

**Decentralised solid waste  
management through  
MCC & MRF: Waste to Wealth**

## Overview of the scheme

Solid Waste Management is revolutionised and has set its roots in Urban Odisha. In an attempt to make Odisha, “Swachh Odisha Swastha Odisha”, the Housing & Urban Development Department, Govt of Odisha has embarked upon Decentralised Solid Waste Management. This is being done through the installation of Wealth Centre (WCs) which is a blend of two waste processing facilities, namely Micro Composting Centre (MCC), and Material Recovery Facility (MRF). The former helps in processing wet waste and the latter processes dry waste giving a modern-day touch to solid waste management.

## Objective

- Self-serve web and mobile based.
- Easy to use.
- Online property assessment and re-assessment.
- Online payment to citizens in real- time.
- Automate all property tax operations.







## Key features of the programme

- **WASTE SEGREGATION AT SOURCE:**  
A certain level of ease in handling waste settles in when it is bifurcated into different categories from the point of waste production. It helps the sanitation workers during collection and while processing it. The waste can then be recycled accordingly which is the most efficient way of disposal.
  - **BATTERY OPERATED VEHICLES (BOVS):**  
The vehicles deployed across ULBs to collect waste are environment-friendly with their battery system. These vehicles are used to go through the identified route map for timely waste collection.
  - **WEIGH BRIDGES:**  
All Wealth Centers (WCs) have been installed with weighbridges for accurate measurement of the waste collected and also to test the efficiency of the WCs.
  - **ORGANIC MANURE:**  
All the processed wet waste is turned into manure and is marketed as “Mo Khata” and sold at the rate of Rs 20/- per kilo. This makes the entire system efficient even for revenue generation.
  - **RECYCLING:**  
The recyclable waste collected at MRFs is sold to waste pickers and agencies. Whereas the non-recyclable waste is processed and sent to cement factories for recycling. This can be one of the easiest ways to reduce the dumping rate and can cut down the number of landfills.
  - **COLLABORATION:**  
Waste management is being effectively carried out as a team with the ULBs signing a Memorandum of Understanding with respective Operations and Management teams of Wealth Centers. Alongside, the Swachh Karmis are nominated by the Mission Shakti Self Help Groups, Transgender and Rag Pickers to run the system better.
  - **SUSTAINABLE SYSTEM:**  
The waste that goes in and out of the operation and maintenance of wealth centers is used to generate revenue by turning them into monetizable commodities such as manure and other products. The wealth centers have been allocated a Centre-wise bank account in nationalised banks for the purpose of account maintenance.
  - **HAZARDOUS WASTE DISPOSAL:**  
E-waste and domestic hazardous materials are deemed to be the most dangerous of all waste generated. In Odisha, under the Urban Sanitation Mission, the e-waste is collected and disposed of via verified agencies at Wealth Centers. This drastically reduced the rate of pollution and contamination of natural resources.
  - **SINGLE-USE PLASTIC BAN:**  
There has been an urgency imposed over the ban on single-use plastic. In order to bring about a behavioral change, defaulters are also fined for its use.
  - **BCC & IEC ACTIVITIES:**  
People's attitudes towards cleanliness can be changed only with appropriate training and exposure to better sanitation. Thus, the ULBs conduct Behaviour Change Communication along with Information, Education, and Communication (IEC) activities for various communities.
1. In a move to sensitise students about waste management in cities, 25,000 school and college students were given an opportunity to visit waste management and sanitation sites.

2. A special drive was conducted by all ULBs to create awareness amongst the public on “Swachh Survekshan-2023”. This was successfully carried out by organising campaigns, street plays, drawing murals and opting for other methods for sensitisation.

3. Apart from the National Level Recognition, the cities in Odisha also complete the “Hon'ble Chief Minister's Cleanest City Award”, keeping individuals on their toes to keep their cities and towns clean.

- **CAPACITY BUILDING:**

All sanitation workers including the Swachh Supervisors, Swachh Sathis, Swachh Karmis and Mission Shakti members are briefed about various aspects of sanitation to help them better understand waste management. This ensures quality service from their end and improved waste management in general.



## Progress so far



As a part of revenue generation, 4,057 metric tonnes of “Mo Khata” organic manure was generated until December 2022.



Out of this, a total of 3,019.18 metric tonnes of manure has been sold out which brought in a revenue of Rs. 6.86 crores which is in turn being used for the management of the same system.



Along with wet waste, dry waste is also disposed of in a standardised manner whereby a total of 2,399.32 metric tonnes of recyclable materials have been sold earning a revenue of Rs. 1.20 crores.



Revenue is also being generated by enforcement squads finding defaulters that use single-use plastics. So far, these teams have collected Rs. 31.20 lakhs and have seized more than 59.88 metric tonnes of single-use plastics.



A total of 252 Micro Compost Centres with a capacity of processing 1,137.5 tonnes of waste per day and 214 Micro Recovery Facilities with a capacity of processing 2,240 tonnes of waste per day.



The efficiency has gone up by 10% by now and has added to the total efficiency percentage of 85 per cent.



Soon 87 cities will undergo biomining of legacy waste dump sites for which request for proposals have been issued.



A pre-bidding meeting has also been convened to inform matters on clearing up dumping sites.



Along with this, urban sanitation activities of the ULBs are monitored on a fortnightly basis by the commissioners and collectors. The report generated is duly updated on the “Swachh Sahar Odisha” web application.



A digital aspect has been added to the waste management system with the web application ‘Ama Sahara’. This site assists in monitoring the SWM activities with Payment Gateway facilities for collection of the User Fee for SWM.



Women have been given positions across the solid waste management value chain to run the operations and management of assets and also their service delivery.



The number of these women currently stands at 5,061 who have come together from 2,650 self-help groups.



Rag pickers now get standardised pay from Urban Local Bodies in consideration of the guidelines for remuneration and integration issued. Apart from this, a methodical way for the disposal of construction and demolition waste has also been issued by the department.



## Recognition and awards

Out of 1850+ cities across the country, top two ULBs from Odisha got selected in Indian Swachhta League (ISL). Cuttack(MC) got the ISL award under 3 Lakh-10 Lakh population category and Pipili(N) got the ISL award under 15K-25K population category.

·Three National Awards received at ISC-FICCI Sanitation Awards 2022 ( Best FSSM Model to BMC, Best Women Changemakers in Sanitation to Swachha Sathi, Bhadrak Municipality, Best Skilling Initiative to Jajpur Municipality)