

7 Strategy for Assistance

7.1 Needs for Assistance

(1) Necessity of Assistance in Environmental Fields

Egypt has been facing various environmental deteriorations such as worsening air and water quality and illegal dumping of wastes, from growing population, advancing agricultural development, increasing automobiles, industrial development, and tourism development. Traditionally, environmental administration in Egypt has been implemented by numerous ministries like Ministry of Water Resources and Irrigation (MWRI) or Ministry of Health and Pollution (MoHP). In 1994, the Government of Egypt established the law for environmental protection (Law 4/1994), and reorganized EEAA and put EEAA as implementing authority for the said law. Since the enactment of the legislation in February of 1998, EEAA has played a vital role in implementing environmental administration, including budgeting of EEAA's its own budget and formulating environmental policies with donor assistance. Although National Environmental Action Plan 2001/17 has become a base of environmental policy in Egypt, the action plan remained in the paper and not actual action has followed. Gradually, the environmental management in Egypt has improved and there will be needs for assisting Egypt from environmental management aspect. Egypt, located in the middle of Arab-African nations, is an advanced country in the region. EEAA has vision of promoting capacity building in environmental field in Arab-African nations; it is very important to provide necessary assistance in the environmental field to Egypt in coming years.

The following is a list of needs for support in environmental fields that has become clear from our study on existing documents as well as the fact finding study tour.

1) Natural Environment

< Ecosystem protection >

- Protection of marine resources as tourism resources including the one in Red Sea
- Ecosystem management in Natural Protectorates

2) Air Quality

< Air Pollution >

- Air pollution control in Greater Cairo (including follow-up of CAIP project and mobile exhaust gas measures)
- Air pollution control in rural cities (including open burning of agricultural waste in harvest season)
- Development of system to monitor indoor and work environment

- Controlling the use of low-grade fuel (mazot)
- Promotion of fuel conversion to Natural Gas

3) Water Environment

<Water quality degradation and protection of water resources>

- Promotion of marine resource protection and improvement of coastal water quality
- Promotion and dissemination of low cost sewage treatment technology in rural area
- Development of sewage system in cities
- Development of monitoring and managing system of groundwater pollution
- Management of agricultural drainage and improvement of its reclamation
- Industrial effluent control

4) Environmental Monitoring

<Monitoring>

- Monitoring of petroleum originated VOCs in Suez and Alexisandria
- Development of monitoring system for agricultural drainage
- Development of monitoring system for groundwater pollution by toxic substances
- Continued effort on capacity building of EEAA's laboratories

5) Waste Stream

<Waste Management>

- Promotion of 3Rs on solid waste and development of relevant infrastructures
- Improvement of solid waste management in rural area (including development of landfills)
- Implementation of capacity building on solid waste management (central and local governments – i.e. governorates, waste management bureaus)
- Promotion of education / campaign on solid waste management with public participation
- Improvement of hazardous waste management and development of relevant infrastructure

6) Policy and Organizations

- Improvement of environmental administrative capacity of EEAA (Capacity building)

- Improving capacity of Governorates and its Environmental Management Unit (EMU)
- Introduction of Strategic Environmental Assessment
- Integrate administrative responsibility on water resource management (EEAA)
- Promotion of CDM projects

7) Industrial Environment

- Development of a system to promote National Cleaner Production including financial and technological elements. (Currently, the cleaner production is disseminated only through projects like EPAP, especially for small and medium enterprises)
- Promotion of the modernization of factories
- Development of POPs management system (including development of inventory)
- Development of voluntary environmental management system (self-monitoring and measurement) by a enterprises (system includes guidelines, measuring instruments, financial support and pollution control managers)

(2) Trend of International Organizations

Since 1992, the EEAA with the support of several donors have undertaken initiatives to implement actions and investments identified in the NEAP. The following Figure 7.1 presents the distribution of the official development assistance by donors. The highest assistance was come from USAID that has been dealt with water and sewage establishment, followed by DANIDA, World Bank, KFW – GTZ, GEF, CIDA, DFID, EU, and JICA.

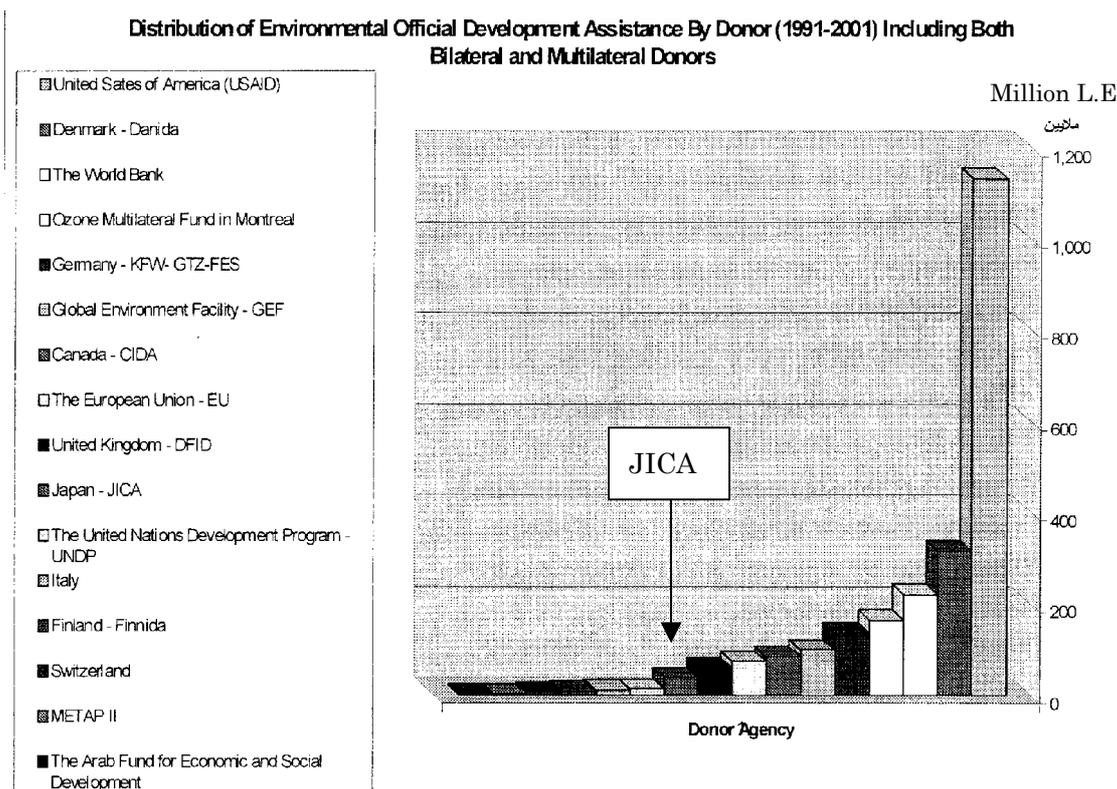


Figure 7.1: Distribution of Environmental Assistance by Donor (1991-2001)

Source: Tarek M. Genena, 'A Consultant Report on the Country Environmental Analysis', Dec.2003

Table 7.1 shows the details of environmental ODA by sector.

Table 7.1: Environmental ODA for Egypt during 1991 - 2001

Environment Sector	Number of Projects/Programs	Volume of Assistance (million L.E)	% to total volume of assistance
Policy support	4	1,025	42.9
Industrial pollution abatement	5	367	15.4
Air pollution abatement	3	257	10.8
Protection of the Ozone Layer	1	166	6.9
Institutional support & capacity building	13	149	6.3
Natural & cultural resources management	7	140	5.8
Environmental monitoring	2	91	3.8
Land & water resources management	5	60	2.5
Environmental awareness and support to NGOs	2	56	2.0
Coastal zone management	5	41	1.8
Solid & hazardous waste management	4	40	1.8
Total	51	2,393	100

Source: Tarek M. Genena, 'A Consultant Report on the Country Environmental Analysis', Dec.2003

These bodies are implementing their own assistance by avoiding conflict in project arena and emphasizing particular sector. However, there is an example of cooperation among donors like Egyptian Pollution Abatement Project or EPAP. There will be increasing need of such cooperation and collaboration among aiding institutions in the future.

Following section discusses some of major donor projects in Egypt in the environmental field. The Government of Egypt has developing potable water supply system and sewage treatment system with foreign assistance. Among them, USAID has actively involved in this area since 1975. Japan also has played an important role in development of water supply and sewage system with 6 grant aids, development study and technical assistance in project bases. USAID has aiming to shift its emphasis from infrastructure development toward poverty reduction and capacity building efforts. USAID, nonetheless, continued to support development of water supply in rural areas since only 56% has the access to water supply system and rest of the population have no choice but to use degraded water. Large budget of USAID for 1991 through 2001, shown in Figure 7.1, is likely to indicate numerous infrastructure projects for water supply and sewage systems, and Cairo Air Improvement Project (CAIP).

Table 7.2: Development of Potable and Sewage Serviced in Egypt by USAID

	Project	Commerce	Budget (US\$)
Water supply	Cairo Water Supply II	1988	145 million
Sewer	Alexandria Wastewater System	1977	425 million
	Cairo Sewage II	1984	77.1 million
Water supply and sewer	Provincial Cities Development	1981	141.4 million
	Canal Cities Water and Wastewater II	1987	380 million
	Secondary Cities Development	1994	315 million
	Egypt Utilities Management Plan	1997	NA

Source: JICA, 'Report on Environmental Monitoring Center Project (Followup)' April 2004

CIDA provided assistance project called Egyptian Environmental Information System or EEIS in the same period. The project started in 1997 and ended in September of 2004. Total budget reached 11.2 million Canada dollars. Following Table 7.3 shows the activities and component of the project.

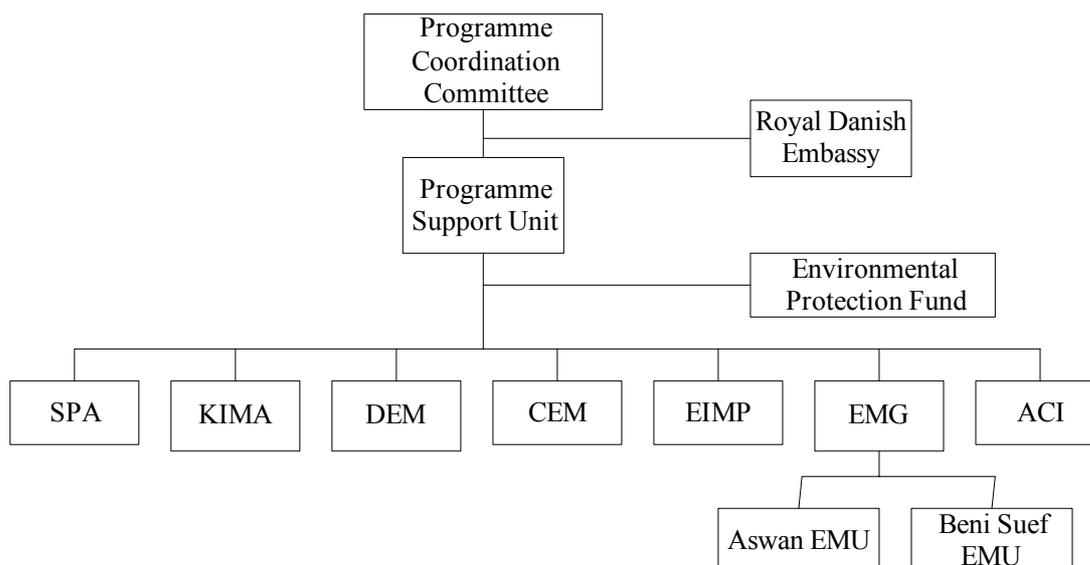
Table 7.3: Egypt Environmental Information System Project by CIDA

Period	Component	Activities / Components
Stage 1 (1997-2000)	ECIS	<ul style="list-style-type: none"> ● Installment of PC servers (8), local computers (80) ● Training of GIS program (ArcView) ● Development of database (map information, environmental data, and socio-economic data) ● Applications: Mapping of Natural Protectorates Mapping of Air Quality monitoring parameters EMIP data (SO₂, NO₂, PM₁₀) CAIP data (PM₁₀, PM_{2.5}, Pb)
	IPIS	<ul style="list-style-type: none"> ● Database on factory inspection
	IZIS	<ul style="list-style-type: none"> ● Database on types and source of pollution in industrial areas
	URDAIS	<ul style="list-style-type: none"> ● Database on pollution in cities and rural area, land utilization, and environmental assessment
	EPIS	<ul style="list-style-type: none"> ● Information database on various projects (EEAA project and donor supported projects)
	MEAIS ExecEIS	<ul style="list-style-type: none"> ● Database on multiparty environmental treaty ● Database on decision making of senior officials of EEAA
Stage2 (2001-2004)	Addition of ECIS Finalize IPIS, and ExecEIS GEP	Refer to Stage1

ECIS: Environmental Common Information System
 IPIS: Industrial Pollution Information System
 IZIS: Industrial Zones Information System
 URDAIS: Urban & Rural Development Areas Information System
 EPIS: EEAA Project Information System
 MEAIS: Multilateral Environmental Agreement Information System
 ExecEIS: Executive Environmental Information System
 GEP: Gender Equality Program
 EMIP: Environmental Information and Monitoring Program(DANIDA)
 CAIP: Cairo Air Improvement Program(USAID)

Source: JICA, 'Report on Environmental Monitoring Center Project (Followup)' April 2004

As for technical cooperation, DANIDA implemented comprehensive capacity building program in environmental fields – i.e. Environmental Sector Programme or ESP, is worth noting. The project started in 2001 and will be ended in 2008. The total budget for the project reaches 367 million Danish Krone. The following Figure 7.2 shows the component of the Environmental Sector Programme.



SPA: Technical Assistance to Shore Protection Agency
 KIMA: Fertilizer and Ferrosilicon Plant (only planned)
 DEM: Decentralized Environmental Management
 CEM: Communication in Environmental Management
 EIMP: Environmental Information and Monitoring Programme
 EMG: Environmental Management in Governorates
 ACI: Achieving Compliance with Environmental Regulation in Industry
 Source: JICA, 'Report on Environmental Monitoring Center Project (Follow-up)' April 2004

Figure 7.2: Components of Environmental Sector Programs

- ACI; Soft loan component in support of cleaner production promotion
- DEM; Conduct capacity building of RBO in conjunction with EEAA's policy on RBO strengthen. Target ROBs are GC, Suez, and Asyut. Content of training include methods of inspection and cooperation with EMU.
- EMG; Capacity building program of EMU targeted for Governorates of Aswan and Beni Suef, and to formulate 'Governorates Environmental Action Plan (GEAP)'. Provides field instruments for measuring air quality, and training for use of those devices.
- CEM; Joint project with Ministry of Education. Formulate Environmental Information Strategy. Awareness raising campaign for environmental protection through television, radio, newsletter, and various meetings.
- SPA; Capacity building program for the Shore Protection Agency
- EIMP; Commenced in 1996, but already completed. Following activities were carried out to EEAA:
- Coastal water quality monitoring
 - Ambient air monitoring
 - Improvement of quality of monitoring data
 - Provision of monitoring instruments
 - Training on QA/QC
 - Provision of data for the annual report prepared by EEAA on state of the environment

During the study tour, the Study Team had an opportunity to attend a seminar called ‘Donor Assistance to Egypt in the Field of the Environment, The Lessons learned and the Way Forward’ organized by a local environmental consulting firm, EcoConServ. The seminar was held in Cairo and major donor countries for Egypt in the field of Environment were participated. A survey was conducted before the seminar, and the result was shown. One of the questions in the survey was about preference of the counterpart in environmental field in the future (See Table 7.4). It almost equally divided into four groups from the range of 20-30%, among government agencies, NGOs/CDAs, private sector, and governorates/decentralized institutions. The result shows diversifying counterparts from governmental agencies to direct counterpart in environmental assistance in the future.

Table 7.4: Preference for Future Counterparts in Environmental Field

Type of Counterpart	Rate of donor showing the preference (%)
Government agencies (such as EEAA, MoWRI)	29
NGOs/CDAs (Community Development Association)	29
Private sector	23
Governorates/ Decentralized Institutions	19

Source: EcoConServ, ‘Donor Assistance to Egypt in the Field of the Environment’, Dec. 2004

7.2 Policy for the Assistance

(1) Assistance Policy in Environmental Fields

According to World Bank, economic loss caused by environmental degradation in Egypt in 1999 reached US\$ 4.37 billion, which is approximately 4.9% of GDP. In addition, inefficient use of natural resources such as water and energy, as well as global environmental issues is causing US\$ 1 billion of economic loss. Combined them, the total loss for Egyptian economy reached US\$ 5.85 billion, or 6.6% of Gross Domestic Products.