



SANJEEVANI S3

SIMPLE!! SMART!! SUSTAINABLE!!

Plastic Recycling - Informal Sector

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- ▶ **Started in 2015** with the goal of improving the health of Mumbai and its residents through an efficient sub-urbanised waste management system with composting and recycling at its forefront.
- ▶ We have experts in the field of Mechanical engineering, Biochemical engineering, Sustainable development (**GRI certified**), Social work, Disaster management(**MCGM assisted**), Global warming & Climate change(**UNFCCC certified**).
- ▶ Our team members have worked in some of the best laboratories of the country (**DBT-ICT centre for energy and biosciences**) on industrial projects like carbon sequestration & Waste to energy/ Value addition from waste.

Scope of work



- We provide a complete solution to the followings:
 - **IEC Programs**
 - a. *Phenk Mat Mumbai* : With CII and SBC3; Covered 200 schools and 33 colleges.
 - b. AHAR: Trained more than 200 restaurants in Mumbai to follow segregation.
 - **On-site processing system**
 - a. Organic waste management; Manual, Semi Automatic and Fully Automatic.
 - **Off-site**
 - a. Centralized Bio-gas Plant
 - b. Material recovery facility
 - **R&D Center**
 - a. Solid Fuel; Non plastic pellet and Plastic pellet.

Plastic recycling survey

- ▶ Covered more than 100 informal vendors.
- ▶ Trend: Primary sorting – Rag picker/Housekeeping staff

Secondary sorting – Local kabaddi waala

Tertiary sorting – w. r. t. colour/types

Shredding / Washing

Pelletization

Observations



- ▶ Sector running for decades.
- ▶ Defined approach :
 1. Plastic materials making money – Recycled.
 2. Plastic materials not making money – Dumped/Burnt
- ▶ Plastic pellets and products out of pellets were made next door.
- ▶ Machines used to make in-gots/buckles/clips were locally made.
- ▶ No awareness w. r. t. plastic pollution/problems.

Suggestions



- ▶ Recognition – They are actually the front runners for plastic recycling.
- ▶ Mapping the flow with both quantitatively and qualitatively.
- ▶ Following standards of Plastic waste management rules 2016 for making extruding/blowing/moulding machines locally.
- ▶ Channelizing reject.
- ▶ Producer making simpler form of plastic to strengthen the lobby of recycling. Eg. PET – India recycles 70-80%, highest in the field of plastic recycling.

WE PROMISED



WE DELIVERED



62 Societies

were **sensitised** and made aware about the benefits of at source segregation and waste management.



14,164 Individuals

were **trained** on categories of domestic waste and appropriate methods of disposal.



1,980 tonnes

of municipal solid waste is **processed** every year in Sanjeevani's centralised and decentralised composting systems.



19,297 Trees

(maintained for 40 years) equivalent **carbon footprint** reduction through onsite and offsite waste processing.



4,950 Litres

diesel saved per year by averting the waste from being transported to the dumping grounds.



50 Women

from **underprivileged** communities are serving as waste managers at Sanjeevani's processing units.



Annual waste processing facilities at Sanjeevani S3 have *averted emissions of 693 tonnes/year of CH₄ and 1,972 tonnes/year of CO₂ into the atmosphere*

THANK YOU