

Management models for decentralised composting ( Small, Medium and Large Scale Decentralized Composting)

Options	Characteristics	Main Actor(s)	Role of City Government or Municipality	Advantages	Constraints
<b>Model 1</b> <b>Municipally owned -</b> <b>Municipally operated</b>	Integrated into the existing municipal SWM system and focused on reducing waste which otherwise has to be transported and disposed of in landfills.  Cost reduction through lower transport and disposal costs.	Municipality	Introduces recycling and composting into the SWM policy.  Implementing agency.	Composting is an alternative treatment system, which can be integrated into the existing system (waste collection, transport, disposal).  All composting sites can be centrally controlled.  City gains valuable soil conditioner to maintain parks and green areas.	Financial constraints due to the low priority given to SWM projects.  Operating efficiency and marketing potential may not be fully exploited.  Lack of coordination between departments regarding the use of the compost product.
<b>Model 2</b> <b>Municipally owned -</b> <b>Community operated</b>	Benefiting community is involved in the management of primary waste collection and composting.  Non-profit seeking model.  Cost reduction through lower transport and disposal costs.	Municipality Local community NGOs	Introduces recycling and composting into the SWM policy.  Implementing agency.  Supports communities in finding composting sites and develops a proper system for waste collection and disposal of residues.  Provides support funds for construction of composting plants and the setting up of a primary waste collection.	Alleviates the municipal burden of SWM through community inputs.  Improvement of solid waste management scope through voluntary participation.  Clear contracts ensure reliable partnerships with community groups.  Creates new jobs in the neighbourhoods.	Lack of community awareness and interest.  Need for a reliable informal leader among the community.  Highly complex management.
<b>Model 3</b> <b>Municipally owned -</b> <b>Privately operated</b>	Benefiting community is partly involved.  Profit seeking model if possible. Requires at least full cost recovery (from fees and compost sales as well as carbon credits).  Cost reduction through lower transport and disposal costs.	Municipality Private sector or NGO	Introduces recycling and composting into the SWM policy.  Implementing agency.  Selects composting sites, constructs plants (investments); develops a proper system for waste collection and disposal of residues.  Contracts out the operation and maintenance. Monitors performance of contractors.	Alleviates the municipal burden of SWM through private sector participation.  Provision of additional funds and know-how through private investors.  Clear contracts ensure reliable partnerships with private entrepreneurs.  Creates new jobs in the neighbourhoods.	Lack of community awareness and interest.  Need for a reliable and skilled partner with sense of entrepreneurship.  Complex management.
<b>Model 4</b> <b>Privately owned -</b> <b>Privately operated</b> <b>(profitable with Carbon Credits)</b>	Profit-seeking enterprise based on ideal compost market conditions. Income is generated through compost sale , collection fees and carbon credits.	Private sector	Introduces recycling and composting into the SWM policy.  Transparent regulations for public - private partnerships.  Cooperates in supplying raw waste and disposal of residues.	Alleviates the municipal burden of SWM through private sector participation.  Provision of additional funds and know-how through private investors.  Clear contracts ensure reliable partnerships with private entrepreneurs.  Can create employment and business	Lack of private land for composting activities.  Lack of vital compost markets if compost is not a well-known product.

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diversification.