



COUNTRY PROFILE ON THE SOLID WASTE MANAGEMENT SITUATION IN

EGYPT

July 2010

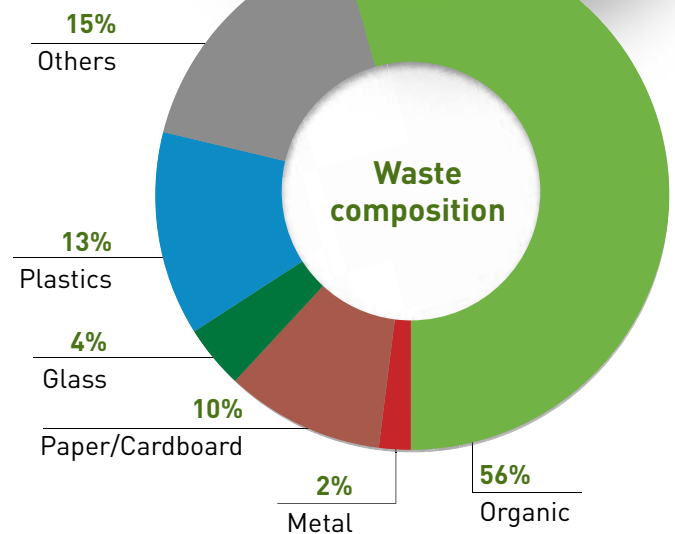


BACKGROUND INFORMATION

• Population :	78.2 million (2010)
• Municipal solid waste (MSW) generation:	19.7 million tons (2009)
• Per capita MSW generation:	
urban areas	0.7 – 1.0 kg/day
rural areas	0.4 – 0.5 kg/day
• MSW generation annual growth:	3.4%
• Medical waste generation:	40,000 T/year
• Industrial waste generation:	6.2 MT/year
• Hazardous industrial waste generation:	0.2 MT/year
• Agricultural waste generation:	23 MT/year

TECHNICAL PERFORMANCE

• Municipal waste	
- MSW collection coverage :	
in rural areas	0 - 35%
in urban areas	40 - 90%
- MSW final destination:	
- Composted:	9%
- Recycled:	2.5%
- Landfilled :	5%
- Open-dumped:	83.5%
- Number of sanitary landfills	
- Under study:	-
- Under construction:	3
- Built:	-
- Operational:	5
• Hazardous and industrial waste	
- Number of treatment units/centers of industrial wastes (physical chemical treatment)	
- Under construction:	-
- Built:	-
- Operational:	1
- Types of treatment of medical waste:	Incineration: 151 units Sterilization (Autoclave): 48 units



LEGAL FRAMEWORK

- Egypt doesn't have a solid waste management (SWM) law.
- SWM legal framework is scattered in many pieces of legislation. The two most significant pieces of legislations are Law No. 38/1967 on General Public Cleaning and Law No. 4/1994 for the Protection of the Environment and their amendments.
- The main updates of legislations within 2005-2010 are*:
 - Law No.10/2005 establishing a solid waste collection fee system ;
 - Prime Minister Decree No. 1741/2005 amending the Executive Regulations of Law 4/1994 and covering regulations for the selection of sites for recycling and land-filling and equipment requirements for waste collection and transfer ;
 - Law No. 9/2009 amending Law 4/1994 and regulating collection, treatment and disposal of hazardous waste ;
 - Presidential Decree No. 86/2010 regulating the closure of existing dumping sites and the landfill at Greater Cairo and allocation of five new sites outside the residential and commercial belt of Greater Cairo.

*Earlier information is available in Egypt's Country profile, METAP Regional Solid Waste Management Project (Country Report - Egypt, METAP, 2004)



INSTITUTIONAL FRAMEWORK

- **The Central Government** sets up policies, legislations, enforcement means, cost-recovery mechanisms; programs for capacity building and awareness, etc.
- **A steering committee** of Ministry of State for Environmental Affairs (MSEA), Ministry of Local Development and Ministry of Finance handles implementation issues.
- **Governorates** are responsible for all SWM activities either directly or by contracting private sector companies.
- **Municipalities** are responsible for implementation of the system, monitoring, inspection and training.
- **NGOs** provide MSW treatment, recycling, community development and public awareness.

POLICY AND PLANNING

Solid Waste Management

- The National Strategy for Integrated Municipal Solid Waste Management (2000).
- Egypt's Country Report published by METAP (Mediterranean Environmental Technical Assistance Program) Regional Solid Waste Management Project (2004).
- A strategic framework for the municipal solid waste recycling sector (2006).

Hazardous Waste Management

- The National Strategy for Healthcare Facility Hazardous Waste Management.
- An Integrated Strategy for Hazardous Substances and Waste Management (in the course of preparation).

Private Sector Participation

- A strategy on private sector participation (PSP) in SWM is in the course of preparation.

FINANCE AND COST RECOVERY ARRANGEMENTS

SWM financing

- It is the responsibility of the Governorates to allocate their respective SWM budget.
- Governorates budgets are limited and their budgetary allocations for MSWM depend on their resources and priorities.
- A limited portion of the waste handling fees are collected through the electricity bill.

SWM costs:

Total cost from collection to disposal: 100-110/ton LE in Greater Cairo and Alexandria, and less than 60 LE/ton in other Governorates.

The cost recovery: about 70 LE/ton.

Total cost recovery: 200 million LE per year.

PRIVATE SECTOR INVOLVEMENT

For cleaning and transfer

- Nine private companies (including three international companies) are involved in waste collection in big governorates.
- The informal sector "zabbaleen" and small private companies perform door to door collection in other locations.

For treatment and recycling

- International companies integrated solid waste management (ISWM) contracts involve sorting, recycling and composting of organic waste.
- Informal sector "zabbaleen" practice solid waste sorting, recovery and re-use.
- Currently, two projects receive carbon credits: a composting and sorting facility for the southern zone of Cairo and a landfill gas capture and flaring project at Borg El-Arab and El-Hammam landfills.

For disposal:

ISWM services are responsible for disposal in sanitary landfills or controlled dumping sites.

OPTIONS FOR IMPROVEMENT

- Establishing a national solid waste management law ;
- Establishing an efficient cost recovery mechanism ;
- Supporting SWM projects that reduce emissions of Greenhouse Gases (GHGs) to receive carbon credits, using the Clean Development Mechanism (CDM)/ Prototype Carbon Fund (PCF) and Global Environment Facility (GEF) mechanisms ;
- Adapting new waste utilization technologies (e.g. biogas and waste-to-energy projects) ;
- Extending SWM services in the rural areas as a priority and involving NGOs and local contractors ;
- Removing old accumulations in cities and villages and their disposal in environmentally and health safe locations ;
- Construction of sanitary landfills and closing the open dumping sites ;
- Developing and implementing a national policy targeting reduction of waste generation ;
- Providing technical support to increase the efficiency of waste recycling plants and adapting the principle of extended producer responsibility ;
- Capacity building of the governorates in planning, contracting, implementation, monitoring and follow up of SWM services ;
- Integrating the informal sector in the privatization of the solid waste sector ;
- Increasing public awareness to overcome wrong waste handling practices ;
- Need for national program for source separation.

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Contracts with the private companies have been recently modified to improve SWM in Greater Cairo. Total cost from collection to disposal under the new contracts: 250 LE