

6.4 Waste Management

In the National Environmental Action Plan of Egypt 2002/17, established by Egyptian Environmental Affairs Agency, the Government of Egypt stated that they recognize waste management as a first priority to create modern Egypt for the 21st century. In this action plan, following action plans were mentioned in the chapter of Environmentally Sound Management of Solid Wastes. Solid waste includes municipal wastes, non-hazardous wastes from commercial facilities, street sweepings and construction debris.

a. Managing Municipal Solid Waste

Establish the solid waste management program

User charges for solid waste collection and disposal

Deposit Refund schemes on certain containers

Table 6.3 shows the budget for solid waste management program of the National Environmental Action Plan of Egypt 2002/17.

Table 6.3: Budget Planned for MSW

Project	Investment cost (million LE)	O/M cost (million LE/yr)
Accumulation Removal	55	-
The integrated system in urban communities	-	-
1st stage (11 Governorates)	-	543
2nd stage (8 Governorates)	-	145
3rd stage (8 Governorates)	-	96
Construction of Landfills	70	-
Improvement of open dumping areas	20	-
Integrated systems in rural areas	-	72
Total	145	856

Source: Environment at the Center of Developing Egypt, 'The National Environmental Action Plan of Egypt 2002/17', 2002

b. Agricultural Waste

The Ministry of State for Environmental Affairs has prepared planned actions of agricultural waste management and recycle, especially focusing on rice straw.

Introduction of economic incentives

Table 6.4: Budget for Agricultural Waste Management Program

Project	Investment cost (million LE)	O/M cost (million LE/yr)
Compact and transfer 2.5 million tons of rice straw	25	25
Private sector implementation	-	-
Total	25	25

Source: Environment at the Center of Developing Egypt, 'The National Environmental Action Plan of Egypt 2002/17', 2002

c. Medical Waste

Establish the medical waste management plan

Introduction of economic incentives

Table 6.5: Budget for Medical Waste Management

Project	Investment cost (million LE)	O/M cost (million LE/yr)
Integrated waste management systems in hospitals	30	-
Private sector implementation	300	-
Total	330	-

Source: Environment at the Center of Developing Egypt, 'The National Environmental Action Plan of Egypt 2002/17', 2002

d. Construction Waste

Introduction of economic incentives.

Table 6.6: Budget for Construction Waste Management Program

Project	Investment cost (thousand LE)	O/M cost (million LE/yr)
Integrated system of construction waste	50	-
Design and produce containers and trucks	250	-
Prepare maps for suitable places of final disposal	50	-
Waste transportation by the private sector	-	35
Total	350	35

Source: Environment at the Center of Developing Egypt, 'The National Environmental Action Plan of Egypt 2002/17', 2002

Even with the development of above-mentioned measures, actual status of solid waste management in Egypt, as discussed in section 5.5 Waste Management, page 85, solid waste, especially municipal waste are serious problem, that include illegal dumping of municipal waste and unsanitary disposal of waste like open dumping. To tackle these problems, the Government of Egypt has developed 'The National Strategy for Integrated Municipal Solid Waste Management' in 2002. Based on this strategy and Polluter Pays Principle (PPP), waste management fee was started to be charged with electricity bill. The fee is proportional to the amount of electricity used. Furthermore, financial incentives (favorable tax for five years) has introduced for MSW collection and treatment services. Similarly, privatization of waste management practices for MSW has been promoted to achieve efficient and modern waste management system by private resource. Successful cases remained in large cities like Cairo and Alexandria, whereas smaller cities in rural area do not generate enough garbage to private sector to invest in this area. Agriculture is main activity in the Nile Delta region where as desert area is spread across in Western region. These characteristics restrict availability of land for municipal waste disposal site, which is leading to illegal dumping.