



RURAL WASTE MANAGEMENT



ABOUT SAAHAS

- A NGO registered in **2001** under Societies Act.
- Focus on **'Source Segregation'** and **'Decentralized Waste Management'**.
- Work on **urban and rural programs** providing sustainable waste management solutions.
- **Saahas Waste Management Pvt Ltd**, a social enterprise was registered in **2013**.
- Both entities committed to provide **holistic and scientific solutions to managing waste at source**.

INCREASING PROBLEM OF WASTE IN RURAL VILLAGES

INCREASED DISPOSABLES AND CONSUMPTION WITH NO BACK-END SYSTEM TO MANAGE WASTE



IMPACT OF WASTE IN RURAL VILLAGES

ENVIRONMENT



HEALTH



LIVELIHOODS



CURRENT WASTE MANAGEMENT PRACTICES



Most villages have no waste management systems in place.

Waste is either dumped in water bodies or collected in piles on roadsides and burnt



GOAL OF SWM IN RURAL VILLAGES



Move Beyond the Broom, goal is not a Clean Village but a Zero Waste Village

Survey & Numbering



Door numbering



Bin and bag distribution

Setting up the infrastructure



Setting up waste management shed



Procurement of collection infrastructure

Collection & Transportation



3 way source segregation



Door-to-door collection of segregated waste

Process Flow



Processing & Disposal



Composting of wet waste



sorting of dry waste



non-recyclables to cement plant or aggregation at Taluk level



Sanitary landfill for rejects

Awareness & Trainings



IEC and Awareness



Capacity building & trainings

Steps towards a Zero Waste Village

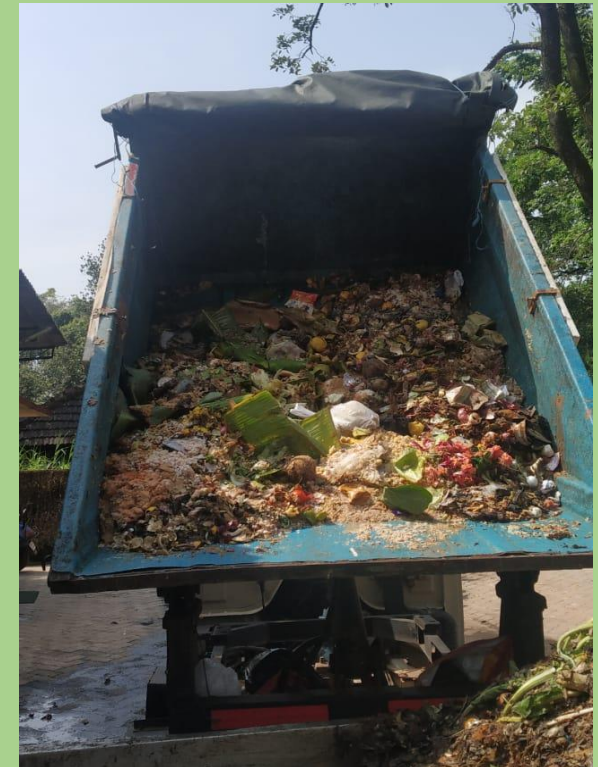
1: MANDATORY SOURCE SEGREGATION



2: DOOR TO DOOR COLLECTION



No public bins, waste collected directly from homes



No mixing while transportation

3: FORMAL PROCESSING FACILITIES TO RECOVER RESOURCES



GP level dry waste collection centres and composting units



Aggregation of plastic waste at Taluk level



4: IEC AND CAPACITY BUILDING

NGOs and other CSOs need to pitch-in to support the Govt in IEC, capacity building and providing technical inputs



5: MONITORING & SUPERVISION

Monitoring framework involving the community members to be developed

6: SUSTAINABILITY

- Financial sustainability through user fees, sale of recovered resources, other GP funds
- Through greater accountability community participation

Who share the responsibility

Citizen:

- Waste reduction;
- Source Segregation;
- No mixing/duping
- User fee for waste management as a service;
- Demanding accountability

Gram Panchayat:

- Regular door-to-door collection;
- Transportation to right end destination;
- Setting up of appropriate infrastructure
- Amending bye-laws to charge user fee to meet operational costs
- Dovetail funds from other Govt schemes to meet capex and opex costs of SWM

Producers of goods:

- Take responsibility of routing their waste to recycling facilities
- Set a percentage of EPR targets to be met from rural waste
- Enable pickup of low value waste from aggregation centres
- Provide funds for formalization of waste value chain, support formal recycling

DRY WASTE COLLECTION

Door to Door collection



Off-loaded at street's end, picked up by collection vehicle



Block Level Aggregation



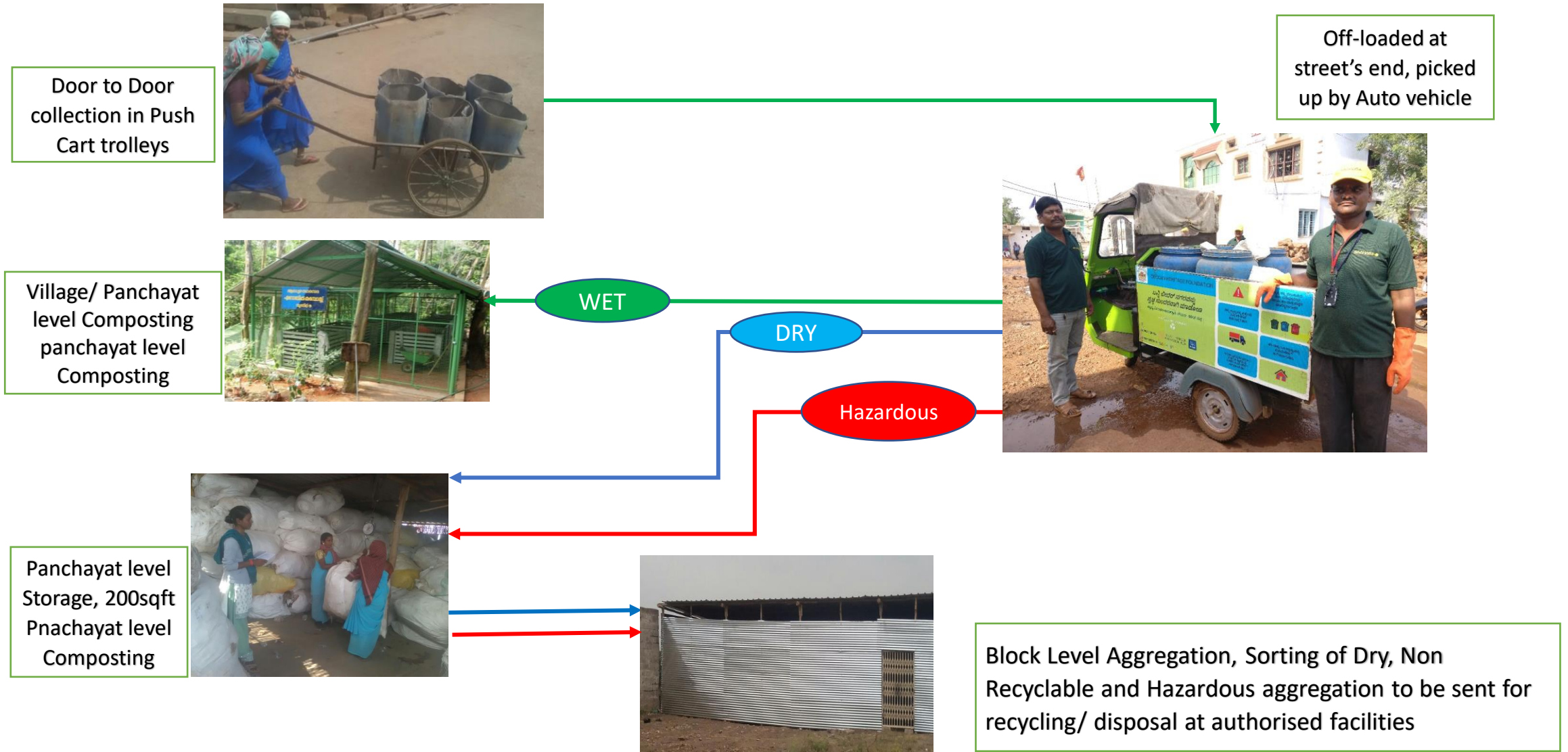
Panchayat level Storage & sorting shed, 500sqft



Recyclable to recyclers

Non-recyclables for Co-processing

WET & DOMESTIC HAZARDOUS WASTE COLLECTION



DRY WASTE AGGREGATION

Aggregation at Taluk or Dist level : Material Recovery Facility

- Aggregation improves sale value of the dry waste
- Automation reduces operational cost
- ~10K sq feet of area required for MRF
- Handle upto 10 tonnes of daily dry waste



SAAHAS PROJECTS

Ballari, Karnataka



Salient features

SCOPE: 7 GPs , 12 VILLAGES + 20,000 HH + 1400 SHOPS

WEEKLY COLLECTION OF DRY WASTE IN 6 VILLAGES + WEEKLY COLLECTION OF DRY WASTE AND DAILY WET WASTE IN THE OTHER 6 VILLAGES.

MONTHLY WASTE COLLECTED : 40 MT OF DRY WASTE AND 250 MT OF WET WASTE

IMPLEMENTATION MODEL: ENTIRE SWM SUPPORTED THRU CSR. HANDOVER INITIATED IN 2 GPs, USER FEE COLLECTION STARTED

% OF NON-RECYCLABLES: 80%

NUMBER OF PERSONS EMPLOYED: 1 MANAGER, 1 COORDINATOR, 12 SUPERVISORS, 95 FIELD STAFF.

NUMBER OF VEHICLES: 1 HIRED VEHICLE, 10 PUSHCARTS, 1 COMPACTOR

SAAHAS PROJECTS

Chikkajala, Karnataka



Salient features

SCOPE: 2731 HH + 75 SHOPS

WEEKLY COLLECTION OF DRY WASTE

AVG MONTHLY WASTE COLLECTED : 1.55 MT

IMPLEMENTATION MODEL– GP PROVIDES VEHICLE AND COLLECTION STAFF. USER FEE COLLECTION STARTED

NUMBER OF PERSONS EMPLOYED – 1
COORDINATOR, 1 SUPERVISOR, 1 ANIMATOR, 6 GP STAFF

NUMBER OF VEHICLES: 2 GP TRACTORS

SAAHAS PROJECTS

Orohalli GP, Karnataka



Salient features

SCOPE: 11 VILLAGES + 1400 HH AND 15 SHOPS
WEEKLY COLLECTION OF DRY WASTE

AVG MONTHLY WASTE COLLECTED : 2MT

IMPLEMENTATION MODEL: HANDOVER INITIATED
FROM CSR TO GP, USER FEE COLLECTION STARTED

NUMBER OF PERSONS EMPLOYED: 1
COORDINATOR, 1 COLLECTOR/SORTING STAFF, 1
DRIVER

NUMBER OF VEHICLES: 1 ELECTRIC VEHICLE

SAAHAS PROJECTS

Bharuch, Gujarat



Salient features

SCOPE: 600 HH

**WEEKLY COLLECTION OF DRY WASTE
+ ALTERNATE DAY COLLECTION OF WET WASTE**

**IMPLEMENTATION MODEL: ALL STAFF SUPPORTED
BY GP, INFRASTRUCTURE PROVIDED THRU CSR**

**NUMBER OF PERSONS EMPLOYED: 1 COORDINATOR;
1 DRIVER FROM GP, 2 OTHER STAFF FROM GP**

NUMBER OF VEHICLES: 1 ELECTRIC VEHICLE