

Zero Garbage and SWaCH Model Solid Waste Management in Pune

SWaCH (Solid Waste Collection and Handling or, officially, the SWaCH Seva Sahakari Sanstha Maryadit, Pune) is India's first wholly-owned cooperative of self-employed waste pickers / waste collectors and other urban poor. The organisation was the joint effort of Pune Municipal Corporation and the waste pickers' union Kagad Kach Patra Kashtakari Panchayat (KKPKP).

In 2008, PMC signed a five year Memorandum of Understanding to decentralise door to door collection services and allow SWaCH members to carry out this work. Through its 2300 members, SWaCH services over 3,78,419 households across 76 prabhags in 15 municipal administrative wards of the PMC.

Process Flow

- Source segregation of (dry and wet) waste
- Door to door collection of segregated waste
- Recovery of recyclables
- Composting and bio-gas generation
- Pelletization
- Disposal

SWaCH members collect segregated (dry and wet) waste, right from citizens' doorsteps and deposit it at the designated PMC collection points. The wet waste is either processed in the housing complex or is given to the PMC ghanta gadi (pick-up truck). The dry waste is further sorted into several categories and recycled. SWaCH enables waste pickers /waste collectors to upgrade their livelihoods, and trains them to carry out their work professionally.

Salient Features

- Shredding and composting of garden waste
- Mandatory onsite disposal in post 2000 residential and commercial schemes
- Data collection for MIS using Mobile SMS
- ALERT G Complaint Redressal through citizens participation
- Capping of old dumping site

Present Status

- 1000 TPD - Composting, RDF, Pellets and Bio fuel
- 200 TPD - Vermi compost and compost
- 60 TPD - Electricity and Compost
- 700 TPD - Electricity (Gasification/Pyrolysis) through DBOO¹

Outcomes

- No open dumping since 2010 and 100 % scientific processing of waste
- Zero garbage
- Decentralised waste processing plant – 27 TPD
- More than half MW of energy from 60 tons of organic waste using biogas
- About 10 MW /hr of energy from 700 Tons of waste by using plasma pyrolysis technology
- Integration of informal sector in Municipal Solid Waste Management
- 300 +/- 5 % m³/day biogas is generated
- Waste pickers and itinerant buyers collect recyclables that amounts to 22% of MSW

For more details contact:

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