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A stylized, colorful illustration of a landscape. It features rolling green hills in various shades of green, a brown path, a green tree, a purple flower, and an orange butterfly. The sky is light blue with a white cloud. The text is overlaid on the right side of the image.

Implementing the Green City Agenda: Workshop on Integrated Solid Waste Management

Anand Chiplunkar

Matters to examine

What policies exist to support ISWM?

- National (e.g., SWM Act)
- Local: Are supporting ordinances in place?
- Enforcement?

Are there city-wide plans?

- ISWM plan: collection, disposal to landfill, waste recovery, financing, cost recovery
- Has the public been consulted? Is there buy-in?
- Is there cross-sector integration with wastewater, drainage, stormwater and flood control plans?

Matters to examine

Public awareness and education

- *Is there social acceptability for the ISWM project?*
- *Are there champions?*

What can be done?

- **Promoting 3 Rs** - reduce, reuse, recycle
- **Anti-littering campaign:** trash bins in strategic locations in the community
- **Community involvement:** river and coastal clean-up, village 'clean and green' contest
- **Provide incentives:** livelihood from recycling waste

Matters to examine

What are the possible collection systems?

- Community-based primary collection
- Collection of residual waste and hauling to sanitary landfill
- Collection for waste recovery
 - Collection of recyclable waste - *materials recovery facility*
 - Collection of organic waste and processing into fertilizer
- Waste segregation - how to promote behavior change?

Matters to examine

Disposal – designing an engineered sanitary landfill

- Site selection: technical and social aspects
- Lining: geotextile material or bentonite clay?
- Leachate collection and treatment - technology options
- soil cover
- methane capture and energy production

Closure of sanitary landfills and post-closure care

- final cover
- monitoring of leachate, groundwater, methane gas
- **From dumps to destination: conversion into parks and gardens!**

Matters to examine

Financing

- user fees
- part of real estate taxes
- City budget appropriation
- National gov't subsidy

Cost recovery

- ring fencing of collected user fees - accounting system

Incentives

- energy production
- carbon credits
- livelihood
- sale of recyclable wastes
- sale of bricks and plastic pellets made from solid waste
- sale of soil conditioner, fertilizer

For discussion: What can we learn?

- *Political will of leaders and commitment of implementers*
- *Community buy in and involvement*
- *Conversion of dumpsites to sanitary landfills*
- *ISWM has potential to be an economic enterprise.*
- *Ring fencing and cost recovery as useful enablers for improved efficiency and continuous improvement*
- *ISWM impacts on sanitation and health*