

**International Consultative
Meeting on Expanding
Waste Management Services
in Developing Countries.**

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Background Information

- Developing countries faces enormous challenges in the provision of waste management services
- Rapid population growth with slow economic development for infrastructural services, presents a mismatch
- Waste management are given low financial priority in budgets than health, education or roads.
- Institutional frameworks have also be found to be weak and waste is managed formally and informally by multiplicity of players.

Solid Waste Generation and Composition

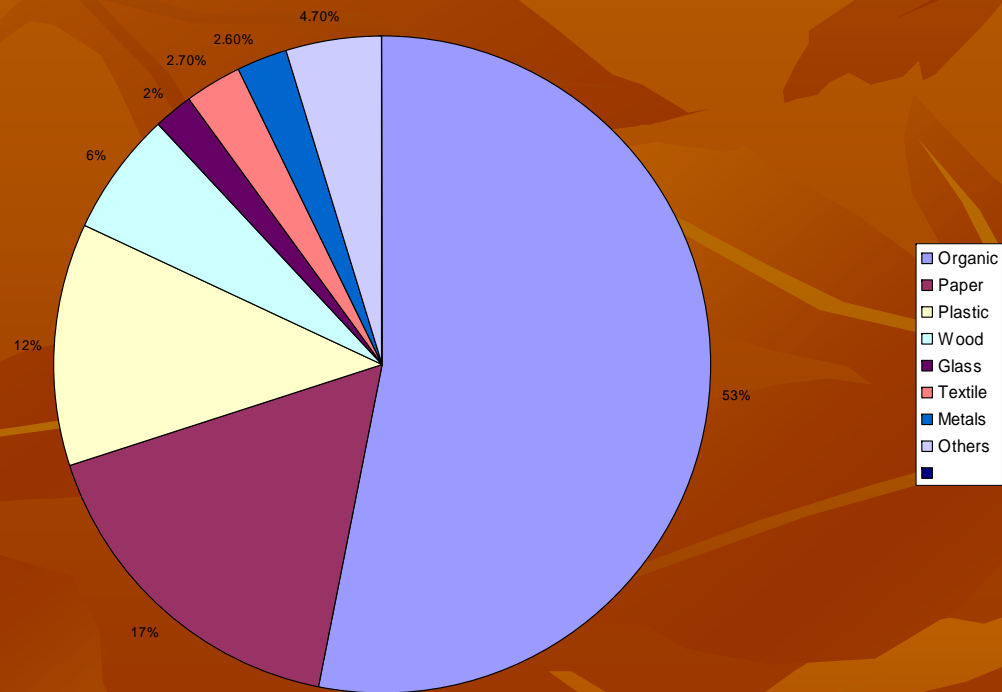
- Nairobi with a population of over 3.5million people, for example generate 3000tons/day with per capita generation of 0.65kg/gday
- 56% of the generated waste is safely collected and disposed.
- Waste is composed of Organic, plastics, paper, glass, textiles, wood, rubber and others.

Municipal waste characteristics

■ Organic	:	53%
■ Paper	:	17%
■ Plastic	:	12%
■ Wood	:	6%
■ Glass	:	2%
■ Textile	:	2.7%
■ Metals	:	2.6%
■ Others	:	<u>4.7%</u>
■ Total	:	100%

Contd.

Pie Chart



Existing Programs and Challenges

- The council's resources for waste management have declined over time
- Private sector have entered the market to provide the service for profit
- CBOs also do primary collection in low income and informal residential areas
- There is a form of loose regulatory framework coupled with weak enforcement

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- There is no formal for specific waste stream management strategies by local councils.
- All waste is heterogeneous and no elaborate source separation practiced
- Waste is informally salvaged e.g. plastics, dry paper, metals etc.
- Public Private Partnership models are coming up strongly

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- Council licenses private waste collectors
- Collectors manage all residential waste
- Collectors charge residents for service
- Council provides disposal site and receptacles
- Informal material recovery at disposal site

Final Disposal site



Some good practices

- Plastic waste stream seen as an opportunity by CBOs in the community
- Other waste streams include metals, glass and dry office paper
- This is due to their market value and simplicity in technology options of recovery and or recycling.

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Plastic menace in the environment

Youth and women groups found an opportunity in this by converting the waste to various uses

Contd.



A youth involved in
a local technology
for plastic
agglomeration

Contd.



- Finished [plastic fencing poles 7feet and weighs 15kgs. This means 15kg worth of plastics were recovered from the environment

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- Other useful products in form recreation benches in city streets of Nairobi.

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- Polythene pillows and jewellery from plastic waste

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- Fencing poles in use. If one pole weighs 15kg say 3000No. Would weigh 45,000kg (45tons) of plastic recovered from the environment.