



Outline of Presentation

- 1 Waste Management Practices
- 2 Engaging the Communities
 - Recycling
 - Composting/Takakura Composting
 - Enzyme Making
 - Say No To Plastic Bags
 - Say No to Plastic Mineral Water Bottles

Waste Management Practices

- Area: 129.5sq km with Population: 200,000
- Waste Generation: 130 tonne per day
- Waste generation per capita: 0.65kg
- SWM Cost: RM4.6mil per annum
- Sanitary Landfill of 13 acres costing RM10.5 million operating since 2001
- Extension of 2 more cells in 2010
- New sewage treatment plant to be completed in 2010
- New landfill will be constructed under 10th Malaysia Plan

Modus Operandi of Collection

- Privatised collection
- Coverage: 100% of the municipality
- 4 collection zones
- Frequency:
 - Residential: 3 times weekly
 - Commercial: once daily
 - CBD and markets: twice daily
 - Annual spring cleaning before New Year



3r activities yielded encouraging results as seen in the reduction of total volume of waste entering kemuyang sanitary landfill



Waste Characterization

Item	Material	Percent [%]
1	Organic matters	49.50
2	Plastic	14.50
3	Paper	10.51
4	Paper Carton	8.80
5	Textile Waste	5.20
6	Glass	3.80
7	Ferrous Material	3.40
8	Rubber	2.80
9	PVC	1.20
10	Polystyrene	0.10
11	Aluminium	0.10

Engaging the Community in Waste Reduction

- Fostering cohesive relationships and engage the local communities through
 - Local Agenda 21 (Recycling, composting, enzyme, cleaning campaigns)
 - Segregation of C & D waste into another site
 - 'Say No to Plastic Campaign' (Every Monday)
 - Say No to Plastic Mineral Water Bottles

Community Recycling

- Started in 1990's
- Working closely with Sibiu Kidney Foundation
 - all proceeds from sales of recyclable items goes to charity
- Activities
 - Talks to schools and NGOs
 - Giving free recycling bins and receptacles
 - Free collection from bins placed with NGOs premises
 - Management of Communal recycling centres



Community Composting

- Started in 2008
- Pilot projects in 3 residential neighborhoods and 3 secondary schools
- Activities
 - Briefing, demonstration, free compost bins, follow up inspection, competition
 - Communal composting centre (Market hawkers and schools)
 - JICA is helping to organise a regional workshop on Takakura Method of composting in Dec 2009



Takakura Method of Composting



Community Garbage Enzyme Making

- household garbage enzymes has suddenly become very popular among the community
- SMC and the NGOs have been going round schools, religious bodies and the communities to give talks and giving demos
- Objective: reducing garbage while producing environmental friendly enzymes for household use and cleansing drains, septic tanks, lakes,



'Say No to Plastic Bags'

- Getting all major supermarkets, fastfood chain, bookshops to participate.
- No plastic bags are to be given on every Mon
- RM0.20 shall be charged should the customers insisted having plastic bags
- Participating outlets given an 'Environmental Partner' status
- Encourage NGOs to give away eco-friendly bags

Say No to Plastic Mineral Water Bottle

- Launched in Jan 2010
- Started with Sibü Municipal Council
- To be extended to Government Departments
- Stop distributing plastic mineral water bottles during meetings
- Installed water dispenser
- Use glasses or paper cups



Future Plans

- Composting plant for waste from market and parks
- Grease processing
 - Working with restaurants and food outlets
- Collection of scheduled waste at source
 - Working with automobile repair association
- Waste segregation at source
 - Working with community and looking into legislation

