









# **RURAL & URBAN LANDSCAPE FREE OF DRY & PLASTIC WASTE**

An unique initiative of HDFC Bank- Centre for Environment Education (CEE)

# **PROJECT BACKGROUND**

HDFC Bank and Centre for Environment Education (CEE), in partnership with rural local bodies, is implementing a community-led project "Rural & Urban Landscape Free of Dry & Plastic Waste" at Bastar-Chhattisgarh, Ganjam-Odisha, and Ranchi-Jharkhand. This initiative is designed to partner with District Rural Development Authority (DRDA), Local Municipalities, Zilla Parishad to synergize the efforts with State Pollution Control Boards, Swachh Bharat Mission Grameen (SBM-G), and Swachh Survekshan. The stakeholders such as Block Development Officers, panchayat sarpanch, local schools, colleges, anganwadi's, and Self-Help Groups (SHGs) are jointly taking sustainable steps to reduce negative impacts and risks to the environment in the areas of operation of the project.

- At Bastar, the project is being implemented with the support of Zilla
   Panchayat Bastar, Chhattisgarh in 1 block, 114 villages (71 Gram Panchayats).
- At Ganjam, this is with the support of Zilla Parishad; Ganjam, Odisha in 19 blocks, 105 villages (80 Gram Panchayats).
- At Ranchi, this is with the support of District Rural Development Authority;
   Ranchi, Jharkhand in 2 blocks, 120 villages (39 Gram Panchayats).

# Real value extra actual actual

### **OBJECTIVES**

- Improve Source Segregation, Collection and Transportation of Waste, at the household & institution level. SHGs and entrepreneurs engaged in collection from villages, panchayats by ensuring user charges collection.
- Achieve Swachh Bharat Mission Grameen (SBM-G) aims and working towards improving the quality of life in the
  rural areas. Enhancing knowledge, skills, and practices in a time-bound project.
- Promote Community Ownerships through meetings, decision-making processes, social mapping exercises leading to relationship & trust for better waste management operations.
- Empower Women Self-Help Groups (SHGs) members to create significant interest, ownerships and social inclusion
  of women SHGs.



# IMPLEMENTATION MODEL FOR INTEGRATED DRY & PLASTICS WASTE MANAGEMENT

# AT VILLAGE LEVEL, GRAM PANCHAYAT AND BLOCK LEVEL



### STEP 1

Collection of the dry waste to the village, panchayat storage: Dry & plastic waste is collected (every 5-6 days) from the households (collection of user charges for the services from HHs and others under SBM-G guidelines) in villages, panchayats via hand-carts/E-rickshaws to the storage points by women SHGs (duly onboarded by the panchayat in the project). All modalities are agreed in village, panchayat decision-making meetings, using social mapping systems and approaches.



### STEP 2

Support and strengthen the processing of waste at storage points: The collected segregated waste by women SHGs is further hand segregated into biodegradable (wet) and non-biodegradable (dry) waste followed by processing of wet waste into compost. The segregated dry & plastic waste is then ready for transportation to the MRF.



### STEP 3

Transportation of waste from village, panchayat to block: The dry and plastic waste is weighed, transported (hand weigh-scale) and duly recorded in the registers. Further transported to the block on the agreed date and time. Proper receipts are kept at the centers and one copy given to the MRF member and waste collector. The purchase rates, and payment terms are also agreed on regular basis.



# STEP 4

NO burning and littering of plastics at the storage points: Efforts are made by the SHG members to ensure there is no littering and burning of plastics at the storage points. Timely and regular IEC activities are done within the Swachhta Guidelines at the village, panchayat ecosystem. Various knowledge products are distributed to SHGs through regular meetings & discussions.

### AT BLOCK LEVEL



### STEP 5

Establishment of the Swachh Centre-PWMU/MRF: Segregated waste from the village and panchayats is purchased and sent to the Plastic Waste Management Unit (PWMU)/ Material Recovery Facility (MRF) (comprising Conveyor Belt, Baling Machine, Dust Air Blower, Plastic Grinder, etc.) for further processing of the segregated waste. Timely payments are made via cheques in panchayat/SHGs accounts as agreed. All registers and records are maintained manually & digitally.



### STEP 6

Agreements with recyclers for recycling/end of life disposal: The segregated waste is then processed (bailed and shredded) and is sold to the concerned recyclers for granules through proper weighment using the weigh bridge slips and invoices with GST as applicable. Non-recyclables are sent for co-processing in cement plants or road making on special state rates agreed following Central Road Research Institute (CRRI) norms





# **KEY COMPONENTS**



Systems Approach with Standard Operating Procedures (SOPs)



Digital Monitoring & Reporting through Dashboards

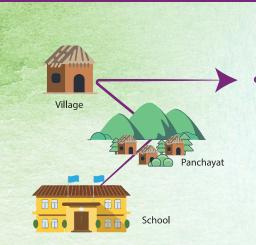


Inclusion of Safai Mitras



Behavior Change Communication Campaigns

# **MATERIAL RECOVERY FACILITY (MRF) PROCESS**



Transportation of collected waste



Weighbridge



Recyclers/ Aggregator **SWACHH CENTRE** 



Conveyor Belt (Sorting/Segregation)

# WASTE **GENERATORS**

Villages, Gram Panchayats, Peri-Urban Areas, Shops, Markets Schools, Health Centres, Anganwadis & Others



Weighing



**Dust Air Blower** Machine (MLP and flexible plastics)



**Bailing Machine** (Different types of waste)



Forklift

# **AMENITIES AT MRF**



Safe Drinking Water



**Basic** Sanitation



Scale

Sanitary Waste Incinerator



**Bathing Facility** for Safai Mitras



Lockers for Safai Mitras



**CCTV** Camera



Fire Safety

# About Centre for Environment Education (CEE)

Centre for Environment Education (CEE) was established in the year 1984 as a Centre of Excellence under Ministry of Environment & Forest and Climate Change Government of India, working in the field of environmental education and education for sustainable development.

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## Service providers:





Bastar, Chhattisgarh Ganjam, Odisha



Ranchi, **Jharkhand**