

GROUNDING CLIMATE RESILIENT WASH ACTION IN SMALL TOWNS - CHIKKABALLAPURA

(Jointly convened by the District Urban Development Cell (DUDC), BORDA, FISH and TIDE)



Cluster-Based Legacy Waste Remediation: Chikkaballapur's Path to Sustainable Land Recovery

Project Overview

To reclaim dumpsite lands across all five ULBs of Chikkaballapur district through biomining and bioremediation, recovering resources, mitigating GHG emissions, and restoring the land.

Problem Statement

3rd largest source of methane emissions globally is from dumpsites

1.63 Lakh MT of unmanaged legacy waste across 5 towns in Chikkaballapur

24 acres (18 football fields) of land occupied under legacy waste in ULBs of Chikkaballapur

Execution Framework

Cluster Approach

The project covers five ULBs under District Cluster - Chikkaballapur, Chintamani, Gouribidanur, Sidlaghatta & Bagepalli.

Total legacy waste: 1.63 lakh MT spread across 24 acres.

Implementation Strategy

- Parallel bio-mining operations in all 5 ULBs
- Excavation, windrow formation & solar drying for methane removal
- Bioremediation using composting cultures → 35–40% volume reduction
- Mechanical sieving for material segregation and recovery

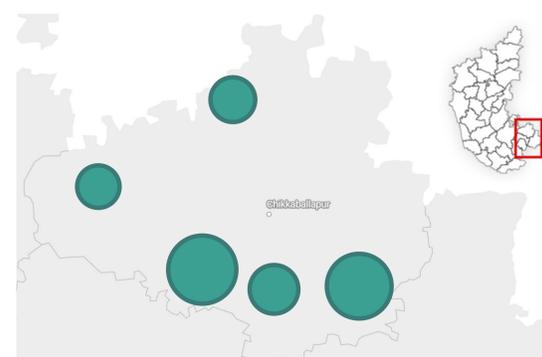
Funding Source: SBM (central and state shares), NGT funds, Municipal Revenue

Resource Recovery & Disposal

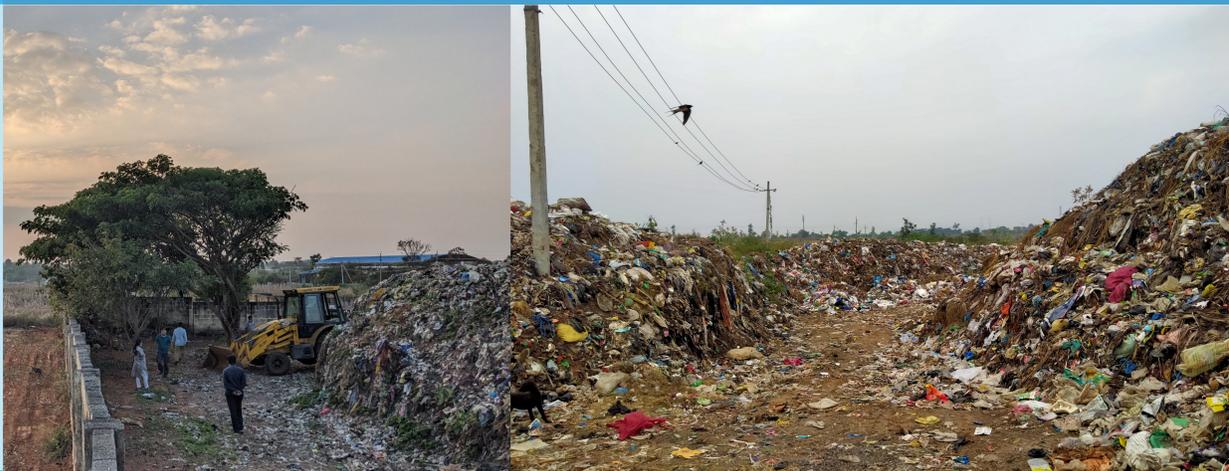
- RDF:** Sent to cement/WtE plants (MSW Rules 2016, Clause 18)
- Recyclables:** Sold to state-registered recyclers
- Bio-earth:** Used for landscaping or site restoration
- Inerts:** For road base/plinth filling or sanitary landfill
- Governance & Monitoring:** Dashboard/ERP system with weighbridge integration

Legacy Waste Snapshot of Chikkaballapur

ULB	Area (in acres)	Legacy Waste (MT)	Age (Yr)
Chikkaballapur	8	48,871	12
Chintamani	6	46,804	12
Gouribidanur	4	20,430	15
Shidlaghatta	4	24,633	10
Bagepalli	2	22,736	15



Gallery



GHG Avoided Emissions Estimate (tCO₂e)



Supporting SDGs

- 13 CLIMATE ACTION**: Methane reduction through legacy waste remediation
- 6 CLEAN WATER AND SANITATION**: Prevention of leachate Contamination
- 15 LIFE ON LAND**: Restoration of polluted ecosystems & land recovery

Expected outcomes



Land restored: **24 acres**



Climate impact: ~**0.31** lakh tCO₂e avoided emissions