

SOLID WASTE MANAGEMENT

- **Nine studies on solid waste conducted in the last 14 years.**
- **Solid Waste generated** **6,500 tons per day**
- **Separated at source by housewives** **800 tons per day**
- **Recycled**
(inclusive of material separated at source) **1,500 tons per day**
- **Burnt as fuel for kilns** **450 tons per day**
- **Used as land fill for reclamation** **250 tons per day**
- **Number of recycling units** **435 (about)**
- **Yearly turn over (estimated)** **Rs 1.2 billion**
- **Employment generated for 40,000 families:**
 - o **Kabaris** **15,000**
 - o **Middle dealers** **800**
 - o **Main dealers** **1,000**
 - o **Street pickers** **20,000**
 - o **Dump pickers** **1,000**
- **The Problem:**
 - o **The garbage is not lifted from the kutchra kundis because scavengers / contractors pay the KMC staff for not picking it up.**
 - o **The picked garbage is taken to the recycling units and not to the land fill sites. These recycling units are located in Sher Shah and peri-urban katchi abadis.**
- **Solution: Recognise the recycling industry and relocate it near the land fill sites.**





Waste disposal in squatter settlements



Scavenger's colony at Jam Chakro



Plastic items separated for selling



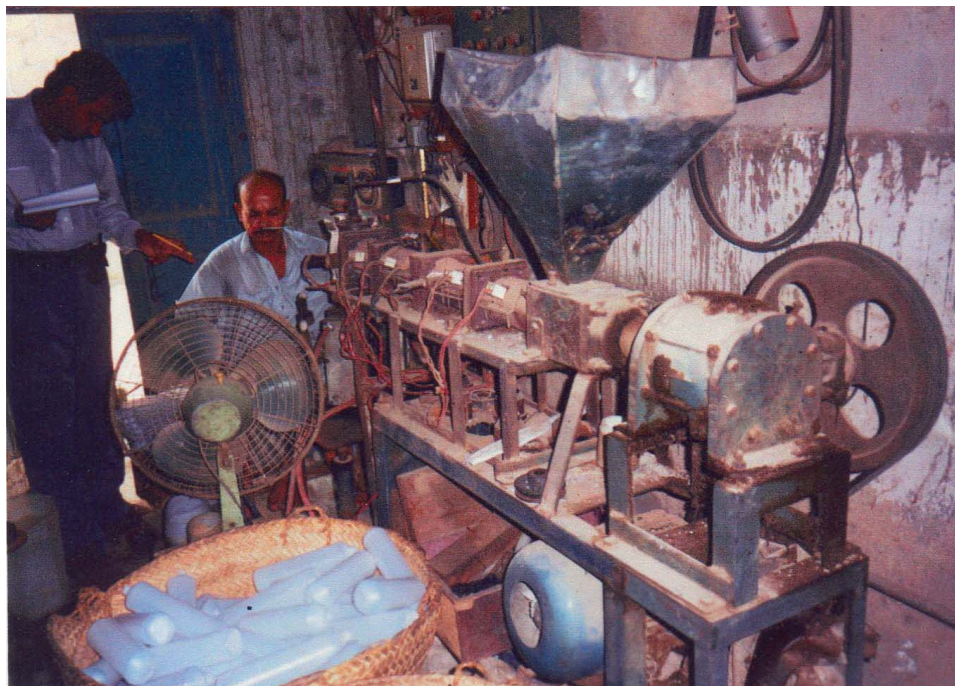
Glass bottles separated for selling



Purchasing of plastic waste by
middle dealer



Purchasing of metal waste by
middle dealer





INTEGRATING RECYCLING AND DISPOSAL SYSTEM FOR SOLID WASTE MANAGEMENT IN KARACHI

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FINANCIAL ASPECTS

Landfill Sites

Capital and O&M Costs for Proposed Landfill Sites

Sr. No.	Item	Capital Costs (in Rs)	Operational Cost (in Rs)	Revenue per Year (in Rs)	Shortfall (-) Surplus (in Rs)
1.	For 500 tonnes /day module (lower cost option)	57,035,000	6,336,000	68,055,000	+ 469,000
2.	For one of 4 sites 1,500 tonnes/day (lower cost option) 1x3	171,105,000	11,913,000	20,415,000	+ 1,407,000
3.	For all 4 sites 6,000 tonnes / day (lower cost option) 4x3	684,420,000	47,652,000	81,660,000	+ 5,628,000

Source of Funds

For the development of one landfill site Rs 171,105,000 or US\$ 2.7 million is required. For the development of all four sites Rs 684,420,000 or US\$ 10.7 million is required. These are not large sums and can be acquired from the Government of Pakistan or the District Governments Annual Development Plan (ADP).