Waste Management and Employment Generation Opportunities



Ahmed Gaber
Chairman, Chemonics Egypt Consulting

Giza, 20.03.2013

Outline

- Interrelated waste management problems
- Sample program briefs



Interrelated Waste Management Problems

- Accumulated MSW in the internal roads of cities and villages
- Accumulated Construction/Demolition waste on main roads
- Accumulated solid waste in water canals and drains
- Disposal of septage in agricultural drains
- Disposal of MSW in open dumps
- Open burn of agricultural residues in rural areas

Proposed programs

P01: Rehabilitation and upgrading of open dumps to controlled landfills

P02: Transfer of the accumulated MSW and C/D waste

P03: Cleaning water ways

P04: Capacity building of labor-based environmental works contractors

P05: Environmental awareness



P01: Rehabilitation and upgrading of open dumps to controlled landfills

Objective: stop the negative environmental and health impacts of open dumps, upgrade to controlled landfills for temporary safe disposal

Magnitude of the task: 200 dump sites

Main activities: Survey, design work, construction work, operation guidelines, procurement of equipment, monitoring

Funding: LE 50 m

Duration: 18 mo



Number of Public and Unofficial Dump Sites in Governorates of Egypt

Governorate	Number of Public Dump Sites	Number of Unofficial Dump Sites	Governorate	Number of Public Dump Sites	Number of Unofficial Dump Sites
Cairo	5	12	Menoufiya	4	14
Alexandria	1	2	Kafr El-Sheikh	6	15
Giza	1	7	Damietta	5	12
Beheira	14	16	Gharbiya	5	10
Qaluobiya	5	8	Daqahliya	6	13
Sharqiya	5	10	North Sinai	6	8
Marsa Matrouh	8	8	South Sinai	8	10
Port Said	1	1	Suez	1	3
Ismailiya	1	7	Red Sea	6	10
Fayoum	5	7	Beni Suif	2	8
Minya	9	12	Assyout	2	8
Sohag	11	13	Qena	11	12
Luxor	2	3	Aswan	5	10
Total	68	106	Total	67	133



6

Open Dump Site



CHEMONICS EGYPT

Open Dump Site



P02: Transfer of the accumulated MSW and C/D waste

Objective: Transfer of the accumulated MSW and C/D waste from and around 200 urban centers

Magnitude of the task: xx millions tons

Main activities: survey work, planning, contracting, supervision

Funding:

Duration: 18 mo



Before and after transfer of accumulated waste, Mostorod







Before and after transfer of accumulated solid waste, Boulak el Dakrour







P03: Cleaning of water ways

Objective: Cleaning of drains and canal from the accumulated solid waste

Magnitude of the task:

Main activities: survey work, design work, contracting, supervision, implementation of protection measures

Funding:

Duration:



Village": Ezbet al Kasr Branch Drain





P04: Capacity building of labor-based environmental works contractors

Objective: to train university graduates for the work of environmental contractors using labor-based methods

Magnitude of the task: 500 contractors

Main activities: selection of participants, class room training, on-the-job training, internship period, post graduation support

Funding: LE 20 m

Duration: 24 month



P05: Environmental awareness

Objective: to enhance community participation and support of the protective measures related to P1-4

Magnitude of the task: tremendous

Main activities: design of the program, contracting, monitoring and evaluation

Funding: LE 10 m

Duration: 2 years



Number of Nongovernmental Organizations (NGOs) Working in Solid Waste Field

Governorate	Number		
Cairo	150		
Alexandria	70		
Giza	80		
Qaluobiya	30		
Daqahliya	22		
Gharbiya	25		
Menoufiya	20		
Beheria	50		
Kafr El-Sheikh	15		
Sharqiya	20		
Damietta	10		
Ismailiya	20		
Port Said	10		



Number of Nongovernmental Organizations (NGOs) Working in Solid Waste Field (Cont'd)

Governorate	Number		
Suez	6		
Fayoum	20		
Beni Suef	10		
Minya	60		
Assyout	25		
Sohag	25		
Qena	30		
Aswan	20		
Luxor	18		
Red Sea	6		
Marsa Matrouh	5		
North Sinai	20		
South Sinai	10		
New Valley	25		

