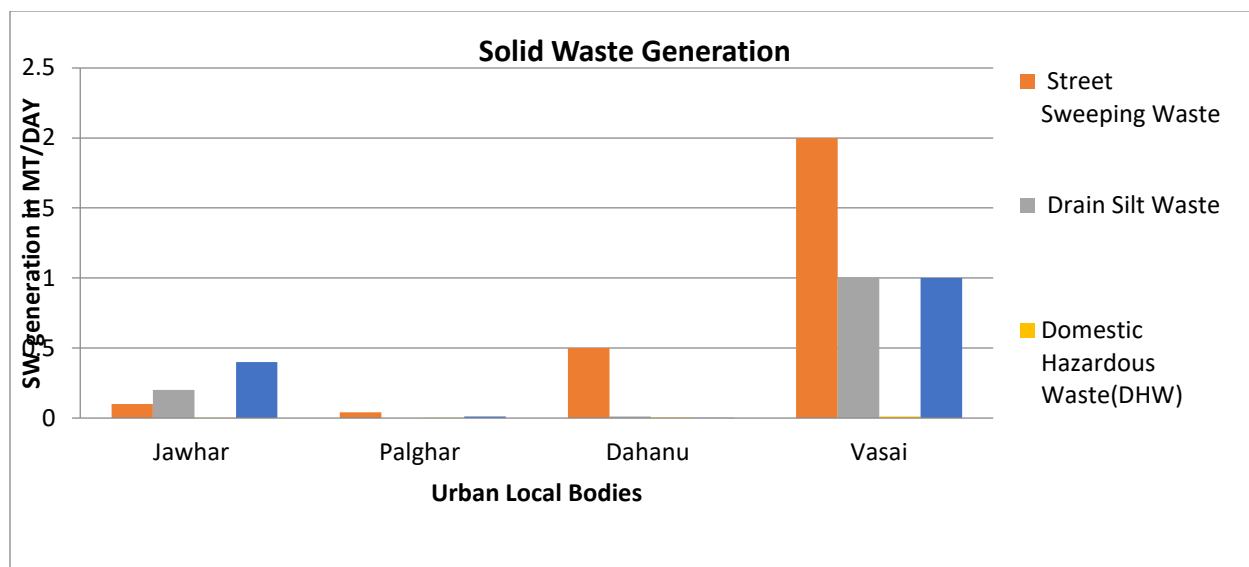


Figure 1.2 Other waste Generation

Fig 1.2 depicts the other solid waste generation of 4 ULB's of Palghar district categorizing it into Street Sweeping, Drain silt, Domestic Hazardous Waste, Horticulture, sanitary waste, etc.

In line, with Fig 1.2 it can be seen that,

- Street Sweeping Waste** : Total Street sweep generation is 2.64MT/D wherein,
 - ✓ Maximum generation is at Vasai- Virar city Municipal Council [i.e, 2.0MT/D]
 - ✓ Minimum generation is at Palghar [i.e, 0.04MT/D]
- Drain Silt** : Total Drain Slit waste generation is 1.21MT/D wherein,
 - ✓ Maximum generate is at Vasai- Virar city Municipal Council [i.e, 1.0MT/D]
 - ✓ Minimum generation/No generation is at Dahanu/ Palghar [i.e, 0.01MT/D]
- Domestic Hazardous Waste (DHW)** : Total DHW generation is 0.018MT/D wherein,
 - ✓ Maximum generation is at Vasai- Virar city Municipal Council [i.e, 0.01MT/D]
 - ✓ Minimum generation is at Palghar Municipal Council [i.e, 0.0005MT/D]
- Other Waste (Horticulture, sanitary waste, etc.)** : Total Other waste generation is 1.413MT/D wherein,
 - ✓ Maximum generation is at Vasai- Virar city Municipal Council [i.e, 1.0MT/D]

- ✓ Minimum generation is at Dahanu, Municipal Council followed by Palghar [i.e, 0.002MT/D]

3.1.1 Collection and Transport

In line with the total Solid waste generated, only 3 ULB Palghar Municipal Council, Vasai-Virar city Municipal Council, Jawhar Municipal Council is provided with Dumpsite facility followed by 2 nos. of Sanitary Landfills. Palghar district comprises of 138 wards. Qty. of Solid Waste stored at all the ULBs i.e Jawhar Municipal Council, Palghar Municipal Council, Vasai-Virar city Municipal Council dumpsite is 3609.80MTD/ 70MTD/ 500000MTD. There are in total 25 nos. of Bulk Waste generations in Palghar district comprises of 4 ULB's providing 1419 nos. of onsite facility for wet waste.

Of all 4 ULB's have 100 percent facility of door to door collection of Solid waste. Palghar district has not initiated any Mechanical Road Sweeping facility among any of its ULB's rather district has 100 percent Manual Road sweeping facility. The district has 100 percent segregated waste transport for 4 ULB's. Segregated wet waste is further utilized for composting. Despite of 100 percent Segregation of the waste generated, 3 ULB's are performing the 100% Compositing operation while the remaining ULB Vasai-Virar city Municipal Council is performing 50% Compositing operation.

MRF is not introduced in 2 ULB's namely Palghar Municipal Council, Dahanu Municipal Council, while the other 2 ULB's are having MR facility.

Further, only Vasai-Virar city Municipal Council & Jawhar Municipal Council, are using 10% and 80% Sanitary Landfill facility to safe decomposition of the solid waste collected.

Some of the ULB's have initiated authorization of waste pickers, and issuance of ID card of personnel's involved in management of solid waste.

Palghar District has not initiated with Reclamation of old dump site and Linkage with waste to energy Boilers/Cement plants is only initiated by Dahanu Municipal Council which is collected by Nepra resource pvt.ltd., Ahmadabad, Gujrat state .

3.1.2 Adequacy of infrastructure

Availability of infrastructure to handle the waste generated from the Palghar district is presented in Fig 1.3

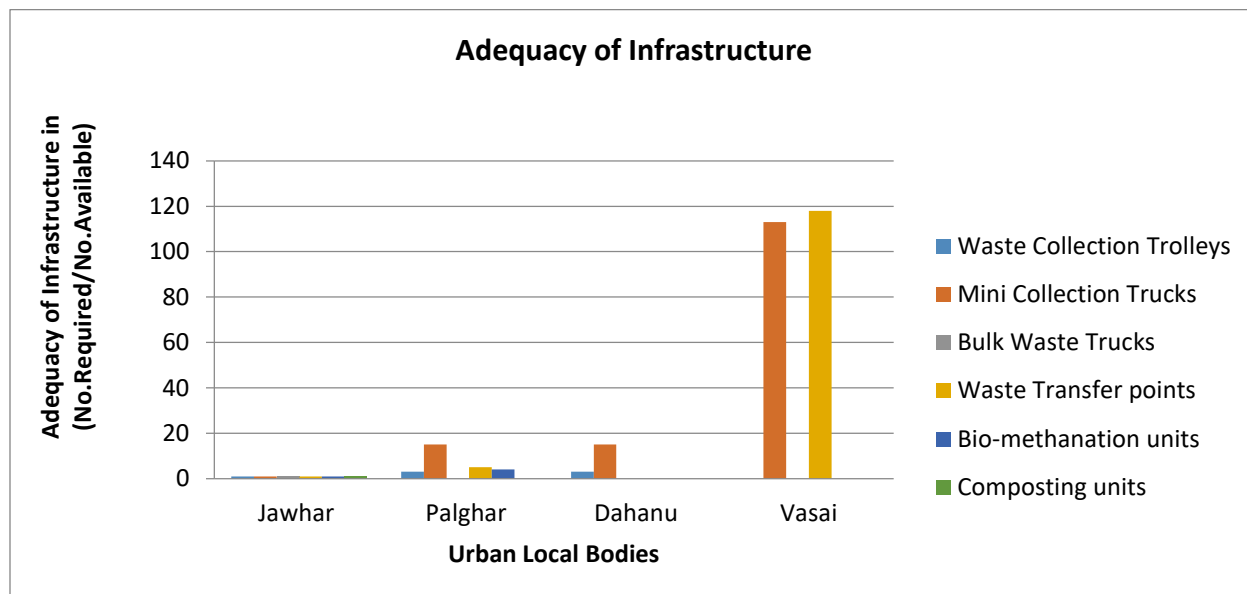


Figure 1.3 Adequacy of Infrastructure

Above graph depicts that Palghar district have many (6 No.s) trolley or (144 No.s) mini truck solid waste collection facility for all of it's ULB's. Among all the 4 ULB's 2 ULB's have the 100% Segregated Transport system to collect the waste. Further District also provides 124 No.s of Bulk Waste Trucks but this facility is not initiated in Dahanu. Palghar District doesn't have any Bio-methanation units. District only have 2 Waste Transfer point i.e at Jawhar and Palghar.

There are in total 6 Composting units among 4 ULB's, maximum is at Palghar Municipal Council and Dhanau Municipal Council. It can be concluded that some of the ULB's in The Palghar district requires Refuse dry waste [RDF] facility.

Furthermore, it can be seen that ULB's requires other decomposition facilities like composting, windrow composting, home composting, Composting Pit in major Municipal Councils and other ULB's

Each ULB's in Palghar district ensure the implementation of applicable by-laws.

3.1.3 Financial allocation

The Total Capital Expenditure for all the 4 local bodies to carry out Solid Waste Management practise starting from Collection, Segregation, Transportation to respective facilities and

implementation of those facilities like Composting units, Material Recovery Facility, Sanitary landfills, etc. is INR. 147 Crore whereas the operational cost for the same INR. 312Crore

3.2 Plastic waste

Plastics are integral part of society and have varied application. Palghar district generates 50.59MTD of Plastic waste from over 4 ULB's. Out of which Vasai- Virar City Municipal Council is the major generator of Plastic waste i.e, 40MTD followed by Palghar Municipal Council i.e 10MTD. All the ULB's have the 100% Door to Door collection facility. Estimated generation details from all local bodies are presented in below **Figure. 1.4**

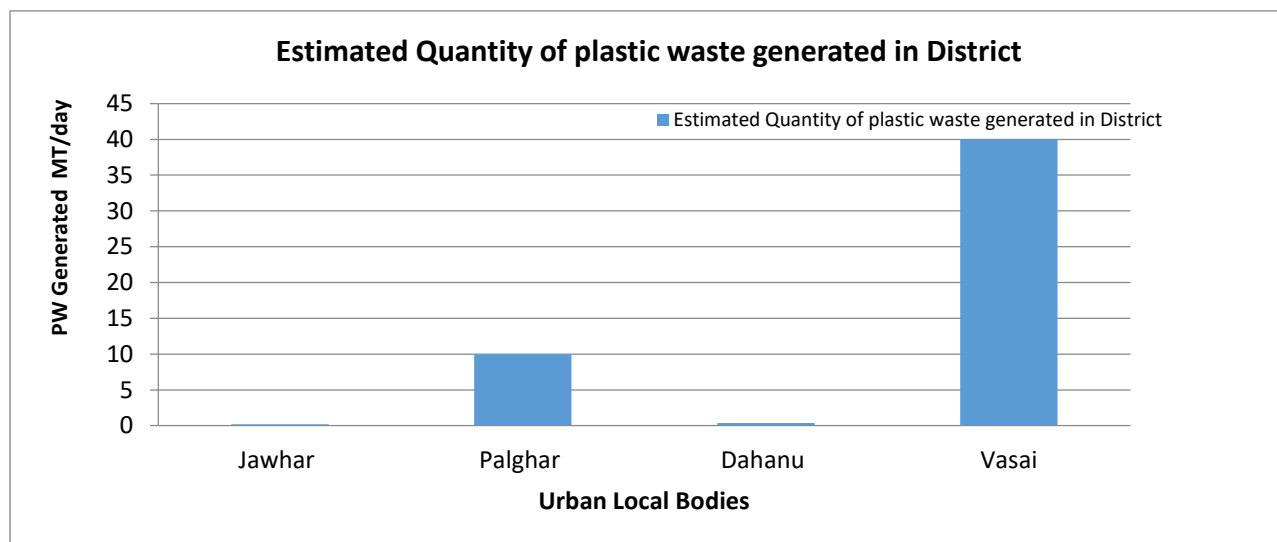


Figure 1.4 Estimated quantity of plastic waste generation

Segregation of waste is done at the tune of 80 – 100 percent for all ULB's and Partially 30% for Dahau. Jawhar Municipal Council followed by Vasai- Virar City Municipal Council has adopted Material Recovery Facility (MRF) to collect the Plastic waste. While, the MRF facility at Dahau Municipal Council is currently under Tender process and Palghar doesn't have MRF installed.

District has initiated Authorization of Plastic Waste personnel's in 44 nos. in various local bodies out of which Vasai_Virar city is the major contributor to initiate the process of Authorization . Palghar District has 5 plastic waste collection centers. Graphical representation of the Plastic waste collection implementation is shown in below Fig 1.5

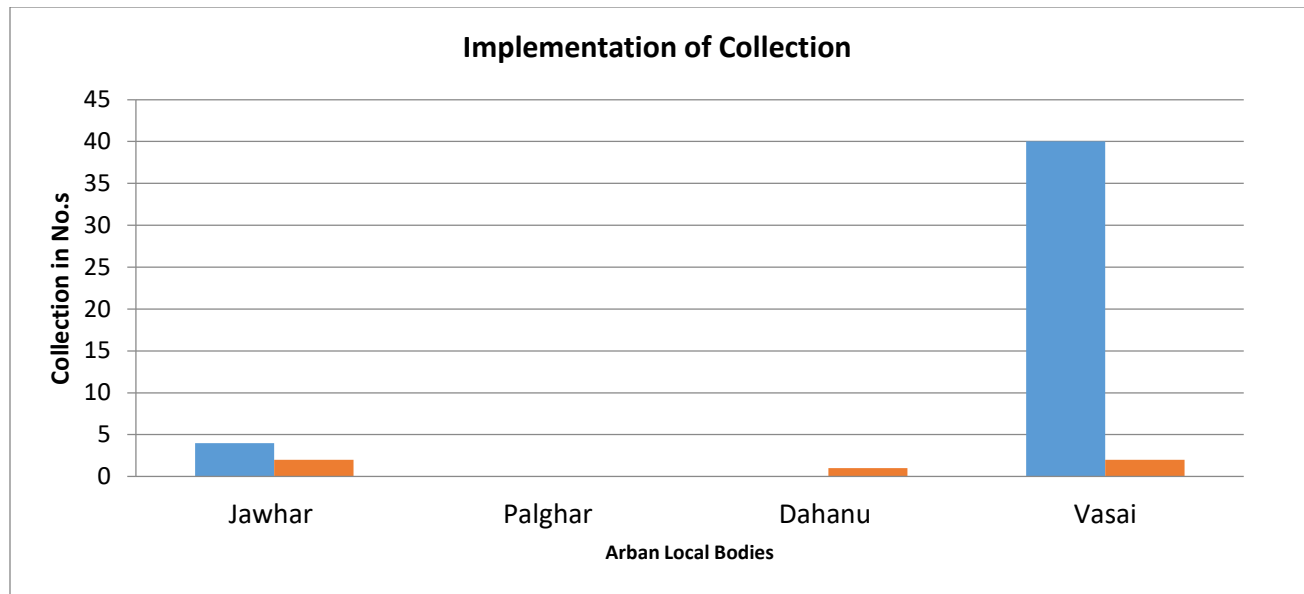


Figure 1.5 Implementation of Collection

In Palghar district it can be seen that, despite of door to door collection of PW and its 100 percent segregation 8 Plastic waste (PW) recycler is available. While district do not contribute in Plastic Pyrolysis nor any Plastic pyrolysis oil plants. Palghar district have only 1 Plastic manufacturers. While Local bodies in Palghar district doesn't uses its collected plastic waste in making roads. Availability of facilities for recycling or utilization of PW in Palghar district is represented in below Fig 1.6

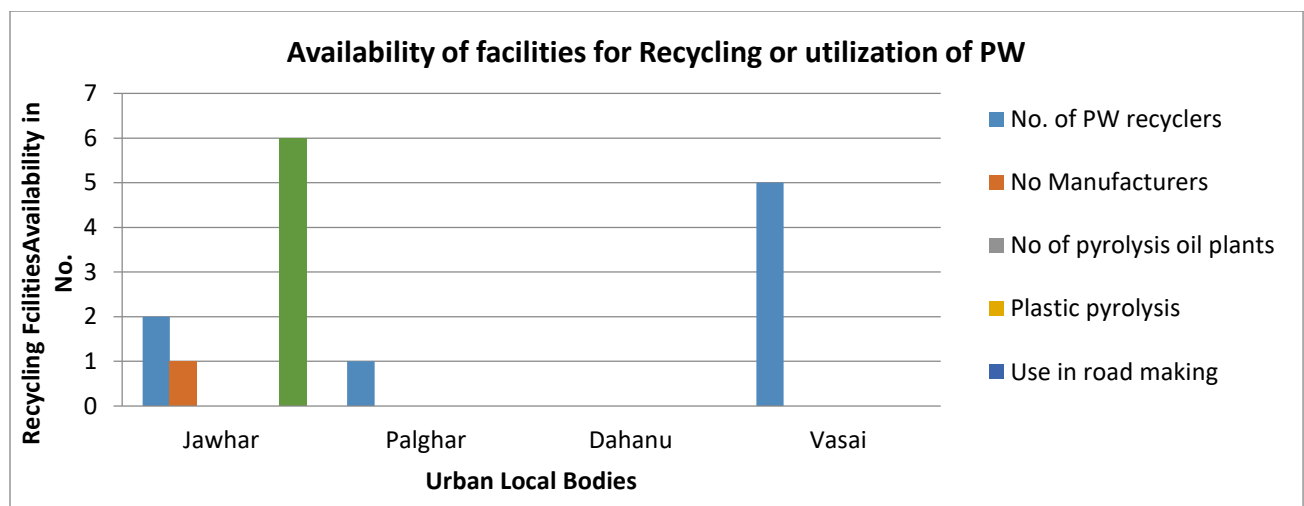


Figure 1.6 Availability of facilities for Recycling or utilization of PW

Palghar District has implemented the PW Management Rules, 2016 in its 4 ULB's resulting in Sealing of units producing < 50-micron plastic, Prohibiting sale of carry bags < 50 micron followed by Ban on Carry bags and other single use plastics as notified by State Government.

On other hand, there are no producers associated with ULB's to produce Plastic nor any Infrastructure is supported by Producers / Brand owners to ULBs.

3.3 Construction and Demolition (C & D) waste Management.

The Ministry of Environment, Forest and Climate Change notified the Construction & Demolition Waste Management Rules, 2016 on 29 March 2016. The rules are an initiative to effectively tackle the issues of pollution and waste management.

Total qty. of C & D waste from 4 ULB's in Palghar District is 365MT/D among with Palghar Municipal Council are the major contributor at tune of 365MT/D each. District has not Implement any scheme for permitting bulk waste generators. Issuance of Permissions by ULBs is not initiated in any of its local bodies.

It can be observed that, Palghar district has notified implementation of By-Laws for C&D Waste Management in any of its local bodies.

3.4 Biomedical Waste Management

Bio-medical waste refers to any waste, which is generated during the diagnosis, treatment or immunisation of human beings or animals or research activities pertaining there to or in the production or testing of biological or in health camps,etc. Fig 1.7 shows the graphical representation of Inventory of Bio medical waste generation.

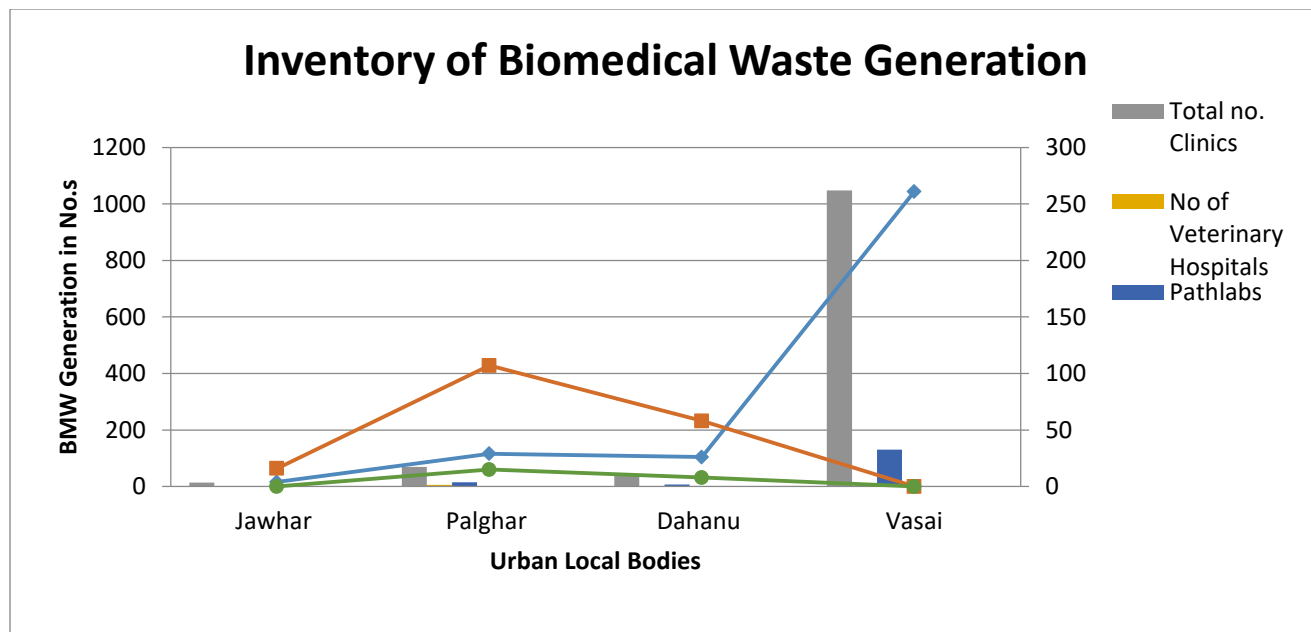


Figure 1.7 Inventory of Biomedical Waste Generation

The amount or the quantity of BMW generated by palghar district is 685 KG/D.

From graph It can be concluded that there are about 320 bedded hospitals in among all the 4 local bodies in Palghar district whereas, 181 nos. of non-bedded hospitals. There are in total 1172 nos. of clinics where maximum nos. are in Vasai- Virar city Municipal Council. Palghar district do have 15 nos. of Dental Clinics in its one Municipal councils followed by 155 Pathalogoy laboraroties . District do have any Veterinary Hospital, Blood Bank, Animal House, etc in Palghar Municipal Council while rest of the ULB's doesn't have any Veterinary Hospital, Blood Bank, Animal House, etc.

Authorization has been done for HCFs by SPCBs / PCCs in Palghar district with bedded HCFs 442 and non bedded HCFs 1265. District doesn't have any common Biomedical Waste Treatment and Disposal Facilities(CBMWTFs).They have their CBMWTFs only in Palghar. Palghar district doesnot have any Linkage with other CBMWTFs for disposal of Bio-medical waste.

Palghar has partial Barcode tracking system installed But Due to poor response by HCF its Not Working properly. Dahau Municipal Council shows BMW lifting by Touch N Glow Pvt.Ltd., Palghar. Rest of the ULBs doesn't how any daily BMW lifting by CBMWTFs

In Palghar District partial Hospitals don't hand over waste with proper segregation thus only 60% of the total waste is segregated.

3.5 Hazardous Waste Management

There is only 831 Hazardous Waste generating industries in Palghar District from where 30804.02 MT/Annum of Hazardous waste is generated of which Incinerable HW is 5668 MT/Annum and Landfillable HW is 25135 MT/Annum. Based on the type of waste it is further sent for treatment i.e either landfilling or Recyclable/Utilizable waste. As per standard norms each of these industries have displayed a board of Hazardous Waste generation in industry. Due to unavailability of Hazardous waste disposal site, the generated waste is sent to CHWTSDF of other district within state. There are 903 No.s of industries authorized by SPCBs/PCCs. Out of 903 industries only 837 industry is having Display Board of HW generation data in front of gate.

3.6 E-Waste Waste Management

It is observed that the district has total of 7 E-waste collection centers with its facility. Citizen of Jawhar, Dahau and Vasai- Virar city are able to deposit or provide E-Waste through Toll-free Numbers in the District while palghar doesn't have any such facility. The top class mobile companies have provided their collection centres from where the discarded mobiles are collected. There is E-waste recycler and the local bodies that have linked up for same with anyone. There is total of 8 no. of dismantler, recycler, producer in the district which are existing in the Jurisdiction of Sub-Regional Office. To create awareness among the people the District administration arranges District level Awareness Campaigns. Out of which there are 2 dismantler existing in Palghar district one is M/s. S. S. E-Waste Recyclers, Gatet No. 442, Village Usar, Kondla Road, Tal. Wada, Dist. Palghar 421312 with capacity 1500MT/D, another is M/s. Eco Layer E-Waste Recycling S. No. 11, H. No. 1/1, PT-8, S. K. Indl. Estate, Choudhary Compound, Vasai E, Palghar with capacity 110MT/D.

3.7 Action Plan

As per the above mentioned observation, it seems that almost all ULBs are handling solid waste generated as per the Municipal Solid waste Management Rules, however there are certain issues that needs to be addressed for 100% implementation of the rules as mentioned in Table 2

Table 2 Action Plan for Solid Waste Management

Sectors	Gaps	Action Points	Priority
Domestic Solid Waste			
Quantification	<ul style="list-style-type: none"> ▪ Methodology for solid waste quantification should be ascertained ▪ Quantification based on Income group, culture affluence and technology to be considered 	<ul style="list-style-type: none"> ▪ Mechanism for graded weighing system either through intermediate transfer station or at the common receiving station to be created. Usually one weigh bridge at any treatment / disposal location required ▪ Quadrate sampling methodology to be adopted in order to reduce quantity as well as quality 	Immediate
Collection System & Transport System	<ul style="list-style-type: none"> ▪ Some of the places, efficiency of the collection system is not up to the mark ▪ 	<ul style="list-style-type: none"> ▪ Ideally most proven method of SWM is 3 Tier System with door to door, community and transfer station approach ▪ 100% efficiency to be achieved ▪ Intermediate 	Short to Mid Term
Infrastructure	<ul style="list-style-type: none"> ▪ Mostly composting is the main treatment methodology with about 100% coverage ▪ MRF facility is also available but limited to few ▪ Sanitary landfill are limited to 2-3 ULBs 	<ul style="list-style-type: none"> ▪ Intermediate / Transfer station based decentralized waste treatment facility to be evaluated ▪ Additional 20% alternative treatment such as bio-Methanation can be explored 	High
Plastic Waste	<ul style="list-style-type: none"> ▪ Lack of SOP for not only quantification but also life cycle analysis [LCA] ▪ Limited understanding / interpretation of EPR / PRO ▪ Only two ULBs lacking implementation of PW notification 	<ul style="list-style-type: none"> ▪ Strengthening surveillance of life cycle assessment for type and quantity of Plastic Waste ▪ Effective EPR Policy ▪ Initiation of 100% compliance to PW Rules at the earliest 	High & Immediate
C&D Waste	<ul style="list-style-type: none"> ▪ 2-3 of the ULB need to establish C&D Waste management system 	<ul style="list-style-type: none"> ▪ Minimum 1 such facility at each of the ULB to be established ▪ System for utilization of recovered material and processed C&D waste to be effectively implemented and monitored 	High
Biomedical Waste	<ul style="list-style-type: none"> ▪ Rooting and effective collection within 48hrs from the time of generation to be effectively handled ▪ Treatment facility lacks 	<ul style="list-style-type: none"> ▪ Regular Inventorization through automatic / digital platform to be developed ▪ Up-gradation of existing facility to meet 2016 CPCB norms ▪ Additional at least 1-2 facilities to 	Very High & Immediate

Sectors	Gaps	Action Points	Priority
	implementation of 2016 Notification in line with CPCB audited report ▪ Limited Inventorization ▪	cover the of umbrella zone along with increasing burden on the existing coverage area to be planned ▪ Collection mechanism to be strengthen with additional vehicles to cover vast area and scattered HCF [miniscule quantity]	
Hazardous Waste	▪ Domestic HW being mixed with solid waste posing threat ▪ No separate handling of domestic HW ▪ Not effective segregation at source	▪ Either decentralized 4 - 5 step segregation practices to be initiated or at least advisory for intermittent storage and collection of domestic HW to be initiated ▪ Inventory to be initiated and maintained	Very High & Immediate
E Waste	▪ Lack of inventory ▪ Limited understanding of E waste rule and management ▪ Neither segregation nor separate transfer / handling facility	▪ Detailed inventory for domestic e waste under 26 different categories ▪ Mass awareness campaign ▪ Every ULB to have at least one E waste management centre and minimum one collection / drop centre in a radius of 25-30km ▪ Atleast one e waste processing unit in a district	Very High & Immediate

4.0 Water Quality Management Plan

There are no Rivers in Palghar district. With respect to the data collated about 259MLD of untreated /partially treated sewage of 4 ULB's flows in to the riverine length thereby [posing challenge for attaining clean water in the river.

The 4 ULBs generate about 112.9 MLD of sewage with an existing capacity of 30 MLD of STP for only Palghar Municipal Council leaving a deficit of 43 % in remaining 3 ULB's. On the other hand most of the deficit is accounted due to lack of sewage conveyance system [Sewer Network]. However it is also many a time the deficit as a representative of treatment capacity / capability. Even though MPCB has been eying to formulate policy w.r.t. reuse treated sewage as a regulation, lack of reuse conveyance system and more often than not due to the limited options of reutilization of treated sewage worsened with consistent out put quality of treated sewage only leads to complicated disposal options. Rain water Harvesting is Iplemented in 3 ULBs of Palaghar district except Dahanu.

On the other hand industrial effluent are much more regulated wherein 59.106MLD from 851 nos. of industry are disposing the total 59.106 MLD WW into Nallahs/rivers. There is only 1 Common Effluent Treatment Facilities available in Palghar district.

A detailed Issue based management action plan is provided in Table 3.

Table 3 Action Plan for Water Quality Management

Sectors	Gaps	Action Points	Priority
Water Resources	<ul style="list-style-type: none"> ▪ Limited information available on mapping of surface water resources in terms of quantity ▪ Limited Inventorization of quantity, usage, availability exploitation etc. ▪ Limited Rejuvenation / remediation of water bodies ▪ Solid waste dumping i the river bodies 	<ul style="list-style-type: none"> ▪ Thorough Mapping of resources to be taken up ▪ Extensive assessment of quality to be done ▪ Criticality indicators to be established for each water body/resource ▪ Extend water quality monitoring network to include representativeness ▪ Based on the criticality initiate Rejuvenation / remediation ▪ Online Monitoring system for surface water bodies to be established ▪ Protection methods to be developed for creative stoppage of dumping of solid waste in the surface water bodies 	High
Domestic	<ul style="list-style-type: none"> ▪ Correlation between generation and treatment often misleading ▪ Water budgeting exercise often missing ▪ Computation of water footprint missing ▪ Surveillance /Inventorization in cradle to grave approach absolutely never applied ▪ Limited collection system and treatment facility especially in remote area ▪ Often polluting water resources ▪ No established reuse options / reuse network 	<ul style="list-style-type: none"> ▪ Digital Platform to accommodate water budgeting / reuse potential ▪ Approximately 120MLD of STP needed ▪ Strengthen the sewage collection network to cover 100% Population ▪ Policy for reuse / recycle of treated wastewater 	Very high & Immediate
Industrial	<ul style="list-style-type: none"> ▪ Limited information of industries discharging wastewater in to the river 	<ul style="list-style-type: none"> ▪ Digital compliance methodology to be developed 	High

	<ul style="list-style-type: none"> ▪ No provision of CETP ▪ All 15 number of industries Noncompliance of in terms of meeting discharge standards 	<ul style="list-style-type: none"> ▪ Disposal system to be under constant surveillance 	
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5.0 Air Quality Management Plan

As it is Palghar district being one of the outgrowing areas in Maharashtra, Air quality assessment and sectoral management needs are ought to be essentially planned and executed. However, CPCB & MPCB through their NAMP & SAMP program has not set up manual nor any CAAQM stations across the district.

An exceedance factor like Identifying prominent air polluting sources such as Unpaved roads, burning of waste stubble reveals as per the monitored data that needs immediate attention as is the case in most of the areas of India. In view of the same the priamafece of every ULB's shall be to establish at least one such Ambient Air Monitoring Station and coordinate / collaborate with other monitoring organization to provide for advisory to general public towards health associations and risk of exposure. They have access to Air Quality Monitoring Data from SPCBs and CPCBs.

District doesn't provide any Vehicle pollution check centers, while no Dust Suppression Vehicles Action plans are prepared for non-attainment cities. District has access to air quality data from SPCBs & CPCB through Dashboard. They air pollution complaint redressing system of SPCBs. Inventory and policy formulation action plan is stated in **Table 4**.

Table 4 Action Plan for Air Quality Management

Sectors	Gaps	Action Points	Priority
Air	<ul style="list-style-type: none"> ▪ Limited CAAQMS to establish / corroborate inferences ▪ Sectoral action plans not effectively established 	<ul style="list-style-type: none"> ▪ Emission inventory and source apportionment supported with dispersion and health based iterative process for science based AQM strategy to be established ▪ Each ULB to have at least one urban and one rural CAAQMS or three manual stations at least to include criteria pollutants with minimum one location to include parameters of 2009 CPCB notification and meteorological data including cloud cover ▪ Fugitive emission control system for hot spot emission control to be installed ▪ Green barriers / Photo catalyst options to be evaluated ▪ Capacity building to be enhanced 	High

6.0 Mining Activity Management plan

Mining waste is the high-volume material that originates from the processes of excavation, dressing and further physical and chemical processing of wide range of metalliferous and non-metalliferous minerals by opencast and deep shaft methods. Palghar district has no mining activities carried out among its local bodies. Area that is covered under mining activity is 70.24hectare, Sand mining is done.

It can be observed that all the 24 Mining areas are meeting Environmental Clearance Conditions. No any Mining operations are suspended for violations to environmental norms nor any odd directions are issued by SPCBs for the mining areas in the district.

7.0 Noise Pollution Management Plan

The goal of noise management is to maintain low noise exposures, such that human health and well-being are protected. The specific objectives of noise management are to develop criteria for the maximum safe noise exposure levels, and to promote noise assessment and control as part of environmental health programmes.

There are in Total 1 No. of noise measuring devices with district administration to monitor the noise levels while 1 noise measuring devices with SPCBs. There are No complaints received on noise pollution in last 1 year for Palghar district. District ocassionally implemnt ambient noise standards in residential and silent zones. No Noise monitoring study is carried out in Palghar district. Noise quality reveals mainly source specific noncompliance such as traffic related in most of the kerb side analysis. Though zoning categories and regulations therein are particularly specified, in limitation of noise regulations has always been challenge to the regulatory authority. **Table 5** spells potential management plan that could be taken up on priority by each of the ULBs.

Table 5 Action Plan for Noise Pollution Management

Sectors	Gaps	Action Points	Priority
Noise	<ul style="list-style-type: none"> ▪ Most of the source related noise areas show exposure beyond compliance ▪ Excessive exposure during noise generating potential events/ festivals ▪ 	<ul style="list-style-type: none"> ▪ Noise mapping to be carried out for zonation purposes ▪ At source control using physical or natural attenuation methods to be adopted ▪ In the path noise control methodologies using noise absorbers creating zone of inhibition / silence zone to be done ▪ End of the pipe measures such as PEs acoustic enclosures etc. to be 	High

		adopted ▪ Event based noise control policy to be effectively implemented	
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8.0 Conclusion

There seems to be vast data gaps and a detailed exercise to collate and validate data gathered through this process needs to be urgently taken up in addition to the adopting a holistic & inclusive consultative process of gathering information, collating & converging it in order to be able to device strategies of future. Also, it is equally important that projection for at least next 20 years be done in order to evaluate management plans for futuristic view to meet the objective of such vast exercise. Digital data availability needs to be one of the prime tasks of government & methods of its validation be created with scope for improvement in near future. The practice needs to be a continual one to be updated regularly in order to monitor progress and effectiveness of this process & shall be linked with financial allocations being designed to be promoted by government of the day. With regards to action plans, the priorities shall be aligned based on sustainability objectives.