

மக்கள் நல சங்கம்

PUBLIC WELFARE AND DEVELOPMENT SOCIETY (PWDS)



“Vivekananda Sevashram” 2/51, Kamarajnagar, Kanakkampalayam,
Gobichettipalayam Taluk, Erode District, TAMILNADU - 638505

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Secretary : **K.A.NATARAJAN**

Date: 09-2019

To:

Shri Narendra Modiji, Prime Minister of India ,
Minister of State for Social Justice and Empowerment,
Govt. of India, New Delhi

Respected Sir,

Greetings from PUBLIC WELFARE AND DEVELOPMENT (PWDS)

We, a reputed NGO, since 1986, working for rural development, here with sending an application with relevant documents for **Solid waste Management Project for CLEAN INDIA-GREEN INDIA**. We expected your support for this proposal for financial assistance from Government of India or under Corporate social Responsibility.

There is need for solid waste management, both in urban and rural areas and recycling of the final waste product. All the open areas will be either paved or grassed. All the streets to be paved with concrete blocks or paver blocks. There should be zero tolerance to dumping or littering of solid waste matter (mostly paper and plastic matter) in open spaces. There should be daily sweeping of streets, roads or public places.

This programs will be very important and needful to be clean and green Environment to Stand up India we get bio fertilizer from the waste. Also energy will be increased from the garbage.

We request you Sir, to sanction the meaningful program to be CLEAN INDIA GREEN INDIA concept which focused Shri Narendra Modiji's promote thinking of Swachh Bharat Abhiyan.

Thanking you and with kind regards

Yours faithfully

K A NATARAJAN, Secretary

ABOUT THE IMPLEMENTING ORGANISATION

1	Name of the Organization (as per registration certificate)	PUBLIC WELFARE AND DEVELOPMENT SOCIETY(PWDS)
2	Full address of Headquarter of Organization with PIN code	“Vivekananda Sevashram” 2/51, Kamarajarnagar, Kanakampalayam, Gobichettipalayam Taluk, Erode District, TAMILNADU-638505
3	Name of contact Person	Shri K A Natarajan - Founder Secretary
4	Contact No. and E-mail address	Watts app No. 7904869075 pwds9442263431@gmail.com , pwdsngo2018@gmail.com
5	NGO Darpan –Niti Ayog Uniq ID:	TN/2009/0002189
6	Name of Act under which registered	Registered under Tamilnadu Societies Act 27 of 1975 Renamed on 12-07-2004. Regd No.: 95 dated 10-11-1986
7	Bank Informations	ICICI BANK, ERODE, A/c.No.SB. 606201082604-IFSC. ICIC0006062 Karur Vysya Bank, Kanakkampalayam A/c.CA 1676135000001813 –KVBL0001676
8	Tax exemption under IT Act	80-G, C.No.227(16)/CIT-II/Cbe/2011-12 dt.16-08-2011
9	Details of registration under Foreign Contribution Regulation Act, if applicable	FCRA No. 76060035 Valid upto 01-11-2021
10	Details of financial assistance from foreign agencies, if applicable	Foreign Assistance before 2000 only (GSSS, Ecomwel, Cebemo, Desh, Eldonjohn)

Through this project we propose to create 'Zero Waste Erode' through 'Waste to Manure' strategy. To achieve this, we desire to promote 'Source Segregation Practice of Wet and Dry Waste in Communities' and create 'Materials Recovery Facilities (MRF)', which can give community a sustainable future. Furthermore, our effort to assist waste collectors to be recognized as 'green labour' is geared towards creating a sustainable model of waste to manure within community sphere. Waste collectors will collect household waste from identified points and bring those to 'MRF' to convert into 'Bio culture' and 'Aerobic Compost'.

The following waste management hierarchy is undertaking to process:

1. Wherever possible, waste reduction is the preferable option.
2. If waste is produced, every effort should be made to reuse it if practicable.
3. Recycling is the third option in the waste management hierarchy. Although recycling does help to conserve resources and reduce wastes, it is important to remember that there are economic and environmental costs associated with waste collection and recycling. For this reason, recycling should only be considered for waste which cannot be reduced or reused.
4. Finally, it may be possible to recover materials or energy from waste which cannot be reduced, reused or recycled.

Agro based bio fertilizer-based composting is an ideal form of recycling, as it reduces truck hauling for managing garbage and involves local community to take responsibility of its waste. Finished compost is more readily available for growing food by households, baddy field in this taluk level, urban and rural farms, community gardens, and school gardens. It is also available for low-impact development and green infrastructure such as green roofs, green streets. In short, community composting builds more resilient and sustainable communities.

These are some issues that the project will address:

No System of Primary Collection from the Doorstep

There is no public system of primary collection from the source of waste generation. The waste discharged here and there is later collected by rural and town panchayats, municipal sanitation workers through street sweeping, drain cleaning, etc. Street sweeping has, thus become the principal method of primary collection.

Irregular Street Sweeping

Even street sweeping is not carried out on a day-to-day basis in all Panchayats, and towns in India. Generally commercial roads and important streets are prioritized and rest of the streets are swept occasionally or not swept at all. The tools used for street sweeping are generally inefficient and outdated.

Waste Storage Depots

As waste is collected through traditional handcarts/tricycles that can carry only a small quantity of waste at a time, there is a practice to set up depots for temporary storage of waste to facilitate transportation through motorized vehicles/lorries.

Transportation of Waste

Transportation of waste from the waste storage depots to the disposal site is done through a variety of vehicles, a few cities use modern hydraulic vehicles but most of the transport vehicles are old and open. They are usually loaded manually. The fleet is generally inadequate and utilization is not optimal. Inefficient workshop facilities do not do much to support this old and rumbling squad of squalid vehicles. The traditional transportation system does not synchronize with the system of primary collection and secondary waste storage facilities and multiple manual handling of waste results.

Medical waste:

The term “medical waste” can cover a wide variety of different byproducts of the healthcare industry. The broadest definition can include office paper and hospital sweeping waste. The list below displays the most common waste categories as identified by the WHO.

Sharps: This kind of waste includes anything that can pierce the skin, including needles, scalpels, lancets, broken glass, razors, ampoules, staples, wires, and trocars.

Infectious Waste: Anything infectious or potentially infectious goes in this category, including swabs, tissues, excreta, equipment, and lab cultures.

Radioactive: This kind of waste generally means unused radiotherapy liquid or lab research liquid. It can also consist of any glassware or other supplies contaminated with this liquid.

Pathological: Human fluids, tissue, blood, body parts, bodily fluids, and contaminated animal carcasses come under this waste category.

Pharmaceuticals: This grouping includes all unused, expired, and/or contaminated vaccines and drugs. It also encompasses antibiotics, injectables, and pills.

Chemical: These are disinfectants, solvents used for laboratory purposes, batteries, and heavy metals from medical equipment such as mercury from broken thermometers.

Genotoxic Waste: This is a highly hazardous form of medical waste that’s either carcinogenic, teratogenic, or mutagenic. It can include cytotoxic drugs intended for use in cancer treatment.

General Non-Regulated Medical Waste: Also called non-hazardous waste, this type doesn’t pose any particular chemical, biological, physical, or radioactive danger.

Processing of Waste

Only a few cities have been practicing decentralized or centralized composting on a limited scale using aerobic or anaerobic systems of composting. In some towns un-segregated waste is put into the pits and allowed to decay and the semi-decomposed material is used out as compost. In some large cities aerobic compost plants of 100 MT to 700 MT capacities are set up but they are functioning much below installed capacity. A few places are practicing vermi-composting on a limited scale.

Disposal of Waste

Disposal of waste is the most neglected area of SWM services and the current practices are grossly unscientific. These sites emanate foul smell and become breeding grounds for flies, rodent, and pests. Liquid seeping through the rotting organic waste called leachate pollutes underground water and poses a serious

threat to health and environment. Landfill sites also release landfill gas with 50 to 60 per cent methane by volume. Methane is 21 times more potent than carbon dioxide aggravating problems related to global warming.



Quality of Life

Living in an insanitary environment, like poverty, degrades the quality of human life and it is a curse and a social stigma as well. Therefore, the accomplishment of the Total Sanitation Programs (TSP) will improve the living standard of the Poorest of the poor on the one hand and improve the Human Development Index (HDI) of India. In fact, a sanitary environment is the basic necessity of human life like air, water and food for its aesthetic and psychological development. That is why we say, "Cleanliness is next to godliness".

There is need for solid waste management, both in urban and rural areas and recycling of the final waste product. All the open areas in urban and rural communities will be either paved or grassed. All the streets to be paved with concrete blocks or paver blocks. There should be zero tolerance to dumping or littering of solid waste matter (mostly paper and plastic matter) in open spaces, both in urban and rural areas. There should be daily sweeping of streets, roads or public places both in rural and urban areas.

Garbage Sorting Machine



As the government and people are paying more and more attention to environmental protection, the garbage sorting machine is becoming more and more popular in the market. The machine makes use of a series of sorting methods and physical reactions to achieve the separation various garbage. After sorting, each of the final products has their own applications, which can fully realize the goal of recycling garbage to energy.

Working process of garbage separation machine

1. After entering the field, the garbage in the truck will be unloaded on the discharge platform, and then sent to the scale plate feeder by the hopper.
2. After uniformly distributed, the garbage is sent to the manual sorting platform by belt conveyor, where the workers will sort and select the large objects (quilts, cotton clothes, trunk, branches, long sticks, brick and stones, bottles, etc.) and hazardous waste. The bag breaker can break up the garbage wrapped in plastic bags for further sorting.
3. After sorted manually, the garbage will be sent into the screening machine by belt conveyor for screening treatment. Screening is a very important ring for garbage recycling. According to the technical requirement, we set the sieve plate diameter of the rotary screening machine as 50mm. The machine can divide the garbage into two parts: large than 50mm and smaller than 50mm. The garbage smaller than 50mm is mainly organic matter, and the iron objects in this part of organic matter can be selected out by the hanging magnetic separator, and then is directly sent into compost workshop for treatment.
4. The iron materials larger than 50mm (mainly iron beverage cans and iron cans) can be sorted out by magnetic separation. Then the other garbage larger than 50mm is sent into winnowing machine by belt for wind *election* treatment. The comprehensive

winning machine can sort the garbage on the screen out and divide into three parts: the light plastic waste; heavy materials (bricks and tones, rubber shoes, tiles, glass, etc.); secondary heavy materials (hard plastic, textiles, rubber products, wet paper products, etc.). 5. The three kinds of waste will respectively go to different follow-up devices equipped with **garbage sorting machine** for further processing.

What can we get from the garbage sorting machines?

Dust, earth, sand, stone and broken glasses



These construction materials and broken glasses can be made into new bricks by the related brick production line.

Organic matter



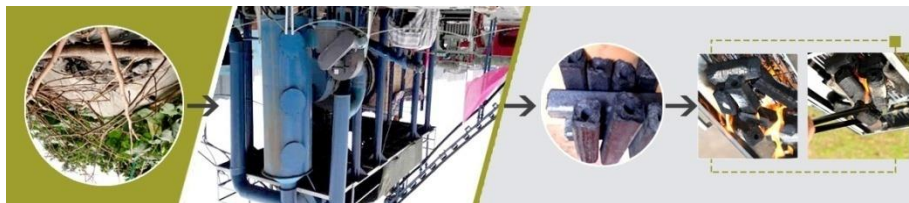
The organic matter such as dregs, kitchen garbage, etc. can be added into animal feces and straw

to get bio-gas by fermentation system. The bio-gas can be used converted to electricity by gas generator.

Cloth, branches and other combustible items: These items can be made into RDF for gasification generator. **Cardboard:** These hard paper materials can be processed into new craft paper.



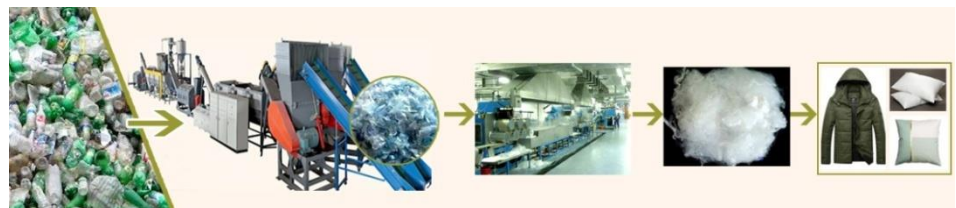
Green waste



The green waste includes tree leaves, grass, fruit shells and other biomass materials. These waste materials can

be used for making charcoal powder by charcoal making machine. The charcoal powder can be further processed into briquettes, which can be widely used in many areas, such as BBQ.

PET:The PET bottles can be processed into flakes, and then reprocessed into fibers, which can be used for producing clothes, pillow inner, bolster.



Plastic

The other kinds of plastic waste such as PE, PP, ABS, etc. can be processed into fuel oil and carbon black by pyrolysis plant. The fuel oil can be further converted into diesel or gasoline by distillation plant; the carbon black can be processed into fine carbon black such as N220, N330, N660, etc. by carbon black processing plant. Besides, these waste plastic materials also can be packed by automatic hydraulic packing machine and sold directly.



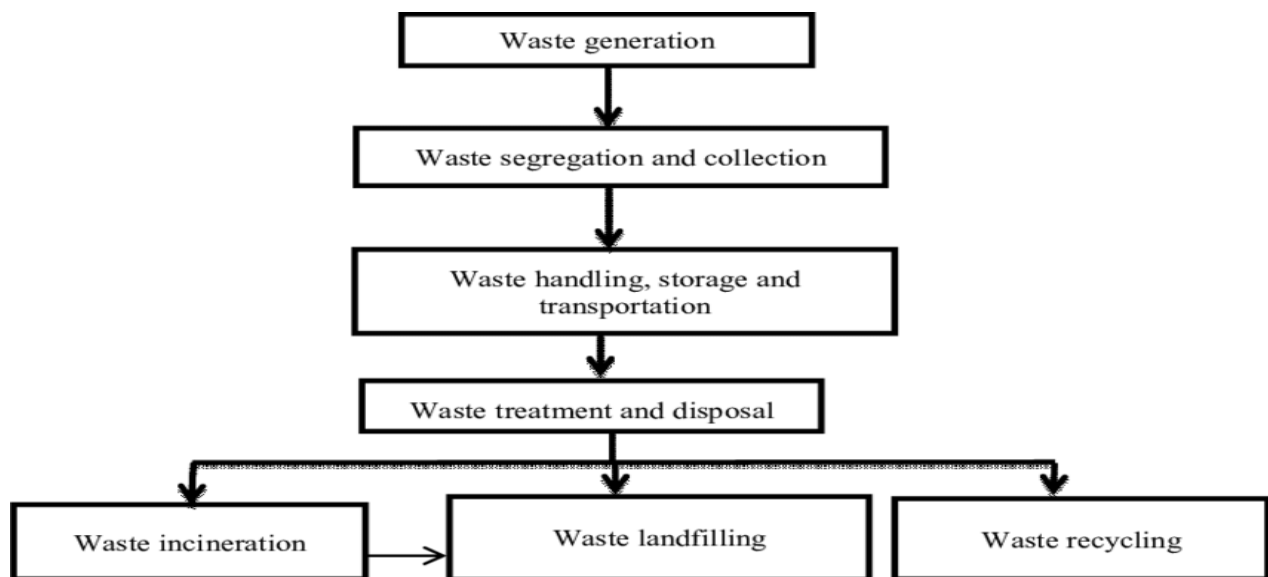
Medical waste



Autoclaves are used 90% of the time to treat medical waste. They are closed chambers that apply heat, pressure and steam to sterilize the medical waste and to kill all the microorganisms. Autoclaves is a two step process because after treatment the medical waste is still recognizable and therefore needs to be shredded. Once the shredding process is completed the waste can be disposed in the general garbage container and can be treated as any other trash.

Small, countertop autoclaves are used by facilities to sterilize equipment for re-use. Large autoclaves are used by facilities to sterilize medical waste that will further be destroyed mechanically.

Stage wise classification of studies on waste management



BUDGET FOR THE SCHEME in Erode District level

Activities	Need	Number and unit cost	Amount
Collection of garbage waste/ Dispose after treatment the waste	Modern hydraulic vehicles	2	1,00,00,000
Fuel and Maintenance			
Loading unloading	2 Drivers/ 4 Labours	6 x Rs 20000 x 12	
Storage Godown	5 Hectare Land	5xRs.1.5 crore	7,50,00,000
Segregation process	Labours	20xRs.10000 x12	24,00,000
aerobic or anaerobic systems of composting	Machineries and operators		
Vermi composting	Bits and Labours		
Building and workshed			
Training and exposure			
Administration			