## CII Conference on Alternate Fuels & Raw Material Usage 23 & 24 October 2024



# Comprehensive relook for inclusive RDF sourcing practices



#### Sampurnearth - its story

- 1. Sampurnearth in Waste Management Housing Societies Dry & Wet waste
- 2. Mumbai Ward experience Chembur, Bhandup and Mulund
- 3. Goa Waste Management facility UNDP, Godrej funding
- 4. EPR Coprocessing Hindustan Unilever, Godrej, Britannia, Marico, etc.
- 5. Covid initiative 2500 waste workers in 15 major towns supported over Rs.1.00 Cr. funded by Godrej, Tetrapak, Swedish Chamber of Commerce & Business associates
- 6. Plastics recycling Unilever funding Project Transform Granules & Lumps
- 7. EPR compliance Recycling Plastic & Sale of Credits; Mithapur DWPC Tata Chemicals Ltd.

Now let us look at our Bicholim Project



#### Bicholim project key areas







AND COMMUNICATION

**SOCIAL SUPPORT** 

**OPERATIONS** 



### History of the project



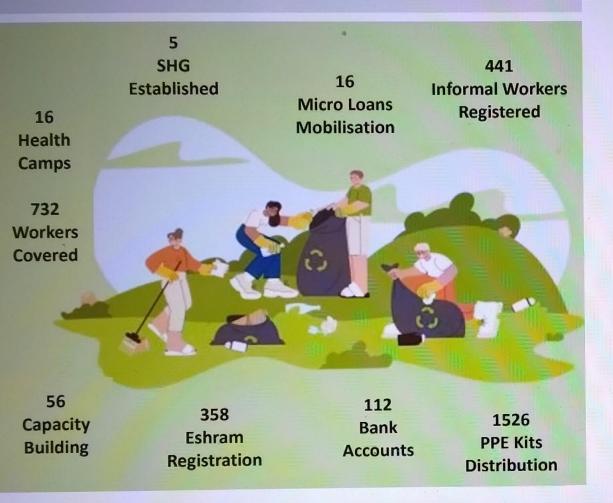
#### Bicholim, Goa IEC activities

Sl. No.	Activity	Numbers	Sl. No.	Activity	Numbers
			7	Panchyat/ULB	
1	SHG Meetings	237	/	Meetings	205
2	School Awareness	105	8	Street plays	13
	Cleanliness drives and Rallies Competitions	33 29	0	Ward level youth, group special events and VO meetings	126
5	Door-to-Door awareness drives	121	10	Special market awareness (Bicholim)	3000 households
6	Exposure visits	37	11	Workshops for Panchayat functionaries	3





#### Community engagement and Social Support Programs









## The Program Outcomes for last Financial year at Goa

Area Covered	3 Municipal Council 30 Panchayats with 50,540 Families
Waste recovery Percentage at Bicholim MRF(Recycled at % of total incoming waste)	55%
Total Waste Handled	1800 MT
Low Value Plastics Recycled	217 MT
RDF Sent to Cement Factories from Scrap Markets to support authorized disposal	156 MT
Total Direct Employment Generated	200+ people (>80% local employment)
Total Indirect Employment Generated/Supported	280 People



#### The Integrated Story in Goa

**Awareness** 

Segregated Dry Waste Collection System clubbed with awareness programs and IEC drives.



HOUSEHOLDS



BULK GENERATORS hotels, resorts, weekly vegetable

market areas

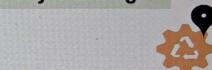


PUBLIC SPACES and Tourist spots.

## **ULB and Panchayat Consultation and Handholding**

Formalization and Mainstreaming of Informal waste workers

Processing Capacity Building



Co-Processing of

Non-Recyclables

Cement Factories and

Scrap Dealers and Other Informal Waste Worker Groups



Other MRFs in Goa & Bulk Waste Generators



Harvalem
Aggregation &
Secondary
Sorting Centre



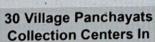
Pissurlem
Low Value
Flexible
Plastic
Recycling
Facility



Other Recycling Go to S

Bicholim Municipal Council

**Bicholim and Sattari** 





Bicholim MRF (Material Recovery Facility)

#### Mithapur Dry Waste Processing Centre







Sampurn(e)arth Environment Solutions Pvt. Ltd., Mumbai

#### Mithapur Plant – Beach Cleanup & TCL Enginneer Team Visit







#### Mithapur DWPC Coastal Clean up & Deepavali celebration







#### Today's RDF supply chain scenario

- 1. Cement Co's. source waste from MRFs, Biomining sites, Paper Mills, Agents
- 2. Most economical cost (including freight) is the deciding factor
- 3. Unshredded and Unbaled RDF is supplied to the Cement plants
- 4. Cement plants invest in Shredding facilities at their plants
- 5. MRFs/Biomining sites generally do not have shredding facility
- 6. MRF/Bio-mining contractor employs Waste workers.
- 7. PPE usage by waste workers is minimal.
- 8. Transport cost high due to Unbaled waste and Diesel vehicles (not CNG)



#### RDF supply scenario - Few thoughts

- 1. As share of Alternate Fuels increases, can Shredding and Baling be done at MRFs/Biomining sites too?
- 2. Can nearby cement companies collaborate to fund such facilities?
- 3. Can uniform pricing be adopted for sourcing RDF?
- 4. How much of your CSR spends can go to Waste worker's well-being and PPE
- 5. Can the waste trucks be run on CNG, where possible?
- 6. Can Cement companies fund Plastics recycling facilities?



#### **Upgrading the MRFs**



**Shredding Machine** 



**Baling Machine** 



#### CPCB new initiative on Plastic & Coastal waste

- 1. Lost & Discarded Fishing Gears & High-Littering Plastic wastes in Coastal areas.
- 2. In 2022-23 Annual Report 13 State PCBs located in coastal areas generated 2.37 Million tonnes of plastic waste.
- 3. Within the proximity of all the 12 Blue Flag Beaches plastic recycling facilities.
- 4. Target 12 plastic recycling units & 13 Nylon fishing gear/Net recycling units.
- 5. Sampurnearth has decided to collaborate in setting up a unit at Mithapur (Near Shivrajpur Beach)
- 6. Sampurnearth may collaborate for setting up units at Karwar & Padubidri, Karnataka. The collaboration would be limited to Design, Source, Install & Commission the Plant & Machinery and handle O& M operations for 2 to 3 years. Not the investment and O&M costs.



#### Waste Management of Amaravati (AP) City

- Sampurnearth is keen to collaborate with CII in working towards a comprehensive Municipal waste solution for Amaravati City, Andhra Pradesh.
- 2. The proposal will cover handling both the Dry & Wet waste.
- 3. CII will have to find the funder for this project.
- 4. Sampurnearth will conduct a field survey, propose a solution that includes the Design, Sourcing, Installation & Commissioning the Biogas and MRF facilities. It shall also include conducting Waste Awareness campaign.



## Thank you!

